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# **Santa Fe National Forest Land Management Plan**

## **Final Environmental Impact Statement**

**Rio Arriba, San Miguel, Sandoval, Santa Fe, Mora, and  
Los Alamos Counties, New Mexico**

**Volume 3. Appendices J through N**



*Cover photo:* Reflection of mountain peak and forest in Nambe Lake.

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**Santa Fe National Forest  
Land Management Plan  
Final Environmental Impact Statement**

**Rio Arriba, San Miguel, Sandoval, Santa Fe, Mora, and Los Alamos Counties,  
New Mexico**

**Lead Agency:** USDA Forest Service

**Cooperating Agencies:** East Rio Arriba Soil and Water Conservation District; La Jara Ditch Association; Nacimiento Community Ditch Association; New Mexico Department of Agriculture; New Mexico Economic Development Department; New Mexico Environment Department; New Mexico Forest and Watershed Restoration Institute; New Mexico Department of Game and Fish; New Mexico Energy, Minerals, and Natural Resources Department, State Forestry Division, Las Vegas District and Botany Programs; New Mexico Land Grant Council; Santa Fe – Pojoaque Soil and Water Conservation District; Tierra y Montes Soil and Water Conservation District; and Tesuque Pueblo.

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**Abstract:** To comply with the National Forest Management Act and address changes that have occurred over the past 30 years, the Santa Fe National Forest proposed to revise the current land and resource management plan (1987 Forest Plan). This programmatic final environmental impact statement documents analysis of impacts of four alternatives developed for programmatic management of the 1.6 million acres administered by the Santa Fe National Forest. The analysis displays anticipated progress toward desired conditions as well as potential environmental and social consequences of implementing each alternative. Alternative 1 is the no-action alternative, which is the 1987 Forest Plan, as amended. Alternative 2 is the Forest Plan and is reflected in the accompanying Land Management Plan for the Santa Fe National Forest. This alternative addresses new information and concerns received since the 1987 Forest Plan was published, and it meets objectives of Federal laws, regulations, and policies. It provides for restoration and diverse ecosystem services. Alternative 3 maximizes natural processes, reducing human uses. Alternative 4 maximizes human uses through timber utilization, access, and infrastructure.

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## **Appendix J. Documentation of Wilderness Recommendation Process**

When revising the Land Management Plan, the Santa Fe National Forest is required to “identify and evaluate lands that may or may not be suitable for inclusion in the National Wilderness Preservation System, and determine whether to recommend any such lands for wilderness designation” (Title 36, CFR part 219.7(v)). A description of this process can be found in the 2012 Forest Service Planning Rule and Chapter 70 of the Forest Service Land Management Planning Handbook 1909.12. This process includes the following four steps:

1. **Inventory.** Identify and inventory all lands that may or may not be suitable for inclusion in the National Wilderness Preservation System using a given set of criteria;
2. **Evaluation.** Evaluate the wilderness characteristics of each inventoried area using a given set of criteria;
3. **Analysis.** The forest supervisor will determine which areas to further analyze in the National Environmental Policy Act (NEPA) process; and
4. **Recommendation.** The forest supervisor will decide which areas, if any, to recommend to Congress for inclusion in the National Wilderness Preservation System (NWPS).

Lands evaluated and analyzed through this process and the resulting NEPA analysis are only preliminary administrative recommendations; Congress has reserved the authority to make final decisions on wilderness designation.

### **Summary of Public Participation in Wilderness Process**

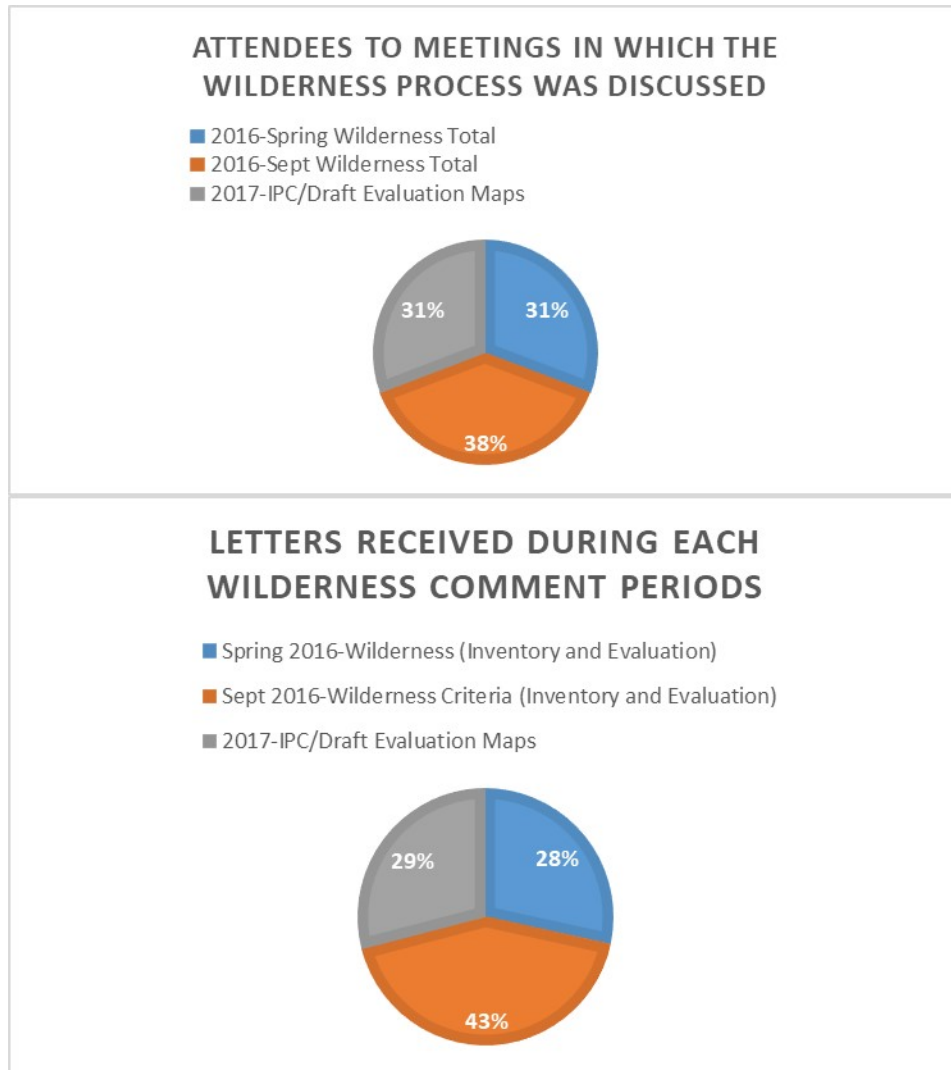
Public involvement is required early and during each step of the Wilderness Recommendation Processes. (2012 Planning Rule and Forest Service Handbook Directives, 1909.12, Chapter 70.61).

Between April 2016 and February 2017, the Santa Fe National Forest held multiple public meetings and comment periods to solicit public input specific to the Wilderness Recommendation Process as part of Forest Plan Revision (FPR). These meetings largely focused on the inventory and evaluation steps of the wilderness recommendation process and also offered opportunities to comment on the wilderness process or other aspects of forest plan revision. The first series of meetings occurred in the spring of 2016 and included an overview of how designated Wilderness lands are managed, and the four-step process used to identify lands as recommended wilderness as part of plan revision. These meetings also provided opportunities to comment on the criteria used for the inventory and evaluation steps of the process. The second series of meetings occurred in the fall of 2016 and included opportunities to learn about the characteristics of recommended wilderness, how the evaluation step would be performed, and generated site-specific comments on the draft inventory to be used in the evaluation. The third series of meetings occurred in January 2017, and included opportunities to provide site-specific comments on the draft evaluation and which polygons should be analyzed in an alternative, and was combined with opportunities to comment on initial plan components.

Over 750 participants came to 27 general and technical public meetings. Over 1,000 comment letters were received during meetings and through post, email, and online comment systems. These letters contained over 3,000 comments. Both the number of letters received and approximate meeting attendance were fairly even among different meeting periods (Figure J-1). Participants were diverse and included county



officials, state agency representatives, Tribes, grazing permittees, recreation groups, non-governmental organizations (NGOs), inholding landowners, and land grant heirs each attended at least one meeting.



**Figure J-1. Attendees (top) and number of comments (bottom) at the three series of public meetings. Across all three series of meetings, there were a total of 754 participants, approximately 1,300 letters, which were divided into about 3,400 comments. Both attendees and comments were greatest for the series of meetings on the draft inventory and pre-evaluation input while the amount of attendees and comments were about equal between the introductory series on the process and criteria and the last series (including initial plan components (IPC)) on the draft evaluation.**

All comments and responses were documented in spreadsheets and can be found in the project record, along with documents summarizing our public participation process for each wilderness comment period.

## Tribal Engagement

In addition to scheduled wilderness meetings for the general public, the Santa Fe NF held multiple, private meetings with tribal leadership in the region to honor the unique government-to-government relationship between the Federal Government and federally recognized Tribes and Pueblos. A total of 73 meetings were held, during which the FPR process was one of the topics discussed (see appendix H for a

full listing of Tribal meetings). The Wilderness process was included in forest plan revision discussion with Tribes.

## **Step 1: Inventory**

The primary function of the inventory step is to identify all lands in the Santa Fe NF that may have wilderness characteristics as defined in the Wilderness Act (FSH 1909.12 Chapter 71). The inventory is intended to be broad and inclusive, based on the inventory criteria from the Forest Service Handbook (FSH 1909.12, Chapter 71) and further defined by the Santa Fe NF through public and government participation. The following information outlines the inventory process specific to the Santa Fe NF, including the aforementioned criteria, developed using the planning directives (FSH 1909.12, Chapter 70) and input received from the public.

Public engagement efforts for this first step of the Wilderness Process occurred between April and May 2016. The intent of the inventory step is to create a set of lands that will then be evaluated to determine the extent of their wilderness characteristics. Inclusion in the inventory is not a designation that conveys or requires a particular kind of management; rather, inclusion in the inventory means an area will be evaluated for wilderness characteristics in the second step of the process.

## **Inventory Criteria**

Chapter 70 of the Forest Service Handbook 1909.12 outlines criteria for what should and should not be included in the inventoried areas. There are two broad categories of criteria: size and improvements. The “improvements” category further includes: (1) roads and (2) substantially noticeable improvements. Areas in the inventory must meet the size and both sets of improvements criteria (FSH 1909.12 Chapter 71.22). The specific criteria used for the inventory step in the Santa Fe NF are outlined in the following sections.

### **Size**

Areas to be included in the inventory must be Federal lands and must meet one of the following size criteria:

1. The area contains 5,000 acres or more.
2. The area contains less than 5,000 acres, but is of sufficient size as to make practicable its preservation and use in an unimpaired condition, including but not limited to areas adjacent to an existing wilderness, primitive area, administratively recommended wilderness, or wilderness inventory of other Federal ownership.

For areas less than 5,000 acres that are not adjacent to the above, the responsible official will need to consider and determine whether such areas could be preserved in an unimpaired condition.

### **Improvements**

The directives (FSH 1909.12 Chapter 71.22) outline criteria for what improvements should and should not be included in the inventory. Improvements are things that show evidence of human activities such as roads, structures, or past management activities and are divided further into categories for roads and substantially noticeable improvements (described below). Although certain improvements may result in lands being removed from consideration during the inventory stage, the presence of improvements alone does not necessarily eliminate areas for consideration in the inventory.

### Road Improvements Criteria

Road improvements were one of two improvements criteria used to determine which lands should and should not be in the inventory. For this process, a road was defined as a road wholly or partly within or adjacent to and serving the National Forest System that the Forest Service determines is necessary for the protection, administration, and utilization of the system and the use and development of its resources (36 CFR 212.1). The roads criteria from the directives were slightly adjusted to best meet the landscape of the Santa Fe NF (Table J-1). For geospatial mapping, eliminated roads were given a buffer of approximately 100 feet on either side of the road centerline, to include room for the road width, right-of-way, and potential geospatial data inaccuracies.

**Table J-1. Road improvements inventory criteria for the Santa Fe NF wilderness process. Bold font indicates items added or changed from the directives. Italic font describes items from the directives that were not included in the Forest’s criteria for roads.**

<p><b>Roads eliminated from inventory:</b></p> <p>Permanently authorized roads for which a valid easement or interest has been properly recorded.</p> <p>Forest roads maintained to levels 2, 3, 4, or 5 <b>identified on the Santa Fe National Forest’s Motor Vehicle Use Map (MVUM) in the Travel Management decision of 2012</b> (Level 2 roads are open for use by high-clearance vehicles. Level 3 roads are open and maintained for travel by a prudent driver in a standard passenger car. Level 4 and 5 roads are open and provide a moderate to high degree of user comfort and convenience).</p> <p><b>Roads identified as ‘provisional’ under the Travel Management decision in 2012. Provisional routes are those that were included in the Travel Management decision in 2012 but that required surveys, usually for archaeological or Federally Listed Threatened and Endangered species, prior to being published on the MVUM.</b></p> <p><i>FSH 1909.12 Chapter 71.22a Section 2(c) differentiates between Level 2 roads that should or should not be included in the inventory. For the Santa Fe NF, all level 2 roads were eliminated from the inventory.</i></p> <p><b>Roads carried forward in inventory and considered in evaluation:</b></p> <p>Areas that contain forest roads maintained to level 1 (closed to all motor vehicles).</p> <p>Areas with any routes that are decommissioned, unauthorized or temporary, or forest roads that are identified for decommissioning in a previous decision document.</p> <p>Areas with forest roads that will be reclassified to level 1 through a previous decision document.</p> <p>Areas with historical wagon routes, historical mining routes, or other settlement era transportation routes considered part of the historical and cultural landscape of the area.</p> <p><b>Areas with motorized trails. These are not considered roads and will be kept in the inventory and considered in evaluation.</b></p> <p><i>Some parts of the directives (FSH 1909.12 Chapter 71.22a) were not included because they did not apply (Sections 1(d) and (e)) or were determined to not be appropriate for the Santa Fe NF (Section 1(g)).</i></p>
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Areas are formed when pieces of land are surrounded by roads that were eliminated from the inventory. These variously sized areas were then carried forward or eliminated from the inventory depending upon their size, greater or less than 5,000 acres unless adjacent to designated Wilderness, and other criteria. The presence of roads carried forward in the inventory had no effect on area sizes.

### Other Improvements Criteria

After identifying lands that meet the size and road improvements criteria, the last step of the inventory includes determining whether those lands contain other improvements. Specifically, where the other improvements or evidence of past human activities are substantially noticeable in the area as a whole, they should not be included in the inventory.

Since the term “substantially noticeable” is not defined in Chapter 70 of the Forest Service Handbook 1909.12, the interdisciplinary team developed a definition that was refined based on public input received

in April-March 2016. For an improvement to be considered substantially noticeable in the area as a whole, it must:

1. Create a noticeable difference in form, line, color, texture and pattern in the surrounding natural landscape at a size, scale, or concentration that contrasts with the surrounding natural landscape. To be substantially noticeable, the improvement or concentration of improvements must be more dominant than the surrounding natural landscape scene.
  1. Be widespread in the landscape, reflecting pervasive past human influence
  2. Be visible using aerial imagery at the forestwide scale (1 inch = 1 mile or 1:63,360 scale) or if not visible on aerial imagery, have a pervasive impact on the area when viewed from the ground. This pervasive impact determination will be based on field knowledge and documented in this process.

This definition was also used to further refine the criteria for other improvements from FSH 1909.12 Chapter 71.22b (Table J-2). The definitions and examples listed in Table J-2 were used in combination with field knowledge and subject matter expertise to make determinations on whether an improvement was included or eliminated from the inventory. For geospatial mapping, improvements were documented as areas with 100 feet around that single feature to account for footprint and mapping errors.

**Table J-2. Other improvements inventory criteria for the Santa Fe NF wilderness process**

Categories of Other Improvements (FSH 1909.12 Chapter 71.22b)	Inventory Criteria Further Defined for the Santa Fe NF
Airstrips and Heliports	<p><u>Improvements potentially eliminated from inventory as 'substantially noticeable':</u> Surfaced runways, landing pads, or heliports with permanent structures.</p> <p><u>Improvements carried forward in the inventory and considered in evaluation:</u> Any unsurfaced runways, landing pads, or heliports and without permanent structures</p>
Vegetation treatments and Timber harvest areas	<p><u>Improvements potentially eliminated from inventory as 'substantially noticeable':</u> Clear cut forested areas, fuel breaks, and areas of pinyon-juniper chaining that are currently substantially noticeable on the area as a whole. Substantially noticeable means the treatment is more dominant than the surrounding landscape. Edges of the treatment create a noticeable difference in form, line and texture found in the landscape, being dominant, abrupt, strongly defined, vegetation regeneration is minimal.</p> <p><u>Improvements carried forward in the inventory and considered in evaluation:</u> Vegetation treatments such as prescribed fire use and non-commercial fuels reduction treatments that do not produce wood products, areas of sage mowing.</p> <p>Areas with legacy (closed) logging roads, fuelwood, or other thinned areas and other timber harvest areas where logging and prior road construction are not substantially noticeable.</p>
Permanently installed vertical structures, such as electronic installations that support television, radio, telephone, or cellular communications	<p><u>Improvements potentially eliminated from inventory as 'substantially noticeable':</u> Vertical structures (1) extend above the surrounding tree or shrub height (2) require regular access for maintenance, (3) the associated ground disturbance is 1 acre or greater, and/or (4) occur in a concentration. Potentially eliminate the entire concentration or affected area from inventory.</p> <p><u>Improvements carried forward in the inventory and considered in evaluation:</u> Any vertical structures shorter than the surrounding tree or shrub height, structures with ground disturbance of less than 1 acre, those that do not require regular maintenance, and other permanently installed vertical structures provided their impacts, as well as their maintenance and access needs, are minimal.</p>

Categories of Other Improvements (FSH 1909.12 Chapter 71.22b)	Inventory Criteria Further Defined for the Santa Fe NF
Areas of mining activity	<p><u>Improvements potentially eliminated from inventory as 'substantially noticeable':</u>                      Areas of commercial open pit mining that have not undergone reclamation, active mining operations, gas extraction wells, and areas of active mine reclamation.</p> <p><u>Improvements carried forward in the inventory and considered in evaluation:</u>                      sand and gravel pits, permit rock collection areas, small mining claims, or historic mining evidence, and other areas of mining activity where impacts are not substantially noticeable.</p>
Range improvement areas	<p><u>Improvements potentially eliminated from inventory as 'substantially noticeable':</u>                      Water developments with improvements that extend above the surrounding tree or shrub height and the total ground disturbance is 1 acre or greater. Concentrations of improvements may be eliminated if determined that the concentration is substantially noticeable on the area as a whole and supporting rationale is documented.</p> <p><u>Improvements carried forward in the inventory and considered in evaluation:</u>                      fences, agricultural water pipelines (typically less than 2-inch diameter), water troughs, earthen tanks, corrals, or trick tanks.</p>
Recreation improvements	<p><u>Improvements potentially eliminated from inventory as 'substantially noticeable':</u>                      Developed recreation sites (for example ski areas, campgrounds, or interpretive sites of a permanent nature) as defined by current forest plan management areas or special use permit boundaries.</p> <p><u>Improvements carried forward in the inventory and considered in evaluation:</u>                      Areas with dispersed camping sites and outfitter camps as they are temporary and easily removed.</p> <p>Existing non-motorized, mechanized (bike), or motorized trails, or any user created trails are included in the inventory. Trails are not considered a developed recreational improvement in the inventory criteria.</p>
Ground-return telephone lines, electric lines, and powerlines	<p><u>Improvements potentially eliminated from inventory as 'substantially noticeable':</u>                      Powerlines or other utilities with cleared rights-of-way, other permanently installed linear right-of-way structures (such as a tramway), permanent above ground pipelines over 6 inches in diameter (typically industrial grade pipelines).</p> <p><u>Improvements carried forward in the inventory and considered in evaluation:</u>                      ground return lines and electric lines if a right-of-way has not been cleared and pipelines under 6 inches in diameter.</p>
Watershed treatment areas (such as contouring, diking, channeling)	<p><u>Improvements potentially eliminated from inventory as 'substantially noticeable':</u>                      Non-earthen dams, post-fire flooding control improvements (i.e., filter dams made of non-natural materials), and terraced areas. Earthen dams may be eliminated if they are considered substantially noticeable to the area as a whole.</p> <p><u>Improvements carried forward in the inventory and considered in evaluation:</u>                      Earthen dams, other in-stream structures, and fish barriers, and other watershed treatment areas that are not substantially noticeable</p>
Structures, dwellings, and other relics of past occupation	<p><u>Improvements potentially eliminated from inventory as 'substantially noticeable':</u>                      Structures whose primary function is dedicated to housing or a concentration of other permanent building structures including developed recreation improvement structures.</p> <p><u>Improvements carried forward in the inventory and considered in evaluation:</u>                      Areas with structures, dwellings and other relics of past occupation when they are considered part of the historical and cultural landscape of the area</p>

Categories of Other Improvements (FSH 1909.12 Chapter 71.22b)	Inventory Criteria Further Defined for the Santa Fe NF
Lands adjacent to development or activities that impact opportunities for solitude.	<p><u>Areas carried forward in the inventory and considered in evaluation:</u> Areas adjacent to development or activities will be included in the inventory.</p> <p>Boundaries will be extended to the edge of adjacent development defined by the ground disturbance footprint or as described for each improvement category.</p> <p><i>Note: An adjacent development or activity that impacts opportunities for solitude will be considered in the evaluation step (see Criterion 2 in evaluation criteria).</i></p>
Areas with improvements that have been proposed by the Forest Service for consideration as recommended wilderness as a result of a previous Forest planning process or that the Responsible Official merits for inclusion in the inventory that were proposed for consideration through public or intergovernmental participation opportunities	<p><u>Areas carried forward in the inventory and considered in evaluation:</u> Include if identified</p>

Other improvements that did not meet the criteria defined by the Santa Fe NF as per Table J-2 were not eliminated during the inventory step of the wilderness process. These improvements were carried forward in the process and considered during evaluation, under the criterion of “apparent naturalness” (see Criterion 1 in the evaluation criteria).

## Public Participation on Wilderness Inventory

The inventory step of the wilderness process was part of two different series of public meetings. The first occurred in spring 2016 on inventory criteria (these meetings also included comment on the evaluation criteria) and the second occurred in fall 2016 on the draft inventory map (these meetings also included comment for the evaluation). Only input from these public meetings as it relates to the inventory process is discussed below.

### Public Participation on Wilderness Inventory Criteria

The Santa Fe NF held six public meetings between April 25 and May 31, 2016, comprising the first series of meetings focused on inventory criteria. During these meetings, the entire four-step Wilderness Process was explained and the public was invited to comment on the criteria for both the inventory and evaluation steps (information related to the evaluation can be found later in this appendix). These meetings were held in the following communities in and around the Santa Fe NF: Rio Rancho, El Rancho/Pojoaque, Santa Fe, Las Vegas, and Abiquiu.

One technical meeting was held in Santa Fe on April 28, 2016. Technical meetings provide an opportunity to have more in-depth discussions, and while geared toward (i.e., more than 2 hours long and during the workday) natural resource professionals, cooperating agencies, and coordinators for non-governmental organizations or other groups, they are open to the general public. The format of these meetings was similar to the general meetings, but provided more time for discussion and involved more Forest Service staff spanning a range of specialties.

A broad range of participants attended the meetings including concerned citizens, recreational users, environmental non-governmental organizations, livestock grazing permittees, inholding landowners, land grant heirs, county officials, and tribal officials and members.

A worksheet (available in English and Spanish) was used to assess the public’s opinion on what attributes, related to wilderness criteria, characterized areas that were suitable and not suitable for wilderness. For this exercise, input was solicited through questions that were specifically related to different wilderness characteristics (Table J-3). This input was used to inform both the inventory criteria (Table J- and Table J-2) and evaluation criteria (Table J-7 through Table J-10).

**Table J-3. Wilderness characteristics and questions posed to the public used to get feedback on wilderness characteristics.**

**These questions formed the basis for a worksheet used at public meetings and helped shape final inventory and evaluation criteria.**

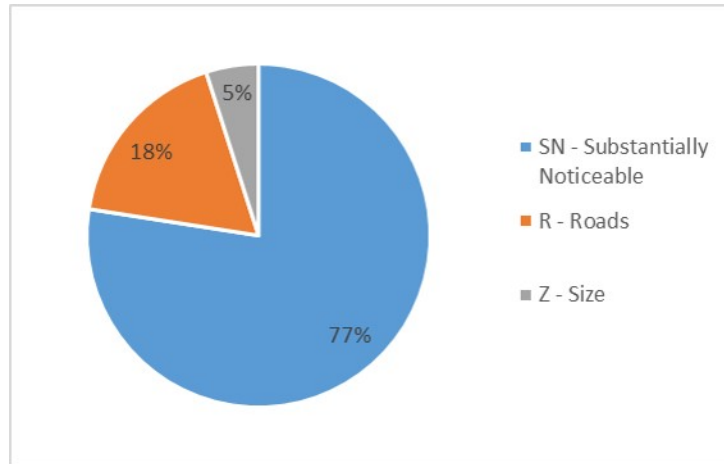
Wilderness Characteristic	Wilderness Characteristic Description*	Worksheet Questions on Wilderness Characteristics
<i>Visual Impacts (Apparent Naturalness)</i>	The degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.	What does wilderness look like to you? What types of human impacts and developments may make the area not look like wilderness?
<i>Solitude or Primitive Recreation</i>	The degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.	What kinds of experiences (sounds, sights, feelings) and activities (types of recreation) do you associate with being in wilderness?  What kinds of experiences (sounds, sights, feelings) and activities (types of recreation) do you associate with being out of wilderness?
<i>Unique Features</i>	The degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.	Are there specific places in the forest that are extremely unique in our Forest or the world (ecological, scientific, geological, beautiful, cultural) you think should be in wilderness? Why does being there make you feel special?
<i>Manageability</i>	The degree to which the area may be managed to preserve its wilderness characteristics.	What current conditions (activities, shape, neighboring lands, laws, existing uses) would make it easy for us to manage an area as wilderness?  What current conditions (activities, shape, neighboring lands, laws, existing uses) would make it challenging for us to manage an area as wilderness?

\* From FSH 1901.12, Chapter 70, Section 72.1



Over all six meetings, there were a total of 232 attendees. Since meetings were structured to be about multiple steps of the process (inventory and evaluation criteria, draft inventory maps and input on site-specific polygons for the evaluation), not all comments received at this time were suited for the inventory step. Comments relevant to the evaluation or analysis steps were flagged to be addressed in the step of the process for which they were best suited. Letters, comments, and Forest Service responses can be found in the project record.

Of the 2,405 comments received (many are counted multiple times), just over 153, or 6 percent, were related to the inventory. Of these, the majority (77 percent) were about the concept of substantially noticeable improvements, another 18 percent were about roads, and 5 percent were specific to the size criteria (Figure J-2).



**Figure J-2. Comments received on wilderness inventory criteria. About 180 comments were received and the majority were related to substantially noticeable improvements.**

Prominent themes emerged from the meetings, identifying characteristics and features that the public associated with each wilderness characteristic (Table J-4). Contrasting themes within a wilderness characteristic, such as pristine nature and infrastructure and roads in apparent naturalness, demonstrate how some lands could be considered suitable while others would be unsuitable for inclusion in the wilderness inventory. Public comments were largely supportive of the concepts laid out in the draft inventory criteria; therefore, no changes were made to the inventory criteria. This input also helped guide how the Forest Service applied the criteria in the next steps of the wilderness process, the evaluation.

**Table J-4. Comment themes related to wilderness characteristics.**

**Numbers of comments do not represent the total number of comments received\*, but help form a picture of how the public feels about each wilderness characteristic and its role in the criteria. Full comments and comment summaries, along with the Forest Service’s response, can be found in the project record.**

Wilderness Characteristics	Number of Comments	Prominent Themes in Comments
<i>Apparent Naturalness</i>	~ 600	Pristine Nature, Infrastructure and Roads, Views, Spiritual Connection, Traditional Uses, and Mountain Bikes
<i>Solitude or Primitive Recreation</i>	~ 580	Quiet Places, Types of Recreation, Trails, Wildlife, and Water Resources
<i>Unique Features</i>	~ 300	Cultural Sites, Peaks and Canyons, Water Resources, and Wildlife Habitat
<i>Manageability</i>	~ 450	Access and Roads, Traditional Uses (grazing, fuelwood gathering, etc.), and Fire

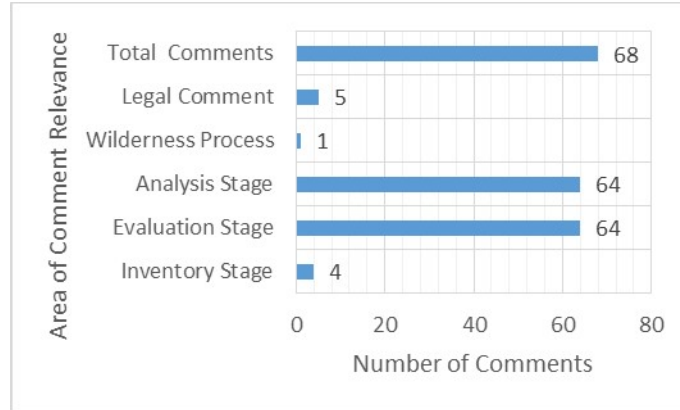
\* A single comment letter could have multiple comments and some comments were counted for multiple themes, so the number of comments will appear inflated over actual comments or letters received.

### Public Participation on Draft Inventory Maps

The second series of meetings regarding the inventory included opportunity to comment on the draft inventory maps. The details of this series of meetings are described below under the “Public Participation on Preliminary Input for the Wilderness Evaluation” section.

The Santa Fe NF used final inventory criteria (Table J- and Table J-2) to develop draft inventory maps. These maps were posted on the Santa Fe NF Forest Plan Revision website July 27, 2016, and large-scale printed copies were made available at Santa Fe NF Supervisor’s Office, ranger district offices, and 27 public libraries around the Santa Fe NF. Notices of the draft inventory maps availability and solicitation for comments were mailed out to individuals and groups on the Forest Plan Revision mailing list. Maps were also made available at the series of public meetings that took place in the fall of 2016.

Approximately 68 comments were received at this time. Since this series of public meetings and comment period was combined with solicitation of comments on site-specific wilderness characteristics for the evaluation step, the majority of comments were relevant to the evaluation and analysis steps of the Wilderness process (Figure J-3) and were carried forward to those steps. All of the comments received were reviewed for new or different information that may have affected the lands inventoried; none was determined to necessitate changes to the draft inventory maps. Letters, comments, and Forest Service responses can be found in the project record.



**Figure J-3. Breakdown of the relevance of comments received in the fall of 2016.** Comments were solicited for draft Inventory maps and site-specific input for the evaluation. Comments could be counted more than once.

### Wilderness Inventory Results

There were 374,084 acres that do not meet the wilderness inventory criteria (Table J-5). These excluded acres include 315,238 acres that did not meet the size criteria (less than 5,000 acres or not adjacent to existing USFS, BLM, or NPS Wilderness); and 58,844 that did not meet the roads or other improvements criteria. The exclusion exercise was done using data from the Forest’s Geographic Information System and included two steps. In step 1, existing administrative sites including towers, helibases, developed recreation sites (Dev Class 2-5); utility lines (power and gas pipelines); railroad (Amtrack); roads (MVUM, MVUM provisional, Admin Use, Private Access), oil, gas, and water wells (e.g., Buckman); ski areas; and recreation residences were eliminated (lines and points buffered 100 feet). This step excluded 58,491 acres, including improvements that clearly met parts 1 and 2 of definition for substantially noticeable. In step 2, other improvements that could meet the criteria were explored, primarily using part 3 of the substantially noticeable definition. Here range improvements and mining areas that could be seen on high-resolution (sub-meter) aerial imagery when zoomed to a scale of 1 inch = 1 mile (1:63,360) were removed from the inventory. This step excluded 354 acres. Many other features that would have met the criteria were already removed by the size criteria or were removed as part of step 1.

**Table J-5. Acres excluded from wilderness inventory by district and exclusion criteria**

District	Size Criteria, < 5,000 Acres (acres)	Road and Other Improvements Criteria(acres)	Total Excluded from Inventory (acres)
<b>Coyote</b>	57,319	15,009	72,329
<b>Cuba</b>	71,060	12,031	83,091
<b>Española</b>	35,605	9,412	45,018
<b>Jemez</b>	44,929	9,879	54,808
<b>Pecos-Las Vegas</b>	106,325	12,513	118,838
<b>Total</b>	315,238	58,844	374,084

Final inventory maps (Figure J-4-west and Figure J-4-east) include 885,350 acres of land determined to meet size and improvements criteria as defined above (Table J- and Table J-2). Of these, 280,730 inventory areas are less than 5,000 acres but are adjacent to existing wilderness and therefore included (Table J-6). These lands may be suitable for inclusion in the National Wilderness Preservation System for the Santa Fe NF and were moved forward to step 2 in the process, the evaluation (Table J-6).

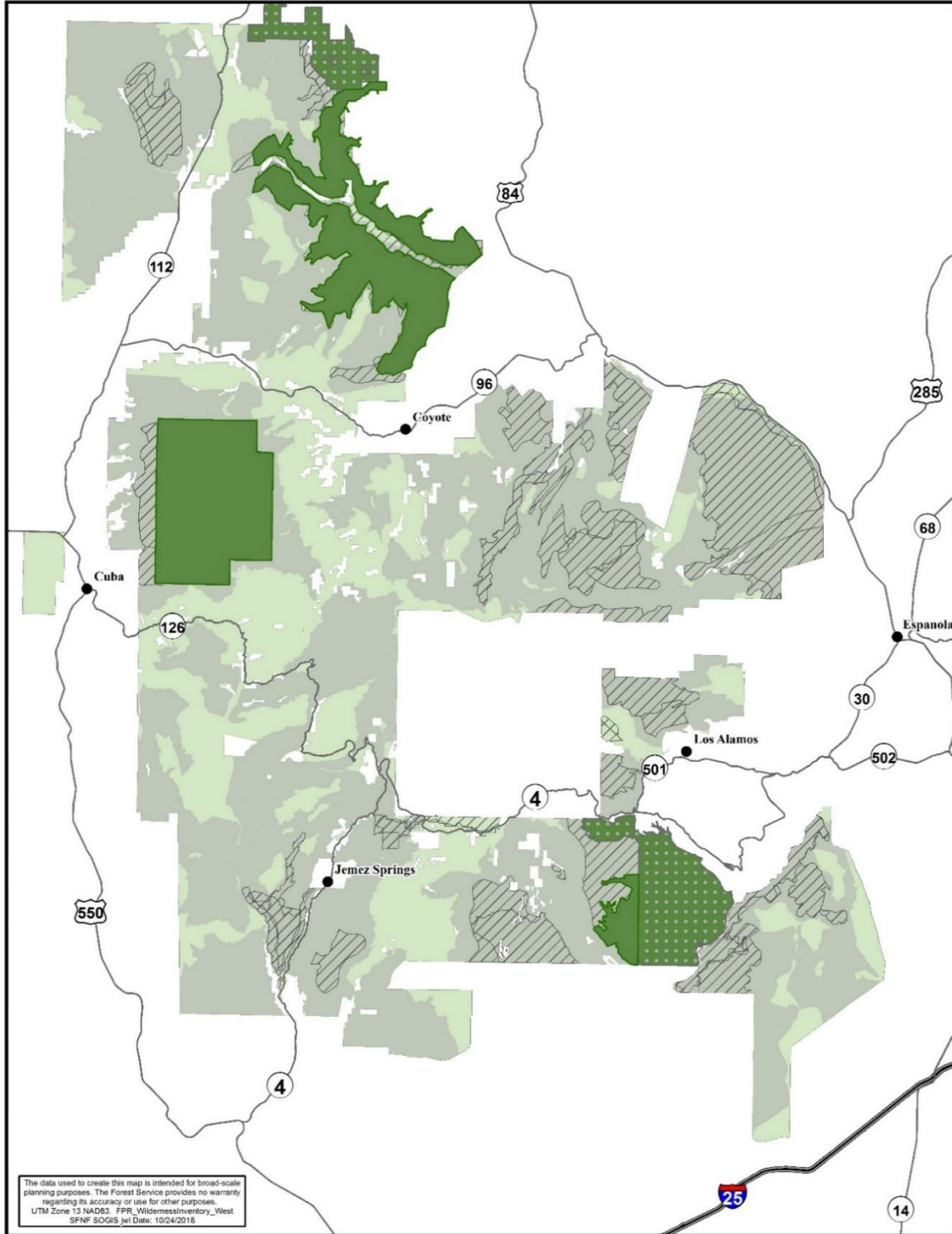
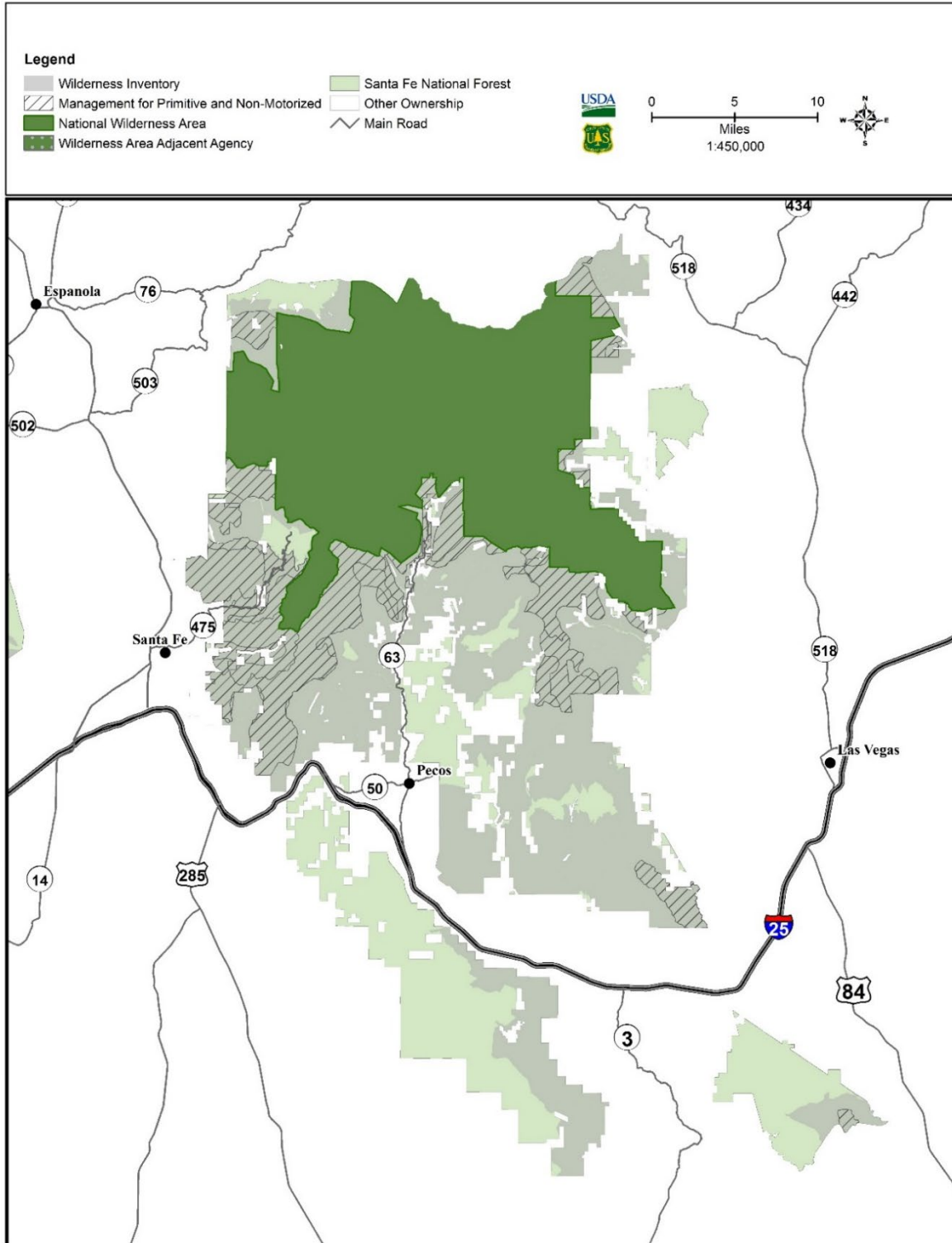


Figure J-4-west. Final wilderness inventory for the western half of the Santa Fe NF, from Cuba to Española. Also shown are areas currently managed for primitive and non-motorized use (e.g., inventoried roadless areas; areas overlaid by a striped pattern) and Designated Wilderness (represented by dark green, with dots represent non-FS Designated Wilderness). For legend see Figure J-4-east.



**Figure J-4-east. Final wilderness inventory for the eastern half of the Santa Fe NF, from Española to Las Vegas.**  
 Also shown are areas currently managed for primitive and non-motorized use (e.g., inventoried roadless areas; areas overlaid by a striped pattern) and Designated Wilderness (represented by dark green, with dots represent non-FS Designated Wilderness).

**Table J-6. Acres included in the wilderness inventory, by district**

District	Included in Wilderness Inventory (acres)	<5,000 acres but Adjacent to Designated Wilderness (acres)	Total Included in Inventory (acres)
<b>Coyote</b>	79,606	41,334	120,940
<b>Cuba</b>	104,695	32,153	136,848
<b>Española</b>	191,707	29,875	221,582
<b>Jemez</b>	161,186	10,060	171,246
<b>Pecos-Las Vegas</b>	67,426	167,308	234,734
<b>Total</b>	604,620	280,730	885,350

## Step 2: Evaluation

The primary function of the evaluation step is to evaluate the wilderness characteristics present in all lands identified in the inventory (FSH 1909.12 Chapter 72). The evaluation is based on the criteria from the Forest Service Handbook (FSH 1909.12 Chapter 72) and further defined by the Santa Fe NF through public and government participation. The following information outlines the wilderness evaluation process specific to the Santa Fe NF given the aforementioned criteria for the evaluation, as developed using the planning directives and input received from the public through engagement efforts between April and May of 2016. The wilderness evaluation did not eliminate any areas or parts of areas from the Inventory (step 1 of 4), but rather assessed wilderness characteristics for all of these areas using criteria from FSH 1909.12 Chapter 70 and further defined for the Santa Fe NF, including public input from spring 2016 meetings. Evaluations are not a designation that convey or require a particular kind of management; rather, the evaluation simply denotes an area’s wilderness characteristics. Further, there is no requirement to carry all lands evaluated forward for further NEPA analysis as possible recommended wilderness (FSH 1909.12 Chapter 72).

All evaluated areas were named according to the ranger district (RD; Co= Coyote; Cu= Cuba; E= Española; J= Jemez; P= Pecos/Las Vegas) the area occurs in plus a unique polygon number. Note that no polygon numbers are repeated, but rise sequentially as ranger district boundaries (in alphabetical order) are crossed. Areas that were further subdivided due to differences in wilderness characteristics were given a letter following the RD# combination (i.e., Co06A). This area naming convention is used throughout the following sections.

## Evaluation Process

The process for step 2 of the process began with defining the criteria for each wilderness characteristic. Chapter 70 of the Forest Service Handbook 1909.12 outlines criteria for evaluation of lands for wilderness characteristics. These criteria are used to determine potential suitability for inclusion in the National Wilderness Preservation System using criteria in the Wilderness Act of 1964 section 2(c) and include the degree to which the area: (1) generally appears to be affected primarily by the forces of nature, (2) has outstanding opportunities for solitude or primitive and unconfined types of recreation, (3) may contain unique features or values, and (4) can be managed to preserve its wilderness characteristics. In addition, areas that are less than 5,000 acres must be evaluated for how they are of sufficient size to make their preservation and use in an unimpaired condition practicable. Since all areas in the inventory that were less than 5,000 acres were also adjacent to Designated Wilderness (USFS, BLM, or NPS), they are considered to be of sufficient size. The Santa Fe NF used criteria for the evaluation step that was based on the handbook, public input, and made relevant for the Santa Fe NF (Table J-7 through Table J-10). Most criteria had several questions (a, b, c), each with several subparts (bullets within each question).

Each question within each criterion was evaluated by the interdisciplinary team using geospatial (map) data from the Forest's Geographic Information System databases, interdisciplinary field knowledge from resource specialists, and public comments from three comment periods (Spring 2016, September 2016, January 2017) for the evaluation. Guidelines were used to help make consistent determinations of high, moderate, low, or no wilderness characteristics for each question and each area on the inventory map (Tables J-7 through J-10). Some of these guidelines were based on a single point (see 1b), while others included several points for consideration: For example, 1c asks for consideration for evidence of human activity, prevalence of improvements, and appearance of improvements. Each of these points represent a part of the question for that criterion, but it was not necessary for consistency in all these parts for the determination. In fact, sometimes a single point strongly influenced the determination for an individual question. For example, for 1a, an area with a prevalence of non-native species (that would be apparent to the average visitor) may result in a lower determination for that area, even if the rest of the plant and animal communities appear natural.



### Criterion 1: Apparent Naturalness

Evaluates the degree to which an area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable. When evaluating for apparent naturalness, the evaluation was based on a balance between the perception of the average forest visitor and subject matter expertise. For example, the average forest visitor may not be able to identify scattered presence of invasive plant species as unnatural, so they would not result in lower determinations.

**Table J-7. Apparent naturalness criteria**

Evaluation Criteria Identified in Planning Directives (FSH 1909.12 Chapter 72.1 Section 1)	Evaluation Criteria Further Defined by Santa Fe National Forest	Guidelines for Determining Amount of Wilderness Characteristics
<p><u>Question 1a.</u> What is the composition of plant and animal communities? The purpose of this question is to determine if plant and animal communities appear substantially unnatural.</p>	<ul style="list-style-type: none"> <li>Describe the dominant vegetation types, associations, and plant and animal communities.                      How are concentrations of nonnative plants and/or animals distributed across the land?                      Other (Include any additional information related to the question above)</li> </ul>	<p><b>High</b> - Non-native species are not evident. The composition of plant and animal communities appears natural.  <b>Moderate</b> - Non-native species are evident in isolated spots or low numbers scattered throughout.                      The composition of plant and animal communities appears natural in most areas.  <b>Low</b> - Non-native species are common in the area.                      The composition of plant and animal communities appears natural in some areas.  <b>No</b> – Non-native species are dominant in the area.                      The composition of plant and animal communities represents a departure from apparent naturalness in the majority of the area.</p>
<p><u>Question 1b.</u> What is the extent to which the area appears to reflect ecological conditions that would normally be associated with the area without human intervention?</p>	<ul style="list-style-type: none"> <li>Describe the distribution and amount of vegetation restoration treatments (e.g. thinning), timber harvest areas, and associated activities (e.g., clear cuts, bulldozer lines, fuel breaks).                      Does the vegetation appear natural (consider elements, including but not limited to vegetation, wildlife, soil, air, etc.)?                      Other (Include any additional information related to the question above)</li> </ul>	<p><b>High</b>– Vegetation appears natural.  <b>Moderate</b> – Vegetation does not appear natural in isolated spots or scattered.  <b>Low</b> –Vegetation does not appear natural commonly in the area.  <b>No</b> – Vegetation does not appear natural throughout the area.</p>

Evaluation Criteria Identified in Planning Directives (FSH 1909.12 Chapter 72.1 Section 1)	Evaluation Criteria Further Defined by Santa Fe National Forest	Guidelines for Determining Amount of Wilderness Characteristics
<p><u>Question 1c.</u> What is the extent to which improvements included in the area represent a departure from apparent naturalness?</p> <p><i>The term “improvements” in this context is taken from the Forest Service Handbook and means the evidence of past human activities in the area as a whole.</i></p>	<ul style="list-style-type: none"> <li>Consider the extent to which the improvements cause the appearance to depart from apparent naturalness to the area as a whole. Consider the appearance and concentrations of all improvements listed below:                     <ul style="list-style-type: none"> <li>Linear travel-ways, including any remaining roads (including system, decommissioned, temporary, or user-created), system trails<sup>1</sup>, and known unauthorized routes</li> <li>Airstrips, heliports, and/or landing zone’s</li> <li>Permanently installed vertical structures</li> <li>Areas of mining activity, including exploration and prospecting</li> <li>Range or wildlife improvements (such as fences, agricultural water pipelines (typically less than 2 inch diameter), water troughs, earthen tanks, corrals, or trick tanks).</li> <li>Recreation improvements</li> <li>Ground-return telephone lines, electric lines, and powerlines</li> <li>Watershed treatment areas (such as contouring, diking, channeling)</li> <li>Structures, dwellings, and other relics of past occupation (that are not considered a part of the cultural landscape)</li> <li>Other (Include any additional information related to the question above)</li> </ul> </li> </ul>	<p><b>High</b> – Little or no evidence of human activity                      Prevalence of improvements is rare or scattered.                      The presence or appearance of improvements does not detract from apparent naturalness. It is rare to see improvements.</p> <p><b>Moderate</b> – Unnoticeable or unobjectionable human activity.                      Prevalence of improvements is overall low throughout the area; it may be concentrated in some spots but is more typically dispersed through the area. It is common to find spots where improvements are absent or unseen. Appearance of improvements detract from apparent naturalness in some areas.</p> <p><b>Low</b> – Noticeable evidence of human activity, area has high level of human disturbance.                      Prevalence of improvements is overall high throughout the area, and is often concentrated. Although spots where improvements are absent or unseen are uncommon, they exist. Appearance of improvements detract from apparent naturalness in most areas</p> <p><b>No</b> - Obvious evidence of human activity.                      Prevalence of improvements is very high throughout the area and there are very few or no spots where improvements are absent or unseen.                      Appearance of improvements detract from apparent naturalness throughout the area.</p>

<sup>1</sup> System trails are acceptable improvements in wilderness areas; the purpose of this consideration is to consider whether the concentration, appearance, and density of system trails in the area impact the area’s apparent naturalness.

## Criterion 2: Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Evaluates the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation. An area only has to possess one or the other; the area does not have to possess outstanding opportunities for both elements, nor does it need to have outstanding opportunities on every acre. The definitions for this criterion are identified in the table below.

**Table J-8. Outstanding opportunities for solitude or a primitive and unconfined type of recreation criteria**

Evaluation Criteria Identified in Planning Directives (FSH 1909.12 Chapter 72.1 Section 2)	Evaluation Criteria Further Defined by Santa Fe National Forest	Guidelines for Determining Amount of Wilderness Characteristics
<p><u>Question 2a.</u> Consider impacts that are pervasive and influence a visitor's opportunity for solitude within the evaluated area.</p>	<ul style="list-style-type: none"> <li>Can a traveler see or hear evidence of civilization from within the area? Consider proximity of area to high use areas, private lands, roads<sup>2</sup>, and/or activities that impact opportunities for solitude. Consider pervasiveness of impacts and potential seasonal variabilities.</li> </ul> <p>Describe the general topography of the area in context of sight, sound, and screening.</p> <p>Other (Include any additional information)</p>	<p><b>High</b>– Common or significant feeling of being alone or remote from civilization.                      --Human activities are rare.</p> <p><b>Moderate</b> –Opportunities to feel alone are possible in much of the area, though signs of civilization are possible.                      --Human activities are uncommon.</p> <p><b>Low</b> – Little opportunity of feeling alone.                      Human activities or presence is common.                      Signs of civilization are common or likely.</p> <p><b>No</b> - No opportunity of feeling alone.                      Human activities or presence is unavoidable.                      Signs of civilization are pervasive.</p>
<p><u>Question 2b.</u> Consider the opportunity to engage in primitive-type or unconfined recreation activities that lead to a visitor's ability to feel a part of nature.</p> <p><i>Note: Examples of primitive-type recreation activities include observing wildlife, hiking, backpacking, horseback riding, fishing, hunting, floating, kayaking, cross-country skiing, camping, and enjoying nature.</i></p>	<ul style="list-style-type: none"> <li>Describe the types of primitive recreation activities in the area.</li> </ul> <p>Describe other types of non-primitive recreation activities in the area.</p> <p>Is the area relatively free of restrictions on visitor behavior, providing an unconfined experience?</p> <p>What is the level of challenge and risk in the area? What is the likelihood of encounters with others?</p> <p>Are facilities or user controls provided that decrease opportunities for self-reliant recreation?</p> <p>Other (Include any additional information)</p>	<p><b>High</b> – There are abundant opportunities for engaging in primitive and unconfined recreation.                      --These opportunities are of high quality.</p> <p><b>Moderate</b> – There are some opportunities for engaging in primitive and unconfined recreation.                      --At least some of these opportunities are of high quality.</p> <p><b>Low</b> – There are few opportunities to engage in primitive and unconfined recreation.                      --Any existing opportunities are poor.</p> <p><b>No</b> – There are no opportunities to engage in primitive and unconfined recreation.</p>

<sup>2</sup> Including any effects from adjacent cherry-stemmed roads along area boundaries.

### Criterion 3: Unique and Outstanding Qualities

Evaluates the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value. Although presence is not required for an area to be recommended Wilderness, they should be identified and evaluated where they exist, considering if the feature is iconic, unique regionally or nationally, and the extent to which it defines how people think about and value the area.

**Table J-9. Unique and outstanding qualities criteria**

Evaluation Criteria Identified in Planning Directives (FSH 1909.12 Chapter 72.1 Section 4)	Evaluation Criteria Further Defined by Santa Fe National Forest	Guidelines for Determining Amount of Wilderness Characteristics
<p><u>Question 3a.</u> Does the area contain rare plant or animal communities or rare ecosystems?  <i>Note: Rare in this context is defined as national or regional in scale.</i></p>	<p>Presence of rare species or ecosystems?                      Other (Include any additional information)</p>	<p><b>Yes</b> (e.g., Threatened and Endangered species, Species of Conservation Concern, Regional Forester's Sensitive Species list).</p>
		<p><b>No</b></p>
<p><u>Question 3b.</u> Are there any outstanding landscape features such as waterfalls, mountains, viewpoints, waterbodies, or geologic features?</p>	<ul style="list-style-type: none"> <li>Description of any outstanding and unique features in the area, including significance and extent.</li> <li>Percent of area mapped as Scenic Class 1 in the Forest's Scenery Management System inventory.*</li> <li>Other (Include any additional information)</li> </ul>	<p><b>Yes</b></p>
		<p><b>No</b></p>
<p><u>Question 3c.</u> Are there historic and cultural resource sites in the area of regional or national significance?  <i>Consider if the feature is nationally recognized (for example, through an official designation such as the National Register) or if the feature is considered a priority heritage asset.</i></p>	<ul style="list-style-type: none"> <li>Presence of significant historic or cultural resources sites?</li> <li>Other (Include any additional information)</li> </ul>	<p><b>Yes</b> (sites eligible for the National Register of Historic Places).</p>
		<p><b>No</b></p>
<p><u>Question 3d.</u> Are there any research natural areas?</p>	<ul style="list-style-type: none"> <li>Percent of area that is part of a research natural area.</li> <li>Other (Include any additional information)</li> </ul>	<p><b>Yes</b> (e.g., Rio Grande Cutthroat pure streams, important acequia headwaters, Wild and Scenic Rivers, important watersheds).</p>
		<p><b>No</b></p>
<p><u>Question 3e.</u> Are there any high-quality water resources or important watershed features?</p>	<ul style="list-style-type: none"> <li>Presence and extent of high-quality water resources or important watershed features in the area. Consider designated wild and scenic rivers.</li> <li>Other (Include any additional information)</li> </ul>	<p><b>Yes</b></p>
		<p><b>No</b></p>

\*The Forest Service's Scenery Management System (SMS) provides the framework to effectively inventory, assess, and manage scenic resources. Scenic Class is a component of the SMS inventory, and is the primary indicator of the relative importance, or public value, of areas with distinctive scenery and visibility. It is a combination of distinct landscape features (landform, vegetation, rocks, water features, and cultural features) and the extent that the public values and sees these features. Scenic Class 1 represents those areas that are most valued, most visible, and contain the most distinct landscape features. Refer to the Forest Service Scenery Management Handbook for more information, [http://fsweb.r1.fs.fed.us/rmlhw/scenery\\_mgmt/handbooks\\_references/sms\\_hanbook\\_701-opt.pdf](http://fsweb.r1.fs.fed.us/rmlhw/scenery_mgmt/handbooks_references/sms_hanbook_701-opt.pdf).

**Criterion 4: Manageability**

Evaluates the degree to which the area may be managed to preserve its wilderness characteristics, considering current conditions.

**Table J-10. Manageability criteria**

Evaluation Criteria Identified in Planning Directives*	Evaluation Criteria Further Defined by Santa Fe National Forest	Guidelines for Determining Amount of Wilderness Characteristics
<p><u>Question 4a.</u> Can the area be managed to preserve its wilderness characteristics?</p> <p><i>Describe factors that are or are not compatible with managing for wilderness character.</i></p>	<ul style="list-style-type: none"> <li><i>Shape and configuration of the area.</i> Describe the boundary, edge to interior ratio, and presence of cherry-stemmed roads, etc.</li> <li><i>Presence and extent of legally established rights or uses</i> within the area and how these uses may support or impact managing an area for wilderness characteristics (e.g., active mining claims, grazing allotment maintenance needs, special uses, cultural or traditional uses)**</li> <li><i>Presence and extent of any specific Federal or State laws</i> that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics (including but not limited to designated or proposed critical habitat). <i>Describe management of adjacent lands.</i></li> <li><i>Presence and extent of wildland-urban interface</i> in the area. Include percent if possible.</li> <li><i>Describe management activities or restrictions</i> within the area (e.g., signed management decisions).</li> <li><i>Presence of inventoried roadless area.</i> Include percentage if possible.</li> <li><i>Other</i> (Include any additional information)</li> </ul>	<p><b>High</b> – Presence and extent of other legally established rights or uses occurs in isolated spots and makes management to preserve the area’s wilderness characteristics easy throughout the area.</p> <p><b>Moderate</b> –The presence and extent of other legally established rights or uses is scattered and makes management to preserve the area’s wilderness characteristics possible throughout much of the area.</p> <p><b>Low</b> – The presence and extent of other legally established rights or uses occurs across most of the area making it difficult to manage the area to preserve its wilderness characteristics.</p> <p><b>No</b> – The presence and extent of other legally established rights or uses in the area is pervasive throughout the area making it impossible to manage the majority of the area to preserve wilderness characteristics.</p>

\* From FSH 1909.12 Directives, Chapter 70

\*\* The impacts and alternatives relating to unauthorized uses are considered in the analysis phase of the inventory and evaluation of lands that may be suitable for inclusion in NWPS. For example, if an area experiencing unauthorized fuelwood cutting was carried forward in an alternative as potential wilderness, the impacts and effects of managing unauthorized use within a recommended wilderness area would be analyzed (e.g., increased enforcement needs). Additionally, this same area may be included in an alternative as a potential fuelwood gathering management area as an alternative to potential wilderness.

Once wilderness characteristics were determined for all questions within all four criteria, the amount of wilderness characteristics across an area were combined to get an overall rating of wilderness characteristics for each area. For each area there are a total of six different determinations of high, moderate, low, or no wilderness characteristics; 3 for Apparent Naturalness (3 questions), 2 for Solitude or Primitive Recreation (2 questions), and 1 for Manageability (1 question). In addition, each polygon has presence or absence findings (yes or no) for five different unique features (criterion 3). The way wilderness characteristics for all questions and all criteria were combined to an overall determination of wilderness characteristics for each area was standardized. Since most criteria were composed of multiple questions, they were combined into a single wilderness characteristic for that criterion.

The apparent naturalness criterion is composed of three questions: (a) composition of plant and animal communities, (b) human intervention on ecological conditions, and (c) improvements. The question on improvements (1c) was given more weight because public comments emphasized that improvements or structures on the landscape were seen as a major impact on the apparent naturalness criterion. Of the 359 comments received on the wilderness evaluation, 64 percent (230) were on improvements (Draft Inventory and pre-Evaluation Fall 2016 as well as Draft Evaluation Winter 2017). In addition, questions 1a and 1b focus on the natural environment, which is typically high on a national forest. Therefore, most areas received either a high or moderate determination for each of these questions. In fact, only one area was determined to have no wilderness characteristics for these questions and another 22 percent (26 areas) were determined to have low wilderness characteristics for questions for 1a, 1b, or both. By giving the improvements question more weight, more differences in the apparent naturalness criterion emerged between the areas across the forest. The way the three questions were combined into a single determination of wilderness characteristics for apparent naturalness followed a formula that gave the improvements question more weight (Table J-12). This formula was developed by taking results from a base formula for combining these qualitative measures (Table J-11), and increasing or decreasing the overall determination of wilderness characteristics based on the weighted characteristic (Table J-12).

The outstanding opportunities for solitude or primitive and unconfined recreation type criterion is composed of two questions: (a) opportunities for solitude or (b) opportunities for primitive and unconfined type recreation. Since this criterion is worded as either solitude *or* primitive and unconfined type recreation, the question with the higher wilderness characteristics of the two was chosen to be factored into the overall determination of wilderness characteristics for the area.

The manageability criterion was composed of a single question: can the area be managed to preserve its wilderness characteristics? In combining the manageability wilderness characteristic determination with those of the other two criteria, manageability was given greater weight than apparent naturalness or solitude or primitive recreation. Public comments throughout the wilderness process showed that manageability was considered a very important indicator of an area's wilderness characteristics. Of the 877 comments received on the criteria for wilderness evaluation, 36 percent (316) were on manageability (from Draft Inventory and pre-Evaluation Fall 2016 as well as Draft Evaluation Winter 2017). Other than improvements (which was also weighted more heavily in combining questions related to apparent naturalness), no other criterion had more than 99 comments or 11 percent of the total comments. The way that apparent naturalness, solitude or primitive and unconfined type recreation, and manageability were combined into the overall determination of wilderness characteristics for an area followed the same formula used to combine the three questions for apparent naturalness (Table J-12).

The unique and outstanding qualities criterion is intended to highlight iconic and unique features of an area. The directives require that the presence of these unique features is identified and evaluated, but also recognize that the values are not required to be present for an area to be recommended wilderness (FSH

1909.12 Chapter 72.1). The majority of the areas possessed at least one, and often times many unique features. Discussions of areas with unique features that might increase the overall determination of wilderness characteristics for each area occurred with district specialists and considered public input on the topic.

**Table J-11. Base formula**

**Formula used to combine three different determinations of wilderness characteristics as in the three questions for Apparent Naturalness and the overall area determination of wilderness characteristics. This formula assumes that all three parts are given equal weight. H = high, M = moderate, L = low, and N = no wilderness characteristics. Footnotes for overall criterion represent the rules followed to develop the overall determination.**

Combinations of 1a, 1b, and 1c			Overall criterion determination
H	H	H	H <sup>1</sup>
H	H	M	H <sup>2</sup>
H	H	L	M <sup>3</sup>
H	H	N	M <sup>4</sup>
H	M	M	M <sup>2</sup>
H	M	L	M <sup>5</sup>
H	M	N	M <sup>6</sup>
H	L	L	M <sup>3</sup>
H	L	N	L <sup>6</sup>
H	N	N	L <sup>4</sup>
M	M	M	M <sup>1</sup>
M	M	L	M <sup>2</sup>
M	M	N	L <sup>3</sup>
M	L	L	L <sup>2</sup>
M	L	N	L <sup>5</sup>
M	N	N	L <sup>3</sup>
L	L	L	L <sup>1</sup>
L	L	N	L <sup>2</sup>
L	N	N	N <sup>2</sup>
N	N	N	N <sup>1</sup>

<sup>1</sup>when all sub-parts are the same, the overall is equal to that same determination

<sup>2</sup>when two sub-parts are the same and the remaining is one step above or below, the overall is equal to the determination that is represented by the most sub-parts.

<sup>3</sup>when two sub-parts are the same and the remaining is two steps above or below, the overall is equal to the determination that is between

<sup>4</sup>when two sub-parts are the same and the remaining is three steps above or below, the overall is equal to the determination that is one step above or below the determination that is represented by two of the sub-parts

<sup>5</sup>when all three sub-parts are different but are each one step apart from each other, choose the middle determination

<sup>6</sup>when all three sub-parts are different but one is two steps above or below the others, choose the middle represented determination



**Table J-12. Weighted formula**

Formula used to combine three determinations of wilderness characteristics into a single determination (apparent naturalness and the overall). For apparent naturalness, questions on vegetative communities and apparent human manipulation of vegetation were given equal weight while improvements, was given more weight. For an area’s overall determination of wilderness characteristics, apparent naturalness and solitude or primitive recreation were given equal weight while manageability was given more weight. Arrows next to the overall determination of wilderness characteristics show that the weighted component increased or decreased the combined value from the base formula (Table J-11). Grey rows represent combinations that did not occur in the evaluation. H = high, M = moderate, L = low, and N = no wilderness characteristics.

Determinations of wilderness characteristics given equal weight	Determinations of wilderness characteristics given more weight	Resulting overall determination of wilderness characteristics
HH	H	H
HH	M	M ↓
HH	L	L ↓
HH	N	L ↓
HM	H	H
HM	M	M
HM	L	L ↓
HM	N	L ↓
HL	H	H ↑
HL	M	M
HL	L	L ↓
HL	N	N ↓
HN	N	N ↓
MM	H	H ↑
MM	M	M
MM	L	L ↓
MM	N	N ↓
ML	H	H ↑
ML	M	M
ML	L	L
ML	N	N ↓
MN	H	H ↑
MN	M	M ↑
MN	L	L
MN	N	N ↓
LL	H	H ↑
LL	M	M ↑
LL	L	L
LL	N	N ↓
LN	H	M ↑
LN	M	M ↑
LN	L	L
LN	N	N
NN	H	M ↑
NN	M	M ↑
NN	L	L ↑
NN	N	N

## Public Participation on Wilderness Evaluation

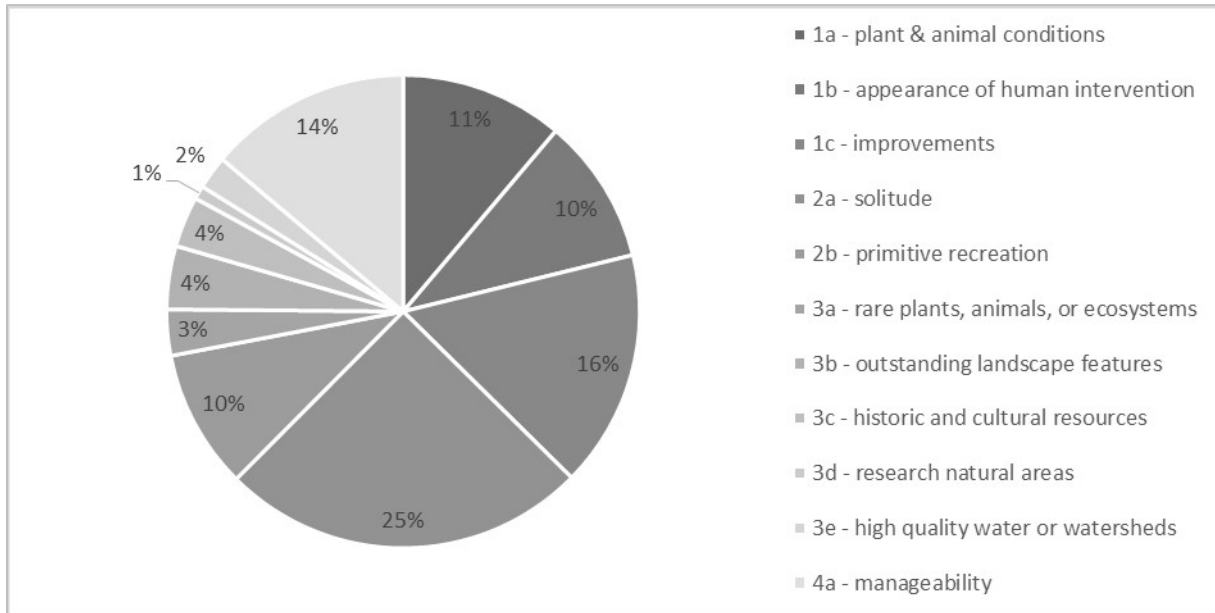
The evaluation step of the wilderness process was part of three different series of public meetings. The first was in Spring 2016 on the evaluation criteria (these meetings also included comment on the inventory criteria), the second was in Fall 2016 to gather preliminary input to be used in the wilderness evaluation (these meetings also included comment on the draft inventory map), and the third was in

January 2017 on the draft evaluation (these meetings also included comment on the initial plan components).

### Public Participation on Wilderness Evaluation Criteria

The first series of meetings regarding the wilderness process included opportunity to comment on the evaluation criteria. The details of this series of meetings are described above under the “Public Participation on Wilderness Inventory Criteria” section.

Of the 2,405 comments received (many are counted multiple times), 61 percent (1,470 comments) were related specifically to the evaluation. Comments were pretty evenly distributed across the different questions and criteria. However, questions related to criteria for apparent naturalness (1a, b, and c) had the most comments (819), the majority about improvements (355); questions related to criteria about solitude had the most comments of any single question (550), and there were generally fewer comments about the unique and outstanding features (Figure J-5). Letters, comments, and Forest Service responses can be found in the project record.



**Figure J-5. About 1,470 comments were received about the evaluation criteria. Criterion 1, apparent naturalness, had the most comments of all the criteria, the majority about improvements. Solitude had the most comments of any single question. Questions related to unique and outstanding features as part of criterion 3, had the fewest comments.**

Based on public input, consideration of mountain biking trails and motorized trails were removed from the criterion for manageability as possible components of legally established rights and uses within the area. While mechanized and motorized uses are prohibited in designated Wilderness per the Wilderness Act, such uses could continue if an area became recommended wilderness and therefore are not incompatible with the wilderness characteristic for manageability. We also ensured that other components of these uses, such as the visibility of their trails and the sights and sounds associated with their activity, were included as part of the wilderness characteristics for apparent naturalness, in the improvements question specifically, and solitude. Although these uses were removed from consideration during the wilderness evaluation, they were brought forward for consideration during the analysis.

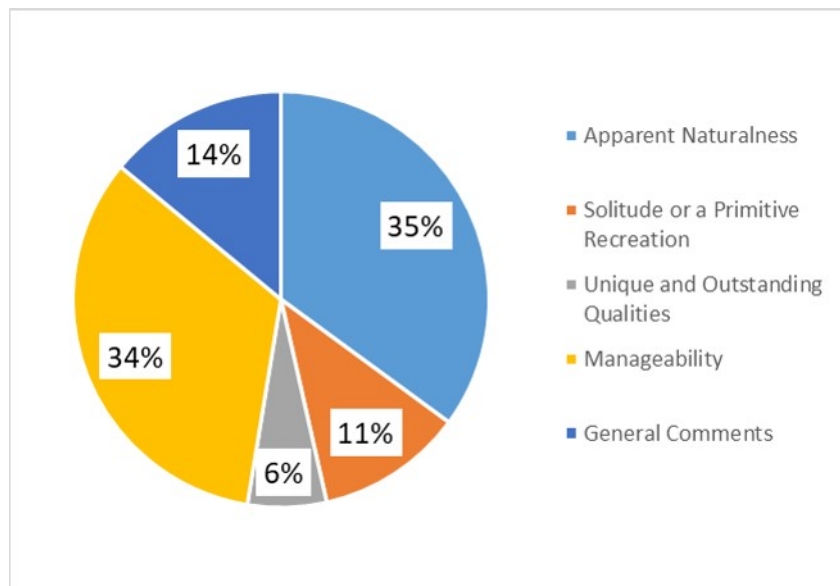
## Public Participation on Preliminary Input for the Wilderness Evaluation

The second series of meetings relevant to the wilderness evaluation focused on site-specific information that could be used in the evaluation. The Santa Fe NF held 10 public meetings between September 7 and September 20, 2016. Five of these meetings were technical meetings, which, similar to the public meetings, asked for and generated comments from attendees. Meetings were in five locations: Española, Cuba, Pecos, Jemez Springs, and Gallina.

The intent of the meetings was to (1) provide an opportunity to learn about the wilderness characteristic criteria and how the wilderness evaluation would be performed, and (2) have the public provide site-specific input for areas from the draft inventory maps. Input was solicited using a worksheet that asked participants to identify information related to wilderness characteristics for specific areas using the area ID from the draft inventory maps. These comments allowed the Santa Fe NF to benefit from the local knowledge of forest users. Comments were collected at the meetings, through mail and email, and through an online comment system.

A total of 290 people attended this series of meetings including representatives from the New Mexico Department of Agriculture, the New Mexico Environment Department, multiple non-profits, the Land Grant Association, [Senators Udall and Heinrich, and Congressman Ben Ray Lujan](#). A total of 214 letters were received during this meeting period, each containing one or more comments. More than 600 unique comments were extracted from these letters. Letters, comments, and Forest Service responses can be found in the project record.

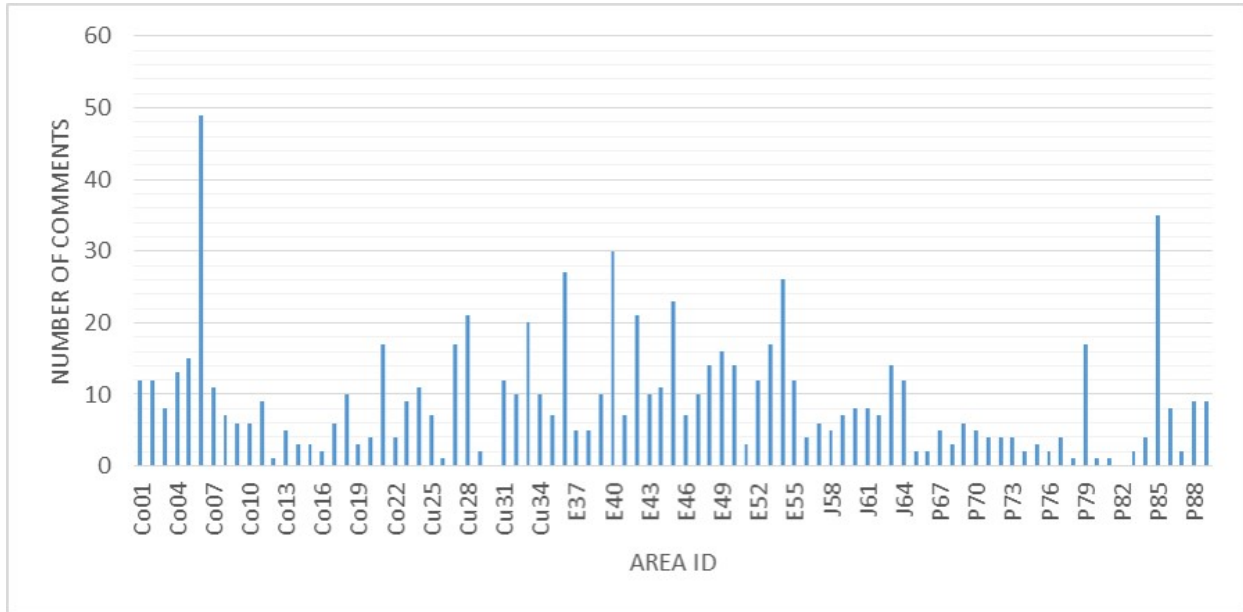
Approximately 600 comments were received on all wilderness characteristics (Figure J-6). Most of the comments were on two criteria—apparent naturalness (35 percent) and manageability (34 percent). Almost 15 percent of comments were not directly related to the wilderness characteristics of an inventoried area or the evaluation criteria in general.



**Figure J-6. Distribution of the approximately 600 comments pulled from comment letters across the different wilderness characteristics used for the evaluation. Many comments related to more than one wilderness characteristic.**

Areas received differing amounts of comments (Figure J-7). Often, areas with the most comments, like Co06 (Coyote Ranger District polygon 06) and P85 (Pecos Ranger District polygon 85), were later split

into multiple areas (i.e., Co06A, Co06B, Co06C, and Co06D) as they had a diversity of wilderness characteristics across the landscape.



**Figure J-7. Number of comments for each area in the wilderness evaluation. <sup>a</sup> Many people commented on more than one area.**

<sup>a</sup> Area ID: Naming convention for areas is the Ranger District (RD; Co= Coyote; Cu= Cuba; E= Española; J= Jemez; P= Pecos/Las Vegas) the area occurs in plus a unique polygon number (no polygon numbers are repeated, but rise sequentially as ranger district boundaries (in alphabetical order) are crossed.) Areas that were further subdivided due to differences in wilderness characteristics were given a letter following the RD# combination (i.e., Co06A).

All comments were sorted by area and wilderness characteristic and were used by the forest in the evaluation. The majority of comments specific to areas and their wilderness characteristics were incorporated into the evaluation (about 73 percent). For example, one commenter wrote that area Co06 had lower manageability because of the *“Impact to the maintenance of acequia in La Jara, Vallecito, Los Pinos, Niacimiento Copper City and Rio Puerco. It will impact our La Jara watershed.”* The final evaluation includes this comment, noting that acequias found in the area have special access needs and provide an important resource to its users.

Another 17 percent of comments were not incorporated in the evaluation because they were not found to be accurate. This discrepancy may have been due to different interpretations of the criteria and determinations of wilderness characteristics or difficulty in relating locations on the map to on the ground knowledge. For example, one commenter wrote that area Cu33 did not possess unique or outstanding qualities because *“Non-native vegetation has been planted for cattle which has also improved wildlife. Water sites have been placed in various areas for cattle, which has improved wildlife. No water sources present without being man made and maintained.”* Although the evaluation also found that no natural water resources are present, it found minimal evidence of invasive species and unique features, including cultural and historic features.

The remaining 10 percent of comments were partially incorporated in the evaluation. For example, comments may have indicated that an area had allotments but no unique features and the evaluation identified the allotments, but also the presence of unique features.

## **Public Participation on Draft Wilderness Evaluation**

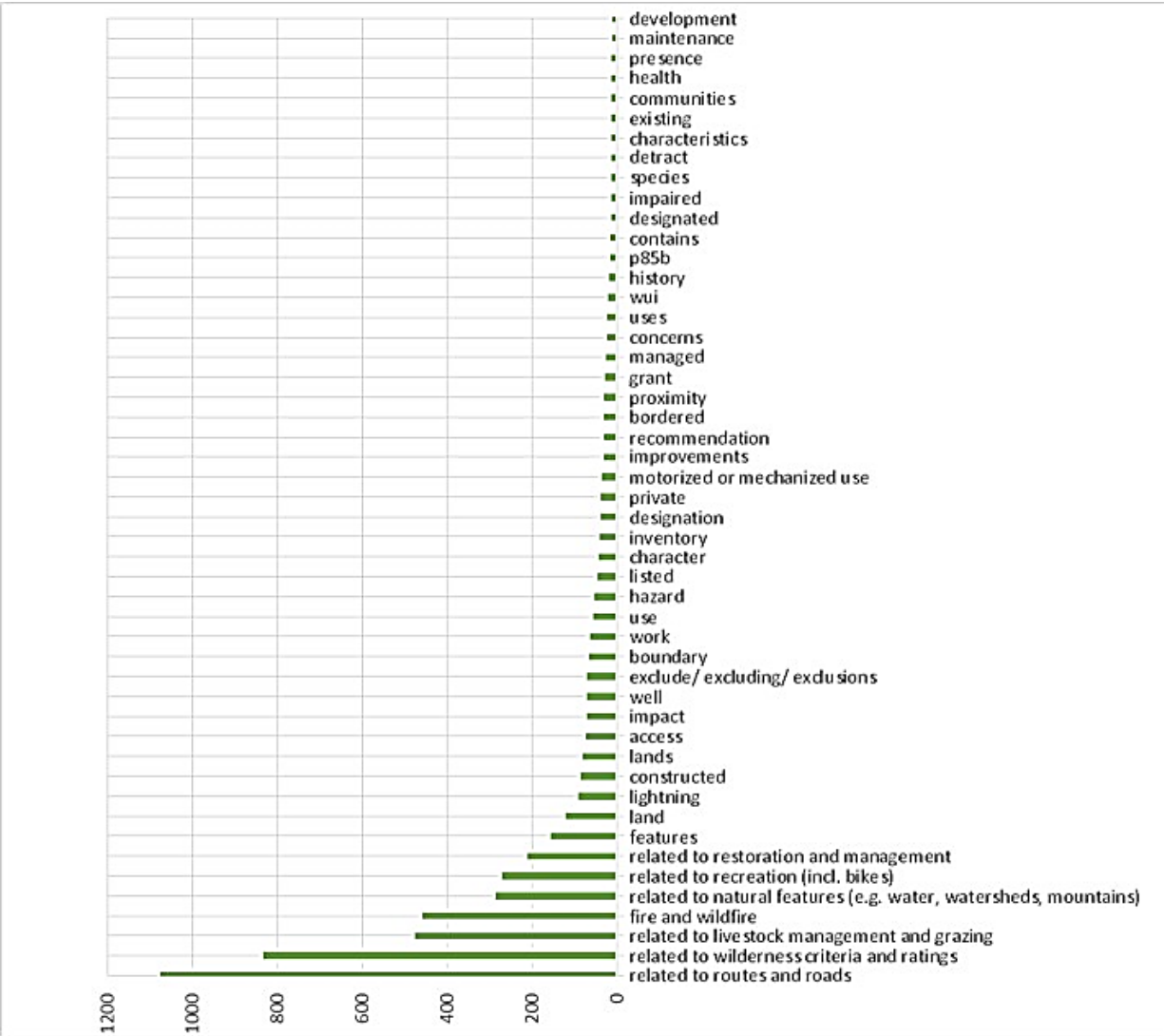
The third series of meetings relevant to the wilderness evaluation focused on comments on the draft wilderness evaluation. The Santa Fe NF held 11 public meetings that included discussion of the draft evaluation between January 17 and February 13, 2017. Meetings occurred in Mora, Bernalillo, Gallina, Cuba, Jemez Springs, Abiquiu, Pecos, and Santa Fe. In addition, this series included a two-day technical meeting in Santa Fe, and the draft evaluation was on the agenda for the second half of the second day. An online comment system was also made available.

The intent of these meetings was to get specific feedback on the draft evaluation, including the overall determination of wilderness characteristics for each area as well as the determinations of individual wilderness characteristics for each area. In addition, the public were asked if they thought any areas should be carried forward to the analysis process and included in any alternative in the final environmental impact statement.

A total of 232 people attended this series of meetings, including representatives from multiple Pueblo communities (including Tesuque Pueblo), the New Mexico Environment Department, the Stockmen's Association, multiple Land Grants, and the San Miguel County Commissioner. Over 140 letters were received during this comment period, with each letter containing one or more comment. Approximately 800 unique comments were extracted and analyzed from these letters. Since this comment period also included comment on the initial plan components, about 250 of the comments were specific to the wilderness process.

The majority of public comments received at this time were specific to the evaluation, either specific areas (52 percent, over 230 comments), specific wilderness characteristics (34 percent, over 150 comments), or the evaluation in general (2 percent, 8 comments). Many comments addressed both specific areas and specific wilderness characteristics (meaning they are counted twice in the numbers presented). About 12 percent of comments (over 50) addressed areas that should be in at least one alternative of the environmental impact statement and analyzed. It is important to note that numerous comments were received throughout all series of public meetings that there was no interest in more wilderness, which drove an alternative with no recommended wilderness. Letters, comments, and Forest Service responses can be found in the project record.

Comments on the draft evaluation covered a wide range of themes (Figure J-8). Topics related to routes and roads, wilderness criteria and ratings, livestock management and grazing, wildfire, natural features, recreation, and restoration and management were the most common, mentioned more than 200 times each.



**Figure J-8. The frequency of words or phrases from comments on the draft evaluation. Themes do not represent the focus of the comments but rather illustrate general trends from the comments overall. One comment could contain several of these categories.**

All comments were sorted by area and wilderness characteristic and were considered in the finalization of the evaluation. When comments on areas provided new or different information than had been considered in the draft evaluation, further research and discussion was made on the comment. In some cases, the information provided in the comment was inaccurate, but in many cases, comments already aligned with the draft evaluation.

The majority of comments were already in line with the evaluation results (about 68 percent). For example, a comment on area Co06B says, “Do not add this area to Wilderness will interfere with Acequia use and maintenance. Re-analyze. This area also utilized for fuel wood area.” Acequias and other water developments were already noted as unique features in this area in the draft evaluation and therefore this comment did not change the evaluation.

Another 25 percent of comments were not in line with the evaluation results and were not incorporated because they were determined to be inaccurate. For example, one commenter wrote about P85B that

“There is an active mining claim up Indian Creek. Attached are a few pictures taken several years ago...” However, the evaluation found that there are no active mining claims found in this area, although there is evidence of historic mining. The remaining 7 percent of comments were partially consistent and partially determined to be inaccurate with the evaluation.

In addition to comments on specific polygons, public input helped determine that the evaluation for the wilderness characteristic of manageability sometimes included items that were inappropriate to either the criterion or the wilderness evaluation in general. This included removal of any consideration of illegal uses or roads surrounding areas, roads and motorized uses in adjacent areas, and motorized dispersed camping corridors, which was in line with the established criteria. The evaluation criterion specifies that illegal uses are not considered as part of manageability in a footnote. Impacts related to unauthorized uses are instead considered in the analysis (step 3) instead of the evaluation. Similarly, the criterion does not include roads or motorized uses around the area (roads surrounding areas may border the area but are not within it). Since these roads are not within the area, they do not impact the manageability of it. Although the presence of roads and uses on them may influence illegal use within the area, illegal use was not considered in the evaluation as mentioned above. Surrounding roads and motorized uses in adjacent areas can impact solitude and were therefore considered as part of that wilderness characteristic. Adjustments were made to the wilderness evaluation in light of these comments.

Based on the public comments and reassessing the draft evaluation after this comment period, a few determinations of wilderness characteristics needed to be changed between draft and final. This resulted in 5 polygons with an increase in their overall wilderness characteristic rating and 22 areas with a decrease in their overall wilderness characteristic rating.

## Evaluation Results

A total of 118 polygons covering 885,992 acres were evaluated. The majority of the areas (44), covering 39 percent of the forest (345,026 acres) were determined to have no wilderness characteristics. Low wilderness characteristics were found in 29 areas, covering 23 percent of the forest (203,212 acres). The fewest acres (160,550 acres, 18 percent) and areas (17) across the forest were determined to have moderate wilderness characteristics. About 20 percent of the forest (177,205 acres) was determined to have high wilderness characteristics. (Table J-13)

**Table J-13. Distribution of wilderness evaluation across district and by wilderness characteristic rating**

District	High Wilderness Characteristic (acres)	Moderate Wilderness Characteristic (acres)	Low Wilderness Characteristic (acres)	No Wilderness Characteristic (acres)	Total (acres)
Coyote	2,228	13,485	41,518	63,709	<b>120,940</b>
Cuba	27,208	8,605	54,978	46,032	<b>136,822</b>
Española	74,190	92,748	5,718	49,596	<b>222,252</b>
Jemez	43,682	17,594	31,783	78,185	<b>171,244</b>
Pecos - Las Vegas	29,898	28,118	69,216	107,502	<b>234,734</b>
<b>Total Across Forest</b>	<b>177,205</b>	<b>160,550</b>	<b>203,212</b>	<b>345,026</b>	<b>885,992*</b>

\*This number does not match the total included inventory acres because a correction was made to the inventory that added over 600 acres. This was due to the correction of a powerline on the Caja del Rio and new information that an old water pipeline in Guaje was no longer in use.

### Final Wilderness Evaluation Results by Area

As part of the evaluation, the detailed evaluation for each area, including determinations of wilderness characteristics for each question within a criterion, is included below. Areas discussed below are referred to by the ranger district (RD) in which the area occurs plus a unique polygon number. Subdivisions of an area are indicated with a letter following the RD# combination (i.e., Co06A; Coyote RD polygon 06 section A).

#### *Co01 – 6,052.72 acres – Overall Determination of Wilderness Characteristics: Low*

<b>Criteria Category</b>	<b>Description</b>	<b>Determination of Wilderness Characteristics</b>
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area. Plant communities are mostly mixed conifer and grassy meadows of native forbs and grasses. Ecological functioning is intact with only a few isolated or scattered spots near roads where evidence of old clear cuts are visible.</p> <p>There is obvious evidence of human activity with a prevalence of improvements high throughout the area. Range improvements include earthen tanks, trick tanks (5,000 gallons with umbrella, painted yellow), water developments, a wooden corral and fence lines. Additionally, closed roads (maintenance level 1) can be seen throughout the area and are very apparent on the landscape. However, a portion of the area in the west has a higher level of apparent naturalness due to minimal presence of roads and other improvements.</p>	<p>1.a moderate 1.b moderate 1.c low</p>
Solitude or Primitive and Unconfined Recreation	<p>Opportunities to feel alone are possible in much of the area, though signs of civilization are likely near roads and range improvements. The area receives high visitor use during hunting season, but generally very low use the remainder of the year.</p> <p>Some high-quality primitive or unconfined recreation opportunities can be experienced within the area. A few of those opportunities include hunting, hiking, and nature viewing. There are no system trails in the area allowing a visitor to experience the challenge and risk of route finding and navigation free from the support of trails or directional signing.</p>	<p>2. a moderate 2. b moderate</p>
Unique Features	<p>There are no known unique or outstanding features present in this area.</p> <p>Interdisciplinary team review identified Jemez Mountains Salamander critical habitat and presence of goshawk.</p> <p>Review of historic and cultural values suggests low site density with little iconic or unique value.</p>	<p>3.a no 3.b no 3.c no 3.d no 3.e no</p>
Manageability	<p>The presence and extent of other uses and/or considerations (e.g., shape or configuration) occurs throughout most of the area making it difficult to manage the area to preserve its wilderness characteristics. There are private land inholdings within the area, cherry stemmed roads, a network of old roads (level 1) that are visible on the landscape, and a wildland-urban interface along the western portion of the area.</p> <p>Grazing occurs throughout the area and motorized equipment and mechanized transportation are authorized for maintenance of range improvements and management of the range resource. Maintenance of range improvements occurs via access on old roads. The area overlaps the Juan Bautista Baldes land grant where traditional uses are likely occurring in the area.</p>	<p>4.a low</p>



Co02 – 6,720.47 acres – Overall Determination of Wilderness Characteristics: Low

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species (Canada thistle and musk thistle) in disturbed areas. Plant dominance types include mixed-conifer, aspen, spruce-fir in the east, and ponderosa pine in the northwest with some grassy meadows intermixed. In addition to common forest wildlife and habitat, the area has an elk calving area and elk winter and summer range.</p> <p>Vegetation does not appear natural in isolated or scattered spots due to a variety of vegetation altering activities including thinning in 1995, a seed cut in 1985, tree planting in 1990, and clear cuts in 1986. Most vegetation management has occurred on the west side of the polygon.</p> <p>Prevalence of improvements is overall low throughout the area, but includes a provisional motorized trails, fence, corral, tanks (trick, pit and dirt), and a many old roads still apparent on the landscape.</p>	<p>1.a moderate                      1.b moderate                      1.c moderate</p>
Solitude or Primitive and Unconfined Recreation	<p>Human activities are uncommon, making opportunities to feel alone possible in much of the area. Recreation use is mostly hunters. Some impact to solitude when range management activities are present (motorized or mechanized) and when the area is used for traditional purposes (resource procurement, etc.). There are few primitive recreation opportunities and they tend to be of low quality, but hunting and hiking can be found in the area.</p>	<p>2.a moderate                      2.b low</p>
Unique Features	<p>No unique features are known to be in this area.</p>	<p>3.a no                      3.b no                      3.c no                      3.d no                      3.e no</p>
Manageability	<p>The presence and extent of other uses and/or considerations occurs throughout most of the area making it difficult to manage the area to preserve its wilderness characteristics. Some considerations include the following: a portion of the area is in a wildland-urban interface, several cherry stem roads dissect the area, and there are private land inholdings with associated use and access considerations. Additionally, motorized and mechanized range management is authorized for allotment permittees.</p>	<p>4.a low</p>

**Co03 – 6,469.33 acres - Overall Determination of Wilderness Characteristics: No**

<b>Criteria Category</b>	<b>Description</b>	<b>Determination of Wilderness Characteristics</b>
Apparent Naturalness	The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species (Canada thistle) along roads in scattered locations. In addition to common wildlife species and habitat, the area has American water shrew (Regional Forester's sensitive species) and elk summer and winter range. Vegetation does not appear natural in isolated or scattered spots due to thinning in the 1980s and early 2000s. Stumps are evident throughout the area. Prevalence of improvements is overall low throughout the area. Improvements include non-motorized trail (Trail # 98), trick tanks, drinkers, fences, old mine and gravel pit sites, old roads (minimally apparent on the landscape), and spring well development with large aprons.	1.a moderate 1.b moderate 1.c moderate
Solitude or Primitive and Unconfined Recreation	Human activities are uncommon, making opportunities to feel alone possible in much of the area. There is a motorized dispersed camping corridor adjacent to the area in the northeast that may affect solitude. There is a non-motorized trail in the Southwest. The primary use in the area is for range management activities and hunting. Portions of the polygon adjacent to rural communities are used for resource procurement. There are few primitive recreation opportunities and they tend to be of low quality. However, hiking and hunting may be done in the area.	2.a moderate 2.b low
Unique Features	Cultural and historic resources are identified as a unique feature in the area. The area has had little or no survey, but has potential for high site density.	3.a no 3.b no 3.c yes, little or no survey 3.d no 3.e no
Manageability	The presence and extent of other uses and management considerations in the area is pervasive, making it impossible to manage the majority of the area to preserve wilderness characteristics. There is a doughnut hole in the area created by roads, private adjacent land, and very long cherry stem roads that dissect the area.	4.a no

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Appendix J. Documentation of Wilderness Recommendation Process*

**Co04 – 12,597.06 acres – Overall Determination of Wilderness Characteristics: Low**

<b>Criteria Category</b>	<b>Description</b>	<b>Determination of Wilderness Characteristics</b>
Apparent Naturalness	The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species in disturbed areas. Plant dominance types include pinyon juniper, ponderosa pine, large grass meadows, mixed-conifer deciduous, and a small amount of spruce fir. Common forest wildlife and habitat occur in the area in addition to an elk calving area, elk summer and winter range, and Gunnison's prairie dog. Vegetation does not appear natural in isolated or scattered spots due to thinning in 1989 and 1994. Stumps are evident throughout treated areas. Prevalence of improvements is overall low throughout the area. Improvements include dirt and pit tanks, spring well developments, corral, fence, a non-motorized trail, and roads (mostly noticeable but some naturalizing).	1.a moderate 1.b moderate 1.c moderate
Solitude or Primitive and Unconfined Recreation	Human activities are uncommon, making opportunities to feel alone possible in much of the area, especially when away from private land, motorized dispersed camping corridor, and non-motorized trails. Use increases during hunting season, affecting opportunities for solitude during that time. Some high-quality opportunities to engage in primitive and unconfined recreation exist in the area including hunting, hiking, and horseback riding.	2.a moderate 2.b moderate
Unique Features	Cultural and historic resources are identified as a unique feature in the area. Varying site density and survey intensity is noted in the area with site density higher near playa areas. Important watershed features include acequias—community operated watercourses that transport water to nearby communities or agricultural areas.	3.a no 3.b no 3.c yes 3.d no 3.e yes, acequias
Manageability	The shape and configuration of the area make it particularly difficult to manage the area to preserve wilderness characteristics. The presence and extent of other uses or considerations occurs throughout most of the area, making it difficult to manage the area to preserve its wilderness characteristics. The area has multiple private land inholdings and adjacent private land parcels. Roads dissect the area, creating cherry stems or loops that create doughnut holes in the area. Motorized and mechanized range management is authorized for allotment permittees, and there is a current NEPA decision for a variety of new constructed range features. Heavy equipment is historically used for acequias maintenance.	4.a low

**Co05A – 14,046.31 acres – Overall Determination of Wilderness Characteristics: Moderate**

<b>Criteria Category</b>	<b>Description</b>	<b>Determination of Wilderness Characteristics</b>
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species in disturbed areas. Dominant plant types include mixed-conifer and spruce fir, ponderosa pine, and pinyon juniper. Common forest wildlife species and habitat are in the area as well as Mexican spotted owl, northern goshawk, American peregrine falcon in the north, elk winter and summer range, Rio Grande cutthroat, Gunnison's prairie dog, golden eagle, and bald eagle.</p> <p>Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention.</p> <p>Improvements in the area are rare or scattered and do not detract from apparent naturalness. Improvements include trick, dirt, and metal tanks for range management; old roads; and Cañone's Creek National Recreation Trail.</p>	<p>1.a moderate 1.b high 1.c high</p>
Solitude or Primitive and Unconfined Recreation	<p>Opportunities to experience solitude can be found throughout much of the area. Challenge and risk can be experienced in the area. High-quality, challenging primitive recreation opportunities like hiking, fishing, and hunting occur in the area. There is intensive use of the area by local rural communities. The designated Cañone's Creek National Recreation Trail runs the length of the polygon.</p>	<p>2.a high 2.b high</p>
Unique Features	<p>Several unique features are identified in the area. Unique or rare wildlife include Mexican spotted owl, northern goshawk, American peregrine falcon, Rio Grande cutthroat, Gunnison's prairie dog, golden eagle, and bald eagle. Cerro Pedernal (a narrow mesa) is considered a unique landscape feature in the area. Cultural and historic features include significant lithic resource procurement area and high site density as well as known location of traditional cultural places significant to tribal communities. Cañone's Creek is identified as an important water resource for its role as high-quality habitat for the Rio Grande cutthroat trout.</p>	<p>3.a yes 3.b yes 3.c yes, Tsi'ping 3.d no 3.e yes, cutthroat trout stream</p>
Manageability	<p>The presence and extent of other uses and management considerations in the area are scattered and make management to preserve the area's wilderness characteristics possible throughout much of the area. Most of the entire area is currently being managed with limited development and motorized use because it is composed of three inventoried roadless areas: Cañone's Creek, Youngsville, and Pueblo Mesa. The Cañone's Creek National Recreation Trail is known for its spectacular views of Cañone's canyon walls, runs the length of the polygon, and is already managed for non-motorized uses only. Motorized and mechanized management of associated allotment is authorized for range permittees.</p>	<p>4.a moderate</p>

Co05B – 16,569.92 – Overall Determination of Wilderness Characteristics: No

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species in disturbed areas. Dominant plant types include mixed-conifer and spruce fir, ponderosa pine, and pinyon juniper. Common forest wildlife species and habitat are in the area as well as Mexican spotted owl, northern goshawk, American peregrine falcon in the north, elk winter and summer range, Rio Grande cutthroat, Gunnison's prairie dog, golden eagle, and bald eagle.</p> <p>Vegetation does not appear natural in isolated or scattered spots due to past thinning and burning on the east side of the polygon in 1994.</p> <p>Prevalence of improvements is overall high throughout the area and includes intensive range infrastructure (fence, pit tanks, trick tanks, troughs, fences, and corrals), a dense network of old or closed roads, and motorized trails in the south.</p>	<p>1.a moderate                      1.b moderate                      1.c low</p>
Solitude or Primitive and Unconfined Recreation	<p>Rough roads make access to the area difficult and human activities are uncommon, making opportunities to feel alone possible in much of the area. Motorized dispersed camping occurs on the edges of the polygon, especially during hunting season. Range permittees are frequently in the area. The area is used for traditional cultural purposes and contains places significant to tribal communities.</p> <p>Some high-quality opportunities for primitive and unconfined recreation exist in the area, including hunting and hiking.</p>	<p>2.a moderate                      2.b moderate</p>
Unique Features	<p>Several unique features are identified in the area. Unique or rare wildlife include Mexican spotted owl, northern goshawk, American peregrine falcon, Rio Grande cutthroat, Gunnison's prairie dog, golden eagle, and bald eagle.</p> <p>Cultural and historic features include significant lithic resource procurement area and high site density, as well as known location of traditional cultural places significant to tribal communities.</p> <p>High-quality water resources include three major drainages in the area: Polvadera, Cañone's, and Chehuahuenos.</p>	<p>3.a yes                      3.b yes                      3.c yes                      3.d no                      3.e yes, for Rio Grande. Three major drainage Polvadera, Canone's, Chehuahuenos drainages</p>
Manageability	<p>The presence and extent of other uses and management considerations in the area is pervasive, making it impossible to manage the majority of the area to preserve wilderness characteristics. The area is dissected by many cherry stem roads, has multiple irregular-shaped lobes with narrow pinch points, and a doughnut hole created by roads that protrude into the area. Motorized and mechanized management of associated allotments is authorized for range permittees, and there is a signed NEPA decision for range improvement work. A portion of the area is within a wildland-urban interface.</p>	<p>4.a no</p>

**Co06A – 9,790.33 acres – Overall Determination of Wilderness Characteristics: No**

<b>Criteria Category</b>	<b>Description</b>	<b>Determination of Wilderness Characteristics</b>
Apparent Naturalness	The composition of plant and animal communities appears natural within most of the area. Dominant vegetation type on north-facing slopes is mixed-conifer. South-facing slopes tend to be oak scrubland with pockets of aspen, ponderosa pine, and pinyon juniper mixed throughout. Nonnative species are present near disturbances in isolated spots. Ecological functioning is intact with only a few areas where evidence of human intervention is apparent, including stumps from logging operations conducted in the 1970s. The natural progression from open meadow and parkland to dense mixed conifer/gamble oak communities is occurring in the area, and reflects the natural progression of succession within the historic range of variability for this area. Animal communities appear natural. Obvious evidence of human activity related to improvements is prevalent throughout the area. A dense network of closed roads (maintenance level 1) is apparent throughout the landscape. Additional improvements include mines, oil and gas developments, pipelines, and corrals. Acequias and irrigation ditches are present throughout the polygon, as are a variety of water developments to meet grazing and municipal water needs for two nearby communities (Regina and La Jara). Old wells and other infrastructure associated with the La Jara and Regina community water development can also be found.	1. a moderate 1.b moderate 1.c no
Solitude or Primitive and Unconfined Recreation	No opportunity of feeling alone can reasonably be found within the area. Human activities or presence is unavoidable, and signs of civilization are pervasive. The highly dissected and lobed shape of the area with a dense network of old roads makes it difficult to experience a feeling of solitude or remoteness from civilization. In addition to the variety and density of other uses, the area is also a designated military overhead flyway that receives heavy use. Primitive or unconfined recreation opportunities are minimal or generally of poor quality in the area.	2. a no 2. b low
Unique Features	Acequias, community-operated watercourses or canals, are present in the area and are considered regionally significant unique features for their cultural value as well as their role in supplying municipal water to two nearby communities, Regina and La Jara. Some of these features are eligible for the National Register of Historic Places.	3. a no 3. b no 3. c yes, eligible 3. d no 3. e yes
Manageability	The presence and extent of other uses and management considerations in the area is pervasive, making it impossible to manage the majority of the area to preserve wilderness characteristics. The shape of the area is highly dissected and lobed. Motorized and mechanized management of associated allotments is authorized for range permittees, and widespread maintenance of acequias occurs. Heavy equipment is currently and has been historically used for maintaining water developments, and the area around La Jara is a wildland-urban interface where fire management objectives would dictate active management of fuels. Adjacent land is private and BLM.	4. a no

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**Co06B – 8,170.89 acres – Overall Determination of Wilderness Characteristics: High**

<b>Criteria Category</b>	<b>Description</b>	<b>Determination of Wilderness Characteristics</b>
Apparent Naturalness	The composition of plant and animal communities appear natural throughout this steep and rugged area. The dominant vegetation type is mixed conifer and Gambel oak with pockets of ponderosa pine and pinyon juniper in the southern portion of the area. Little evidence of human interventions to ecological processes (e.g., vegetation treatments) is evident largely due to management limitations associated with its status as an inventoried roadless area. Some minimal improvements are within the area that detract from its apparent naturalness including a small fence line associated with range management, a gold mine, and several closed roads, all concentrated in the southernmost portion of the area.	1.a high 1.b high 1. c moderate (due to concentration of improvements in the south)
Solitude or Primitive and Unconfined Recreation	Opportunities to experience solitude are high throughout this area. The terrain is steep with dense vegetation, providing challenge and risk to potential visitors. Few facilities or developments are present that would decrease opportunities for self-reliant recreation, though there are several non-motorized trails and a portion of the Continental Divide National Scenic Trail within the area. Some high-quality opportunities to hike, backpack, and hunt can be found throughout the area. Outfitters and guide companies have permits for hunting in this area.	2.a high 2. b moderate
Unique Features	Water in this area feeds acequias, community-operated watercourses, and other water developments that are considered regionally significant for their role in supplying municipal water to two nearby communities, Regina and La Jara.	3.a no 3.b no 3.c no 3.d no 3.e yes
Manageability	The presence and extent of other uses and management considerations in the area is scattered and makes management to preserve the area's wilderness characteristics possible throughout much of the area. The area is also adjacent to a congressionally designated wilderness making extension of those management actions possible in most of this area. Some management challenges exist, however. The southern portion of the area is within a designated wildland-urban Interface because it is near the communities of Regina and La Jara. There are also mining claims present in the south, and depending on future development of those claims, this would make preserving wilderness characteristics in the southern portion of the polygon more challenging.	4.a moderate-because of mines

**Co06C – 8,170.89 acres – Overall Determination of Wilderness Characteristics: Low**

<b>Criteria Category</b>	<b>Description</b>	<b>Determination of Wilderness Characteristics</b>
Apparent Naturalness	The composition of plant and animal communities appears natural within most of the area, with only minimal presence of invasive species. The vegetation community is predominantly wet mixed-conifer and Engelmann spruce with some aspen interspersed throughout. The area is high-quality wildlife habitat with an elk calving area adjacent to the polygon as well as documented presence of northern goshawk, deer, Mexican spotted owl, flammulated owls, bear, coyote, and grouse. Signs of human intervention include evidence of vegetation thinning and clear cuts (e.g., presence of stumps) from the early 1990s, especially in the southwestern portion of the area. In addition, terracing was installed adjacent to National Forest System Road 70 and is still evident in some areas. Prevalence of improvements is overall high throughout the area. There is obvious roading (closed roads) throughout the entire polygon, a gravel pit, and range improvements including spring well developments and barbwire fence line. Two non-motorized trails provide access to the area.	1.a moderate 1.b moderate 1.c low
Solitude or Primitive and Unconfined Recreation	Opportunities to experience solitude are low in the western portion of the area and moderate in the eastern portion of the area. A motorized dispersed camping corridor along National Forest System Road 70 receives high use. Motorized sounds from adjacent roads can easily be heard within the polygon. Palermo’s Trailhead is also adjacent to the area and receives high visitor use. Solitude can be experienced in higher quality in the eastern portion of the area away from motorized roads and high-use areas. There are some high-quality primitive recreation opportunities including hunting, camping, backpacking, and bird watching. Few facilities or developments are present that would decrease opportunities for self-reliant recreation, though there are two non-motorized trails that provide access to the adjacent wilderness.	2.a low in the western portion, moderate in the eastern portion. 2.b. moderate
Unique Features	Regionally or nationally important cultural and historic features may be present in the area. Some of these features are eligible for the National Register of Historic Places. There is very low cultural/historic site density based on previous surveys, but intensive use of parts of the area by rural and tribal communities for traditional activities in the area is occurring. There is also a Mexican spotted owl PAC on the edge of the polygon, nice vistas, and potential habitat for Rio Grande cutthroat trout, but none of these are of regional or national importance.	3. a no/unknown 3.b no 3.c yes (may need more site-specific information for this portion of the polygon) 3.d no 3.e no
Manageability	The presence and extent of other uses and or management considerations occurs across most of the area, making it difficult to manage the area to preserve its wilderness characteristics. Considerations include a wildland-urban interface and private land on the eastern edge, and motorized and mechanized management of associated allotments is authorized for range permittees. A portion of the area is adjacent to the San Pedro Parks Wilderness.	4.a low



Co06D – 13,480.53 acres – Overall Determination of Wilderness Characteristics: No

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species in disturbed areas (Canada thistle is widespread throughout). Dominant plant types include spruce fir, ponderosa pine, some aspen and deciduous shrub (oak scrub). The area has elk summer and winter range, Preble's shrew (Regional Forester's sensitive species list), and a recreational population of Rio Grande cutthroat trout.</p> <p>The extent to which the area reflects ecological conditions without human intervention is low due to past and current vegetation treatments. Treatments are mostly concentrated in the north and include a tree encroachment project in 2010, thinning in 1989, and tree planting in 1991.</p> <p>Prevalence of improvements is very high and there are very few spots where improvements are absent or unseen. Improvements are present along the entire wilderness boundary. Range improvements include metal troughs and fences. There is a high concentration of very visible old roads, a mine, a gravel pit and a motorized trail.</p>	1.a moderate 1.b low 1.c no
Solitude or Primitive and Unconfined Recreation	<p>Human activities are uncommon, making opportunities to feel alone possible in much of the area, especially when away from roads, trailheads, and motorized dispersed camping corridors. There are 5 motorized dispersed camping corridors adjacent to the area that receive heavy summer car camping use and may affect opportunities for solitude in nearby areas. Roads dissect and divide the area and result in a high edge to interior ratio.</p> <p>Some high-quality opportunities to engage in primitive and unconfined recreation exist including hiking, hunting, horseback riding, nature viewing, and dispersed camping. The area is rugged and has no amenities or conveniences, making opportunities to experience risk and challenge possible in the area.</p>	2.a moderate 2.b moderate
Unique Features	<p>Cultural and historic resources are identified as a unique feature in the area. Very low site density based on previous survey but intensive use of parts of the area by rural and tribal communities for traditional activities. Low site density, high elevation. Acequias, community-operated waterways, are important watershed features identified in the area.</p>	3.a no 3.b no 3.c yes 3.d no 3.e yes
Manageability	<p>The presence and extent of other uses and management considerations in the area is pervasive, making it difficult to manage the majority of the area to preserve wilderness characteristics. The polygon has many cherry stemmed roads. There is a wildland-urban interface and motorized and mechanized management of associated allotments is authorized for range permittees. There is also a signed NEPA decision (Cordovas) for mechanical thinning in the north.</p>	4.a no

**Co07 – 4,608.38 Acres – Overall Determination of Wilderness Characteristics: Low**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species in disturbed areas. Heavy presence of thistle along the north edge of the polygon on both sides of National Forest System Road 77 and in the areas affected by the Camino fire (2005). Dominant plant types include pinyon juniper and sagebrush. Common wildlife are in the area as well as Gunnison's prairie dog. The area also has elk summer and winter range.</p> <p>The extent to which the area reflects ecological conditions without human intervention is low due to past and current vegetation treatments. Vegetation in the area has been treated off and on for the past 30 years, most recently in the 1990s (thinning). Sage mowing in the south and firewood cutting has left many stumps on the landscape.</p> <p>Prevalence of improvements is overall high throughout the area and includes a non-motorized trail, closed roads, motorized trail, two trick tanks, fence, pit tanks (tin aprons on tanks), and there is a powerline that runs along the south and west side of the polygon.</p>	<p>1.a moderate 1.b low 1.c low</p>
Solitude or Primitive and Unconfined Recreation	<p>Human activities or presence is common and little opportunity of feeling alone can be experienced in the area. Motorized sounds can be heard in the south and west from motorized trail use and in the north where there is a motorized dispersed camping corridor. The area receives high visitor use during hunting season and during high woodcutting periods, but low use otherwise. The non-motorized trails get little use. Recreational shooting takes place in the southern end.</p> <p>There are few primitive recreation opportunities (hiking, hunting, camping, and shooting) and they tend to be of low quality.</p>	<p>2.a low 2.b low</p>
Unique Features	<p>Cultural and historic resources are identified as a unique feature in the area. There are significant cultural resources below Mesa Alta in the Salitral area along Ojo line. Presence of Ojo line is noticeable. Use of Mesa Alta by local communities for resource procurement occurs.</p>	<p>3.a no 3.b no 3.c yes 3.d no 3.e no</p>
Manageability	<p>The presence and extent of other uses and/or considerations occurs throughout most of the area, making it difficult to manage the area to preserve its wilderness characteristics. A portion of the area is the Mesa Alta Inventoried Roadless Area adjacent to the Chama River Canyon wilderness area. There is an associated wildland-urban interface that surrounds the powerline along the south and west sides. Motorized and mechanized management of associated allotments is authorized for range permittees. There is a NEPA decision (Mesa Alta) to implement thinning in the area. Local communities use Mesa Alta for resource procurement.</p>	<p>4.a low</p>

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**Co08 – 1,469.66 acres – Overall Determination of Wilderness Characteristics: No**

<b>Criteria Category</b>	<b>Description</b>	<b>Determination of Wilderness Characteristics</b>
Apparent Naturalness	The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species (thistle) in isolated areas. Dominant plant types include pinyon juniper, ponderosa pine, and oak scrub. There is an elk calving area and elk winter and summer range. The extent to which the area reflects ecological conditions without human intervention is low due to past and current vegetation treatments including logging (1970s) and thinning (1990s) in the area. Stumps are visible evidence of past treatments and can be seen throughout the polygon. Prevalence of improvements is overall low throughout the area. Improvements include non-motorized trail, some visible closed roads (most are naturalized), a wood post corral, and three metal spring well developments.	1.a moderate 1.b low 1.c moderate
Solitude or Primitive Unconfined Recreation	Human activities or presence is common and little opportunity of feeling alone can be experienced in the area. There is a motorized dispersed camping corridor on one of the cherry stem roads and one on the west boundary. People visit the area commonly, but use is especially high during hunting season. The range permittee is in the area frequently to manage cattle and range improvements. Three long cherry stem roads dissect the area introducing motorized sounds and delivering visitors into the interior of the polygon. There is some use of the area by rural communities for resource procurement. There are few primitive recreation opportunities and they tend to be of low quality. However, some camping, hiking, and hunting can be done in the area.	2.a low 2.b low
Unique Features	No unique features are known to be in this area.	3.a no 3.b no 3.c no 3.d no 3.e no
Manageability	The presence and extent of other uses and management considerations in the area is pervasive, making it impossible to manage the majority of the area to preserve wilderness characteristics. Adjacent to the Chama Wilderness. Though a part of the area is adjacent to the Rio Chama Wilderness, there are three cherry stem roads that nearly dissect the area into three parts. Motorized and mechanized management of associated allotments is authorized for range permittees. There is a NEPA decision (Rio Chama) for mechanical thinning and prescribed burning in the area.	4.a no

**Co09 – 172.34 acres – Overall Determination of Wilderness Characteristics: No**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species (thistle) in isolated areas. Dominant plant types include pinyon juniper, ponderosa pine, and oak scrub. There is an elk calving area and elk winter and summer range. The extent to which the area reflects ecological conditions without human intervention is low due to past and current vegetation treatments including logging (1970s) and thinning (1990s) in the area. Stumps are visible evidence of past treatments and can be seen throughout the polygon. Prevalence of improvements is overall low throughout the area. Improvements include non-motorized trail, some visible closed roads (most are naturalized), a wood post corral, and three metal spring well developments.	1.a moderate 1.b low 1.c moderate
Solitude and Primitive Unconfined Recreation	Human activities or presence is common and little opportunity of feeling alone can be experienced in the area. There are motorized dispersed camping corridors on the east and west boundaries. People visit the area commonly, but use is especially high during hunting season. The range permittee is in the area frequently to manage cattle and range improvements. There is some use of the area by rural communities for resource procurement There are few primitive recreation opportunities and they tend to be of low quality. However, some camping, hiking, and hunting can be done in the area.	2.a low 2.b low
Unique Features	No unique features are known to be in this area.	3.a no 3.b no 3.c no 3.d no 3.e no
Manageability	The presence and extent of other uses and management considerations in the area is pervasive, making it impossible to manage the majority of the area to preserve wilderness characteristics. Adjacent to the Chama Wilderness. Motorized and mechanized management of associated allotments is authorized for range permittees. There is a NEPA decision (Rio Chama) for mechanical thinning and prescribed burning in the area.	4.a no

**Co10 – 4,051.85 acres – Overall Determination of Wilderness Characteristics: No**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species (Canada and Musk thistle) along roads. Dominant plant types include ponderosa pine, mixed-conifer, pinyon juniper, a little scrub oak, and aspen. Wildlife (and key habitat) in the area include elk summer and winter range, elk calving area in the south, northern goshawk, and Gunnison's prairie dogs. The extent to which the area reflects ecological conditions without human intervention is low due to past and current vegetation treatments including shelter wood cuts and thinning in the early 1990s and early 2000s. Stumps are present throughout the area.</p> <p>Prevalence of improvements is overall high throughout the area. Improvements include a dense network of old roads evident on the landscape and range infrastructure including spring well developments and fence line.</p>	<p>1.a moderate 1.b low 1.c low</p>
Solitude or Primitive and Unconfined Recreation	<p>Human activities or presence is common and little opportunity of feeling alone can be experienced in the area. Sounds coming from motorized dispersed camping corridors around the polygon. Hunters and range permittees use the area frequently.</p> <p>There are few primitive and unconfined recreation opportunities and they tend to be of low quality. Primitive and unconfined recreation opportunities include camping, hiking, and hunting.</p>	<p>2.a low 2.b low</p>
Unique Features	<p>No unique features are known to be in this area.</p>	<p>3.a no 3.b no 3.c no 3.d no 3.e no</p>
Manageability	<p>The presence and extent of other uses and management considerations in the area is pervasive, making it impossible to manage the majority of the area to preserve wilderness characteristics. The shape and configuration of this polygon make it particularly challenging to manage for wilderness characteristics. There are very long cherry stem and adjacent roads that dissect the area, creating disconnected lobes of land between roads. Motorized and mechanized management of associated allotments is authorized for range permittees. Finally, there is a NEPA decision for thinning and burning in the area.</p>	<p>4.a no</p>

**Co11 – 3,806.18 acres – Overall Determination of Wilderness Characteristics: No**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species (Canada and musk thistle) along roads. Dominant plant types include ponderosa pine, mixed-conifer, pinyon juniper, a little scrub oak, and aspen. Wildlife (and key habitat) in the area include elk summer and winter range, elk calving area in the south, northern goshawk, and Gunnison's prairie dogs. The extent to which the area reflects ecological conditions without human intervention is low due to past and current vegetation treatments including shelter wood cuts and thinning in the early 1990s and early 2000s. Stumps are present throughout the area.</p> <p>Prevalence of improvements is overall high throughout the area. Improvements include a dense network of old roads evident on the landscape and range infrastructure including spring well developments and fence line.</p>	<p>1.a moderate 1.b low 1.c low</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities or presence is common and little opportunity of feeling alone can be experienced in the area. There are motorized dispersed camping corridors around the polygon and hunters and range permittees use the area frequently.</p> <p>There are few primitive and unconfined recreation opportunities and they tend to be of low quality. Primitive and unconfined recreation opportunities include camping, hiking, and hunting.</p>	<p>2.a low 2.b low</p>
Unique Features	No unique features are known to be in this area.	<p>3.a no 3.b no 3.c no 3.d no 3.e no</p>
Manageability	<p>The presence and extent of other uses and management considerations in the area is pervasive, making it impossible to manage the majority of the area to preserve wilderness characteristics. The shape and configuration of this polygon make it particularly challenging to manage for wilderness characteristics. There are very long cherry stem and adjacent roads that dissect the area, creating disconnected lobes of land between roads. Motorized and mechanized management of associated allotments is authorized for range permittees. Finally, there is a NEPA decision for thinning and burning in the area.</p>	4.a no

**Co12 – 5,570.69 acres – Overall Determination of Wilderness Characteristics: No**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species (musk and Canada thistle) along roads. Dominant plant types include mixed-conifer, ponderosa pine, some pinyon juniper, scrub oak and sagebrush. Wildlife (and habitat) include elk, mule deer and elk winter and summer range.</p> <p>Vegetation does not appear natural in isolated or scattered spots due to fuelwood cutting (ongoing), commercial thinning, and shelter wood cuts in the late 1980s and early 1990s. Stumps are evident throughout.</p> <p>Prevalence of improvements is overall high throughout the area. Improvements include old roads in the north and center that are still very visible on the landscape, a motorized trail, a spring well development, trough, and fence.</p>	<p>1.a moderate 1.b moderate 1.c low</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities or presence is common and little opportunity of feeling alone can be experienced in the area. Several factors affect opportunities for solitude including presence of motorized dispersed camping corridors in the center of the polygon near Caputin peak, a commonly used ATV trail in the north, and presence of range management activities (motorized/mechanized) in the area. Other factors that affect opportunities to feel alone or remote from civilization include, visibility of the community of Gallina from within the area and fuelwood gathering and other traditional uses.</p> <p>There are few primitive and unconfined recreation opportunities and they tend to be of low quality, though hunting, hiking, and dispersed camping may occur in the area.</p>	<p>2.a low 2.b low</p>
Unique Features	<p>No unique features are known to be in this area.</p>	<p>3.a no 3.b no 3.c unknown/no 3.d no 3.e no</p>
Manageability	<p>The presence and extent of other uses and management considerations in the area is pervasive, making it impossible to manage the majority of the area to preserve wilderness characteristics. There are multiple cherry stem roads that deeply dissect the polygon. Motorized and mechanized management of associated allotments is authorized for range permittees.</p>	<p>4.a no</p>

**Co13 – 43.77 acres – Overall Determination of Wilderness Characteristics: No**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species (Canada thistle, spotted knapweed, salt cedar, and Russian olive) in disturbed areas and in riparian areas. Dominant plant types include ponderosa pine with mixed conifer outside of canyons and pinyon juniper, sagebrush, and native grasses in the canyons. Wildlife in the area include American peregrine falcon, Gunnison’s prairie dog, pinyon jay, gray vireo, Rio Grande sucker, Rio Grande chub, bald eagle, and elk (winter range).</p> <p>The extent to which the area reflects ecological conditions without human intervention is low due to past and current vegetation treatments including tree planting (1989), commercial thinning (1990s), and mowing and seeding along the river.</p> <p>Prevalence of improvements is overall high throughout the area. Improvements include fence, corral, spring well developments, and troughs.</p>	<p>1.a moderate 1.b low 1.c low</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities or presence is common and little opportunity of feeling alone can be experienced in the area. Because it is so small, motorized sounds from motorized trails and adjacent roads can be heard within the polygon, affecting one’s feeling of remoteness.</p> <p>Some high-quality opportunities to engage in primitive and unconfined recreation exist in the area, as it is adjacent to wilderness.</p>	<p>2.a low 2.b moderate</p>
Unique Features	<p>There are no unique features</p>	<p>3.a no 3.b no 3.c no 3.d no 3.e yes</p>
Manageability	<p>The presence and extent of other uses and management considerations in the area is pervasive, making it impossible to manage the majority of the area to preserve wilderness characteristics. This polygon is a very narrow strip between wilderness and the road used to access the wilderness.</p>	<p>4.a no</p>



**Co14 – 139.11 acres – Overall Determination of Wilderness Characteristics: High**

<b>Criteria Category</b>	<b>Description</b>	<b>Determination of Wilderness Characteristics</b>
Apparent Naturalness	<p>The composition of plant and animal communities appears natural. Dominant plant types include sagebrush, pinyon juniper, and ponderosa pine. Common wildlife and habitat are present as well as elk winter and summer range and American peregrine falcon.</p> <p>Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention.</p> <p>Improvements in the area are rare or scattered and do not detract from apparent naturalness. The only improvements to note are a windmill and an old loop road to access it. However, the adjacent Carson National Forest polygon of W6 is said to have numerous range and wildlife improvements such as guzzlers, spring developments, trick tanks, stock tanks, and a corral scattered throughout southern W6.</p>	<p>1.a high 1.b high 1.c high</p>
Solitude or Primitive or Unconfined Recreation	<p>This polygon is between the Rio Chama Wilderness and the Carson National Forest. Opportunities for solitude may be greatest closest to the wilderness and diminish as you get closer to the Carson National Forest where there are more limited opportunities for solitude because of heavy use by local residents. Traffic from nearby National Forest System Road 151 and to the windmill may impact solitude.</p>	<p>2.a moderate 2.b moderate</p>
Unique Features	<p>No known rare, unique, or outstanding features are found within this area.</p>	<p>3.a unknown 3.b yes, in all/most 3.c unknown 3.d no 3.e no</p>
Manageability	<p>The presence and extent of other uses and management considerations affects isolated spots and makes management to preserve the area's wilderness characteristics possible throughout the area. While this is a very small polygon, it could be readily managed in conjunction with the adjacent wilderness, as the current boundary does not follow topography (rim of the canyon) here. Motorized access for maintenance of a windmill within the polygon is needed.</p>	<p>4.a high</p>

Co15 – 55.32 acres – Overall Determination of Wilderness Characteristics: No

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural. Dominant plant types include sagebrush, pinyon juniper, and ponderosa pine. Common wildlife and habitat are present as well as elk winter and summer range and American peregrine falcon.</p> <p>Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention.</p> <p>There is obvious evidence of human activity in the area. Improvements in the area include a road on the Carson National Forest's MVUM that comes into the northern section of this polygon and showing obvious evidence of human activity. Other improvements include range or wildlife improvement (water) just to the north of this polygon, on the Carson National Forest, and a portion of the Continental Divide National Scenic Trail that runs from the west end of the polygon.</p>	<p>1.a high 1.b high 1.c no</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities or presence is common and little opportunity of feeling alone can be experienced. This polygon is between the Rio Chama Wilderness and the Carson National Forest. Opportunities for solitude are impacted by the road and range or wildlife improvements and heavy use by local residents immediately adjacent to this polygon, on the Carson National Forest. This polygon is very small and above the rim of the canyon, so any use (noise from roads and developed recreation sites) on this mesa top would be readily noticeable.</p> <p>There are few opportunities to engage in primitive and unconfined recreation in this area. The Continental Divide National Scenic Trail does go through the western half of the polygon and represents the only opportunity for primitive and unconfined recreation.</p>	<p>2.a low 2.b low</p>
Unique Features	<p>No known rare, unique, or outstanding features are found within this area.</p>	<p>3.a unknown 3.b yes, in all/most 3.c unknown 3.d no 3.e no</p>
Manageability	<p>The presence and extent of other uses and management considerations is pervasive and makes management to preserve the area's wilderness characteristics impossible throughout the area. Although this polygon is adjacent to the existing Rio Chama Wilderness, the current boundary of that wilderness aligns with the topography (rim of the canyon), and managing the mesa above that to preserve wilderness characteristics would be impossible, especially given the small size and long shape of the polygon and the presence of a road from the Carson National Forest's MVUM in the polygon. The area is more practically accessed through the Carson National Forest where there are no wilderness characteristics and there is required motorized access and use of mechanized equipment to maintain improvements. The Continental Divide National Scenic Trail traverses the western half of the polygon, but would not detract from managing the area to preserve wilderness characteristics because much of the trail already goes through both the San Pedro Parks and Rio Chama Wildernesses on the Santa Fe National Forest.</p>	<p>4.a no</p>

**Co16 – 49.09 acres – Overall Determination of Wilderness Characteristics: Low**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	The composition of plant and animal communities appears natural. Dominant plant types include sagebrush, pinyon juniper, and ponderosa pine. Common wildlife and habitat are present as well as elk winter and summer range and American peregrine falcon. Vegetation does not appear natural in isolated or scattered spots, past chaining projects affect vegetation in scattered spots throughout this area. There are no known improvements in the area. Although there are numerous roads and range and wildlife improvements in the adjacent CrW7 polygon on the Carson National Forest, they do not detract from apparent naturalness within this polygon because of their distance.	1.a high 1.b moderate 1.c high
Solitude or Primitive or Unconfined Recreation	Human activities are common and little opportunity of feeling alone can be experienced. This polygon is between the Rio Chama Wilderness and the Carson National Forest. Opportunities for solitude are impacted by heavy use by local residents immediately adjacent to this polygon, on the Carson National Forest. This polygon is above the rim of the canyon, so any use (noise from roads and developed recreation sites) on this mesa top would be readily noticeable. There are few opportunities to engage in primitive or high-quality recreation here. There is some distance between the roads on the Carson National Forest and this polygon, which would provide limited opportunities for primitive recreation above the canyon of the Rio Chama Wilderness.	2.a low 2.b low
Unique Features	Unique features are identified for this area including unique or rare animal communities due to the presence of American peregrine falcon, Rio Grande sucker, Rio Grande chub and bald eagle. Unique or outstanding landscape features include rugged cliffs and stunning views. Regionally or nationally significant cultural and historic features are present, and some may be eligible for the National Registry of Historic Places. The Rio Chama Wild and Scenic River (Scenic) is identified as a high-quality water resource with high-quality habitat for Rio Grande chub and Rio Grande sucker.	3.a yes 3.b yes 3.c yes 3.d no 3.e yes
Manageability	The presence and extent of other uses and management considerations occurs throughout most of the area and makes management to preserve the area's wilderness characteristics difficult throughout the area. Although this polygon is adjacent to the existing Rio Chama Wilderness, the current boundary of that wilderness aligns with the topography (rim of the canyon), and managing the mesa above that to preserve wilderness characteristics would be impossible, especially given the small size of the polygon. The area is more practically accessed through the Carson National Forest where no wilderness characteristics are and motorized and mechanized management of associated allotments is authorized for range permittees.	4.a low

**Co17 – 259.11 acres – Overall Determination of Wilderness Characteristics: No**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species (Canada thistle, spotted knapweed, salt cedar and Russian olive) in disturbed areas and in riparian areas. Dominant plant types include ponderosa pine with mixed conifer outside of canyons and pinyon juniper, sagebrush and native grasses in the canyons. Wildlife in the area include American peregrine falcon, Rio Grande sucker, Rio Grande chub, bald eagle, and elk (winter and summer range).</p> <p>The extent to which the area reflects ecological conditions without human intervention is low due to past and current vegetation treatments including tree planting (1989), commercial thinning (1990s), and mowing and seeding along the river.</p> <p>Prevalence of improvements is overall high throughout the area. Improvements include fence, corral, spring well developments, trough, motorized trail in the southwest, and a provisional motorized trail in the north. There is a dense network of old or closed roads that are still apparent on the landscape.</p>	<p>1.a moderate 1.b low 1.c low</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities or presence is common and little opportunity of feeling alone can be experienced in the area. An adjacent private bed and breakfast receives daily use on the weekend as well as heavy boating activity with large groups. Motorized sounds from motorized trails and adjacent roads can also be heard within the polygon, affecting one's feeling of remoteness.</p> <p>Some high-quality opportunities to engage in primitive and unconfined recreation exist in the area including hiking, camping, and hunting. The area's rugged cliffs and canyons provide opportunities for challenge and risk.</p>	<p>2.a low 2.b moderate</p>
Unique Features	<p>Unique features are identified for this area including unique or rare animal communities due to the presence of American peregrine falcon, Rio Grande sucker, Rio Grande chub, and bald eagle.</p> <p>Unique or outstanding landscape features include rugged cliffs and stunning views.</p> <p>Regionally or nationally significant cultural and historic features are present, and some may be eligible for the National Register of Historic Places.</p> <p>The Rio Chama Wild and Scenic River (Scenic) is identified as a high-quality water resource with high-quality habitat for Rio Grande chub and Rio Grande sucker.</p>	<p>3.a yes 3.b yes 3.c yes 3.d no 3.e yes</p>
Manageability	<p>The presence and extent of other uses and management considerations in the area is pervasive, making it impossible to manage the majority of the area to preserve wilderness characteristics. This polygon is adjacent to wilderness with a narrow shape. There is private land access to bed and breakfast commercial business. There are cherry stemmed roads in the west and private inholdings. There are special use permits and motorized and mechanized management of associated allotments is authorized for range permittees.</p>	<p>4.a no</p>

**Co18 – 17,299.26 acres – Overall Determination of Wilderness Characteristics: Low**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species along roads. Dominant plant types include ponderosa pine, pinyon juniper, and a small amount of sagebrush. Wildlife and habitat in the area include elk summer and winter range, Rio Grande cutthroat trout, Gunnison's prairie dog, American peregrine falcon, and Chaco milkvetch (Regional Foresters sensitive species list).</p> <p>The extent to which the area reflects ecological conditions without human intervention is low due to past and current vegetation treatments including areas that been heavily logged or thinned in the late 1980s and early 1990s. Many of the drainages appear natural, but all flats have been heavily managed.</p> <p>Prevalence of improvements is overall low throughout the area, but include fence, pit tanks, motorized trail, non-motorized trails, old roads, water developments, and a motorized trail in the south of the polygon.</p>	<p>1.a moderate 1.b low 1.c moderate</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities are uncommon, making opportunities to feel alone possible in much of the area. Motorized dispersed camping corridors in the east. Two non-motorized trails. Use is consistent throughout the year on the eastern edge. Use is higher during hunting season, but gets consistent use by permittees. Motorized trail in the south. Traffic can be heard from adjacent roads and there is intensive use by rural communities for resource procurement.</p> <p>Some high-quality opportunities to engage in primitive and unconfined recreation exist in the area including primitive rec: hunting, hiking, heavy car camping on dispersed camping corridors.</p>	<p>2.a moderate 2.b moderate</p>
Unique Features	<p>Unique or rare plant or animal communities were identified as unique features in the area due to the presence of Chaco milkvetch, Rio Grande cutthroat trout-occupied stream, Gunnison's prairie dog, and American peregrine falcon.</p> <p>Cultural and historic resources are identified as a unique feature in the area and some may be eligible for the National Register of Historic Places.</p>	<p>3.a yes 3.b no 3.c yes 3.d no 3.e no</p>
Manageability	<p>The presence and extent of other uses and/or considerations occurs throughout most of the area, making it difficult to manage the area to preserve its wilderness characteristics. There is private land along the west side, cherry stem roads, and motorized and mechanized management of associated allotments is authorized for range permittees.</p>	<p>4.a low</p>

**Co19 – 67.14 acres – Overall Determination of Wilderness Characteristics: Low**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural. Dominant plant types include sagebrush, pinyon juniper, and ponderosa pine. Common wildlife and habitat are present as well as elk winter and summer range and American peregrine falcon.</p> <p>Vegetation does not appear natural in isolated or scattered spots, past chaining projects affect vegetation in scattered spots throughout this area.</p> <p>Prevalence of improvements is overall low throughout the polygon, but does include a small road from the Carson National Forest. Although there are numerous roads and range and wildlife improvements in the adjacent CrW9 polygon on the Carson National Forest, they do not detract from apparent naturalness within this polygon.</p>	<p>1.a high 1.b moderate 1.c moderate</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities are common and little opportunity of feeling alone can be experienced. This polygon is between the Rio Chama Wilderness and the Carson National Forest. Opportunities for solitude are impacted by the heavy use by local residents immediately adjacent to this polygon, on the Carson National Forest. This polygon is above the rim of the canyon, so any use (noise from roads and developed recreation sites) on this mesa top would be readily noticeable.</p> <p>There are few opportunities to engage in primitive or high-quality recreation here. There is a road on the Carson National Forest that is almost adjacent to this polygon, which would provide limited opportunities for primitive recreation above the canyon of the Rio Chama Wilderness.</p>	<p>2.a low 2.b low</p>
Unique Features	<p>No known rare, unique or outstanding features are found within this area.</p>	<p>3.a unknown 3.b yes, in all/most 3.c 1unknown 3.d no 3.e no</p>
Manageability	<p>The presence and extent of other uses and management considerations occurs throughout most of the area and makes management to preserve the area’s wilderness characteristics difficult throughout the area. Although this polygon is adjacent to the existing Rio Chama Wilderness, the current boundary of that wilderness aligns with the topography (rim of the canyon), and managing the mesa above that to preserve wilderness characteristics would be impossible, especially given the small size of the polygon. The area is more practically accessed through the Carson National Forest where there are no wilderness characteristics and motorized and mechanized management of associated allotments is authorized for range permittees.</p>	<p>4.a low</p>

**Co20 – 135.84 acres – Overall Determination of Wilderness Characteristics: No**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural. Dominant plant types include sagebrush, pinyon juniper, and ponderosa pine. Common wildlife and habitat are present as well as elk winter and summer range and American peregrine falcon.</p> <p>Vegetation does not appear natural in isolated or scattered spots, past chaining projects affect vegetation in scattered spots throughout this area.</p> <p>There is obvious evidence of human activity. Improvements in the area include a loop road on the Carson National Forest's MVUM (National Forest System Road 145N3) that passes through this polygon showing obvious evidence of human activity.</p>	<p>1.a high 1.b moderate 1.c no</p>
Primitive or Unconfined Recreation	<p>Human activities are common and little opportunity of feeling alone can be experienced. This polygon is between the Rio Chama Wilderness and the Carson National Forest. Opportunities for solitude are impacted by the road and heavy use by local residents immediately adjacent to this polygon, on the Carson National Forest. This polygon is above the rim of the canyon, so any use (noise from roads and recreation sites) on this mesa top would be readily noticeable.</p> <p>There are few opportunities to engage in primitive or high-quality recreation here. There is some distance between the roads on the Carson National Forest and this polygon, which would provide limited opportunities for primitive recreation above the canyon of the Rio Chama Wilderness.</p>	<p>2.a low 2.b low</p>
Unique Features	<p>No known rare, unique, or outstanding features are found within this area.</p>	<p>3.a unknown 3.b yes, in all/most 3.c unknown 3.d no 3.e no</p>
Manageability	<p>The presence and extent of other uses and management considerations is pervasive and makes management to preserve the area's wilderness characteristics impossible throughout the area. Although this polygon is adjacent to the existing Rio Chama Wilderness, the current boundary of that wilderness aligns with the topography (rim of the canyon), and managing the mesa above that to preserve wilderness characteristics would be impossible, especially given the small size and the presence of a road from the Carson National Forest's MVUM in the polygon. The polygon is more practically accessed through the Carson National Forest where there are no wilderness characteristics and there is required motorized access and use of mechanized equipment to maintain improvements.</p>	<p>4.a no</p>

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Appendix J. Documentation of Wilderness Recommendation Process*

**Co21A – 6,409.19 acres – Overall Determination of Wilderness Characteristics: Low**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural. Dominant vegetation is ponderosa pine, pinyon juniper and sagebrush. There are some inventoried invasive plant species, but they are not pervasive or easily identifiable on the landscape. In addition to common forest species like coyote, elk and deer, northern goshawk and American peregrine falcon (both identified on the Regional Forester’s sensitive species list) have been inventoried in the area.</p> <p>Vegetation does not appear natural commonly throughout the eastern lobe of the area. Mastication and evidence of historic logging including presence of stumps can be seen. Vegetation in the western lobe of the area only shows signs of human interventions in isolated or scattered spots. Prevalence of improvements is overall low throughout the area. Improvements include old roads that are minimally evident on the landscape, earthen wells and a fence used for range management, and a weather station. A small portion of the Chama Wilderness Inventoried Roadless Area is in the bottom of the western lobe.</p>	<p>1. high 1.b eastern lobe low, western lobe moderate 1.c moderate</p>
Solitude or Primitive or Unconfined Recreation	<p>Opportunities for solitude exist throughout the area especially away from National Forest System Road 503 where there is a dispersed camping corridor. Visitor use is generally very low with the exception of a slight increase in use during the hunting season. Primitive recreation opportunities include wildlife hunting, shed hunting, hiking, and scenic vista viewing.</p>	<p>2.a high 2. b high</p>
Unique Features	<p>The area contains unique or outstanding features including historic/cultural features and outstanding viewpoints. There is high site density of cultural resources, but the area is relatively inaccessible except from the top. Some of these features may be eligible for the National Register of Historic Places. The upper areas may be used for resource procurement by local rural communities. The view on the east side of the area, along the Chama Wild and Scenic River looking into the adjacent Chama wilderness, is considered a regionally significant vista.</p>	<p>3.a no 3 b yes Golondrina mesa, public comments is beautiful. 3.c yes 3.d no 3.e no</p>
Manageability	<p>The presence and extent of other uses and/or management consideration occurs across most of the area making it difficult to manage the area to preserve its wilderness characteristics. The area is part of the San Juaquin Land Grant, which allows for local traditional uses within the area. Motorized and mechanized management of associated allotments is authorized for range permittees. There is a wildland-urban interface in a portion of the area and cherry stem roads that bring the sights and sounds of civilization into the interior of the area. The area is adjacent to the Chama Wilderness and is very remote, improving slightly the ability to preserve the area’s wilderness characteristics.</p>	<p>4.a low</p>



**Co21B – 10,451.08 acres – Overall Determination of Wilderness Characteristics: No**

<b>Criteria Category</b>	<b>Description</b>	<b>Determination of Wilderness Characteristics</b>
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species (Canada thistle, spotted knapweed, salt cedar and Russian olive) in disturbed areas and in riparian areas. Dominant plant types include ponderosa pine with mixed conifer outside of canyons and pinyon juniper, sagebrush and native grasses in the canyons. Wildlife in the area include American peregrine falcon, Rio Grande sucker, Rio Grande chub, bald eagle, and elk (winter and summer range).</p> <p>The extent to which the area reflects ecological conditions without human intervention is low due to past and current vegetation treatments including tree planting (1989), commercial thinning (1990s), and mowing and seeding along the river.</p> <p>Prevalence of improvements is overall high throughout the area. Improvements include fence, corral, spring well developments, trough, motorized trail in the southwest, and a provisional motorized trail in the north. There is a dense network of old or closed roads that are still apparent on the landscape.</p>	<p>1.a moderate 1.b low 1.c low</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities or presence is common and little opportunity of feeling alone can be experienced in the area. There is an adjacent private bed and breakfast that receives daily use on the weekend as well as heavy boating activity with large groups. Motorized sounds from motorized trails and adjacent roads can also be heard within the polygon, affecting one's feeling of remoteness.</p> <p>Some high-quality opportunities to engage in primitive and unconfined recreation exist in the area including hiking, camping, and hunting. The area's rugged cliffs and canyons provide opportunities for challenge and risk.</p>	<p>2.a low 2.b moderate</p>
Unique Features	<p>Unique features are identified for this area including unique or rare animal communities due to the presence of American peregrine falcon, Rio Grande sucker, Rio Grande chub, and bald eagle.</p> <p>Unique or outstanding landscape features include rugged cliffs and stunning views.</p> <p>Regionally or nationally significant cultural and historic features are present and some may be eligible for the National Registry of Historic Places.</p> <p>The Rio Chama Wild and Scenic River (Scenic) is identified as a high-quality water resource with high-quality habitat for Rio Grande chub and Rio Grande sucker.</p>	<p>3.a yes 3.b yes 3.c yes 3.d no 3.e yes</p>
Manageability	<p>The presence and extent of other uses and management considerations in the area is pervasive, making it impossible to manage the majority of the area to preserve wilderness characteristics. The polygon is adjacent to wilderness and has a narrow shape in some areas. There is private land access to bed and breakfast commercial businesses, cherry stemmed roads in the west, and private inholdings. There are special use permits and motorized and mechanized management of associated allotments is authorized for range permittees.</p>	<p>4.a no</p>

**Co22 – 253.83 acres – Overall Determination of Wilderness Characteristics: No**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	The composition of plant and animal communities appears natural. Dominant plant types include sagebrush, pinyon juniper, and ponderosa pine. Common wildlife and habitat are present as well as elk winter and summer range and American peregrine falcon. Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention. Obvious evidence of human activity exists in the area. Improvements include several roads on the Carson National Forest's MVUM (National Forest System Roads 145T24 and 145T20) through this polygon, showing obvious evidence of human activity.	1.a high 1.b high 1.c no
Solitude or Primitive or Unconfined Recreation	Human activities are common and little opportunity of feeling alone can be experienced. This polygon is between the Rio Chama Wilderness and the Carson National Forest. Opportunities for solitude are impacted by the roads inside this polygon, as well as immediately adjacent on the Carson National Forest. Heavy use of the area by local residents also affects solitude of the polygon. This polygon is above the rim of the canyon, so any use (noise from roads and recreation) on this mesa top would be readily noticeable. There are few to no opportunities to engage in primitive or high-quality recreation here because of the prevalence of roads on the Carson's MVUM throughout the polygon.	2.a low 2.b no
Unique Features	No known rare, unique, or outstanding features are found within this area.	3.a unknown 3.b yes, in all/most 3.c unknown 3.d no 3.e no
Manageability	The presence and extent of other uses and management considerations is pervasive and makes management to preserve the area's wilderness characteristics impossible throughout the area. Although this polygon is adjacent to the existing Rio Chama Wilderness, the current boundary of that wilderness aligns with the topography (rim of the canyon), and managing the mesa above that to preserve wilderness characteristics would be impossible, especially given the small size and the presence of roads from the Carson National Forest's MVUM in the polygon. The polygon is more practically accessed through the Carson National Forest where the adjacent area was eliminated from the wilderness Inventory.	4.a No

Co23A – 2,807.32 acres – Overall Determination of Wilderness Characteristics: Low

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	The composition of plant and animal communities appears natural in most of the area. Dominant overstory plant species include ponderosa pine, mixed conifer, some oak scrub, pinyon juniper, big sagebrush, and sage flats. Weeds are present in isolated spots along some roads. Along with many common forest species, species on the Regional Forester sensitive species list include bald eagle, otter, peregrine falcon, Rio Grande chub and northern goshawk. Vegetation does not appear natural in isolated or scattered spots. Overstocking of small-diameter ponderosa pine trees thinning treatments (2014-2015) and clear cuts (1990) are evident on the landscape and represent a departure from natural ecological conditions. Stumps are present from past thinning and logging. Historic logging activities from the 1940s and 1950s resulted in very large stumps in the Sanchez Mesa and the Tule Mesa areas. Overall prevalence of improvements is overall low throughout the area; it is common to find spots where improvements are absent or unseen. Improvements include old roads that are mostly overgrown, range fence, earthen dams, water developments and a wildlife trick tank.	1. a moderate 1.b moderate 1.c. moderate
Solitude or Primitive or Unconfined Recreation	Human activities are uncommon, making opportunities to feel alone possible in much of the area. The area is remote and adjacent to the Chama Wilderness, but the high concentration and penetration of cherry stem roads introduce motorized and mechanized sights and sounds into the interior of the area. Some high-quality opportunities to engage in primitive and unconfined recreation exist in the area including hunting, shed hunting, hiking, rafting, and enjoying beautiful vistas.	2.a moderate 2.b moderate
Unique Features	The area contains unique or outstanding features including historic or cultural features and outstanding viewpoints. There is high site density of cultural resources. Some of these features may be eligible for the National Register of Historic Places. Additionally, the view on the east side of the area, along the Chama Wild and Scenic River looking into the adjacent Chama Wilderness, is considered a regionally significant vista.	3. a no 3. b yes, vistas beautiful 3.c yes, high site density 3.d no 3. e no
Manageability	Presence and extent of other uses and considerations occurs across most of the area making management to preserve wilderness characteristics difficult. Some considerations include a high concentration of cherry stem roads dissect the area and create narrow pinch points. Additionally, use of the area for traditional purposes including those uses associated with the San Juan de Rio land grant (i.e., fuelwood gathering) would need to be considered. Motorized and mechanized management of associated allotments is authorized for range permittees. Factors that improve manageability include adjacency to a Bureau of Land Management wilderness study area, and adjacency to the Chama Wilderness and Inventoried Roadless Area.	4.a low

**Co23B – 2,217.69 acres – Overall Determination of Wilderness Characteristics: High**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	The composition of plant and animal communities appears natural in most of the area. Dominant over story plant species include ponderosa pine, mixed conifer, some oak scrub, pinyon juniper, big sagebrush and sage flats. Weeds are present in isolated spots along some roads. Along with many common forest species, species on the Regional Forester sensitive species list include bald eagle, otter, peregrine falcon, Rio Grande chub, and northern goshawk. Vegetation does not appear natural in isolated or scattered spots. Overstocking of small-diameter ponderosa pine trees, thinning treatments (2014-2015) and clear cuts (1990) are evident on the landscape and represent a departure from natural ecological conditions. Stumps are present from past thinning and logging. Historic logging activities from the 1940s and 1950s resulted in large stumps in the Sanchez Mesa and the Tule Mesa areas. There is little or no evidence of human activity in the area and no known improvements within the polygon.	1.a moderate 1.b moderate 1.c moderate
Solitude or Primitive or Unconfined Recreation	Visitors can commonly experience significant feelings of being alone or remote from civilization throughout the area due to its remoteness and adjacency to the Chama Wilderness. Some high-quality opportunities to engage in primitive and unconfined recreation exist in the area including hunting, shed hunting, hiking, rafting, and enjoying beautiful vistas.	2.a high 2.b moderate
Unique Features	The area contains unique or outstanding features including historic or cultural features and outstanding viewpoints. There is high site density of cultural resources. Some of these features may be eligible for the National Register of Historic Places. Additionally, the view on the east side of the area, along the Chama Wild and Scenic River looking into the adjacent Chama Wilderness, is considered a regionally significant vista.	3. a no 3. b yes, vistas beautiful 3.c yes, high site density 3.d no 3. e no
Manageability	This area has few other uses or management considerations, making managing to preserve wilderness characteristics possible. A single road leading to private property almost dissects the polygon. Use of the area for traditional purposes including those uses associated with the San Juan de Rio land grant (i.e., fuelwood gathering) would need to be considered. Factors that improve manageability include adjacency to a Bureau of Land Management wilderness study area, and that the entire polygon is within the Chama Wilderness and Inventoried Roadless Area.	4.a high

**Cu24 – 5,891.55 acres – Overall Determination of Wilderness Characteristics: No**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities represents a departure from apparent naturalness in the majority of the area largely due to past vegetation management activities and related disturbances that have altered plant and animal communities. Overstory plant species are composed primarily of ponderosa pine and Gambel oak thickets with a variety of invasive species present throughout. Common forest animals can be found in the area. A Mexican spotted owl protected activity center has been identified in the area.</p> <p>Vegetation does not appear natural throughout the area because of heavy historic logging (1930s to 1940s) and subsequent vegetation treatments implemented on and off to present day. Logging and burning was prevalent in the 1990s all throughout the area. A high number of tree stumps reflect the past and current vegetation management activities in the area.</p> <p>Obvious evidence of human activity can be seen throughout the area. Prevalence of improvements is very high and there are very few spots where improvements are absent or unseen. Improvements include a high density and distribution of old roads that are still evident on the landscape; range improvements include fence line, earthen stock tanks, a logging chute, logging structures, and gravel pits.</p>	<p>1.a no 1.b no 1.c no</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities or presence is common and little opportunity of feeling alone can be experienced in the area. Vegetation management activities like thinning and burning are common as well as fuelwood gathering, recreating, and other traditional uses. The area is adjacent to a high-use road and high recreation use areas including a dispersed motorized camping area. There are a few opportunities to engage in primitive and unconfined recreation (hiking and hunting), but they tend to be of low quality due to the presence of developments like roads, fences, and private inholdings.</p>	<p>2 a. low 2.b low, few but poor quality</p>
Unique Features	<p>This area contains unique or outstanding cultural resources including over 200 recorded cultural sites (mostly prehistoric), historic sites related to past logging, cabin sites, and an old rail bed (National Forest System Road 534). Some of these features may be eligible for the National Register of Historic Places. The area has moderate to high cultural site density and some traditional use by native communities still exists today. Mexican spotted owl is present but does not define the area.</p>	<p>3.a no. MSO present but does not define the area and is not significant or iconic 3. b no 3. c yes, moderate to high 3. d. no 3.e. yes-eligible</p>
Manageability	<p>The presence and extent of other uses and/or management considerations in the area is pervasive, making it impossible to manage the majority of the area to preserve wilderness characteristics. There is a current collaborative forest restoration project with a signed NEPA decision (Chaparral Decision) to implement thinning and burning across two-thirds of the area. Small-diameter ponderosa pine trees are going through current restoration treatments. The entire eastern portion of the area is planned to be burned. Traditional uses, private inholdings, old roads, active grazing, adjacent private land, and Jemez tribal land would all make managing the area as wilderness very difficult. Motorized and mechanized management of associated allotments is authorized for range permittees. A portion of the area is within a wildland-urban interface.</p>	<p>4.a no</p>

**Cu25 – 5,768.40 acres – Overall Determination of Wilderness Characteristics: No**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural in some areas, but weeds are common in many places throughout, especially in areas of past burns. Dominant overstory plants are mixed-conifer on east-facing slopes and ponderosa pine on west-facing slopes. The extent to which the area reflects ecological conditions without human intervention is low due to heavy past logging activity that occurred from the 1970s to the 1990s, leaving many prominent stumps on the landscape.</p> <p>Apparent naturalness is also affected by the presence of improvements in the area. Improvements in this area are minimal and are not concentrated. Range improvements include several small gap fences, a forest boundary fence, and a corral. Other improvements include a structure associated with a mine, and several old roads that are in use today for traditional purposes, as well as range management.</p>	<p>1.a low                      1.b low due to logging                      1.c moderate due to dispersed nature</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities are uncommon, making opportunities to feel alone possible in much of the area. However, regular military low overhead flights (helicopters, airplanes), private inholding use, and heavy dispersed recreation use along National Forest System Road 534 detracts from opportunities to experience solitude in some areas. Few opportunities to engage in primitive and unconfined recreation exist, though hunting, off-trail hiking, and dispersed camping could occur.</p>	<p>2.a moderate                      2.b low due to poor quality</p>
Unique Features	<p>No known rare, unique, or outstanding features are found within this area.</p>	<p>3.a no                      3.b no                      3.c no                      3.c unknown no cultural survey                      3.d no                      3.e no</p>
Manageability	<p>The presence and extent of other uses and/or management considerations occurs across most of the area, making it difficult to manage the area to preserve its wilderness characteristics. Some of those uses and considerations include traditional wood gathering and elk hunting area, access and use of private inholdings, an open pit mine, active Big Bear mining claim, cherry stem roads, and adjacent land management (Tribal lands, State land, south and west is private and Bureau of Land Management, with some fuel reduction occurring).</p>	<p>4.a low</p>

**Cu26 – 5,000.96 acres – Overall Determination of Wilderness Characteristics: No**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with only minimal presence of invasive species (bull thistle mainly along roads and old disturbances). Dominant overstory plants include pinyon juniper in the south, scrub oak on the hillsides, and mixed conifer on the northern slopes. Common forest animals can be found in the area. A Mexican spotted owl protected activity center has been identified on the edge of this area.</p> <p>Vegetation does not appear natural in isolated or scattered spots due to clear cuts implemented along the eastern edge of the area in the 1980s. Apparent naturalness is also affected by the presence of improvements in the area. Improvements in this area are minimal and are not concentrated. Improvements include a pipe and tank associated with adjacent private land, some range fence, several water developments, and old roads along the eastern edge of the polygon.</p>	<p>1.a moderate 1.b moderate 1.c moderate</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities are uncommon, making opportunities to feel alone possible in much of the area. There are no system trails and no recreation sites within the area, however, the town of Cuba can easily be seen from within the polygon, affecting one's feeling of being remote from civilization. A dispersed camping corridor creates a deep cherry stem into the area, which may impact opportunities for solitude due to sights and sounds from motorized use. Some high-quality opportunities to hike, backpack, and hunt can be found throughout the area.</p>	<p>2.a moderate 2.b moderate</p>
Unique Features	<p>No known rare, unique or outstanding features are found within this area. There is a portion of a Mexican spotted owl protected activity center on the edge of the polygon, but it is not considered regionally or nationally unique or important on its own.</p>	<p>3.a no 3.b no 3.c unknown not surveyed 3.d no 3.e no</p>
Manageability	<p>The presence and extent of other uses and/or management considerations in the area is pervasive, making it impossible to manage the majority of the area to preserve wilderness characteristics. National Forest Road 534c creates a cherry stem that almost completely dissects the area. The road is used primarily for hunting and administrative uses, including access for fire. The polygon has a long and narrow shape that is less than 5,000 acres. Motorized and mechanized management of associated allotments is authorized for range permittees. There is an existing special use authorization for a water system for a private home. A portion of the area in the south is in a wildland-urban interface.</p>	<p>4.a no</p>

**Cu27 – 13,677.95 acres – Overall Determination of Wilderness Characteristics: No**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural in some areas, but has been affected by repeated wildfires and subsequent seeding of nonnative species. As a result of frequent disturbance and seeding, weeds are common in many places. Significant wildfire in the last 10 years has resulted in stand-replacing, non-natural-appearing plant communities. Common forest animals including deer, elk, and turkey are in the area. Two federally listed endangered species, New Mexico meadow jumping mouse and the Jemez Mountain salamander are also present in the area.</p> <p>The extent to which the area reflects ecological conditions without human intervention is low due to the presence of stumps across the majority of the mesa and evidence of mastication and fire treatments throughout. Apparent naturalness is also affected by the presence of improvements. Prevalence of improvements is overall high throughout this area and is concentrated in some spots. Range improvements include a pipeline system, new range fence line, wildlife enclosure fences, a water storage tank, a large logging camp and landing, a large umbrella tank, an old earthen tank, and a high concentration of closed roads that are still evident on the landscape.</p>	<p>1.a low 1.b low 1.c low</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities or presence is common and little opportunity of feeling alone can be experienced in the area. Due to the irregular shape of the area, there is a high edge-to-interior ratio, making impacts to solitude from adjacent lands and uses very high. Some uses on adjacent lands include maintenance of powerlines, maintenance and use of range improvements including storage tanks and other water developments, a helicopter landing pad, a high-use motorized camping corridor along National Forest System Road 376, and high-use State campgrounds. Some high-quality hunting and hiking opportunities may be found away from the edges of the area.</p>	<p>2.a low 2.b moderate</p>
Unique Features	<p>Two unique features have been identified for this area: unique or rare animal communities and unique or outstanding historic and cultural resources. Two federally listed endangered species, the Jemez Mountain salamander (endemic) and the New Mexican meadow jumping mouse are present or have critical habitat in the area. Also present are the Mexican spotted owl (threatened), Rio Grande chub and Rio Grande sucker (both species of conservation concern). Limited cultural resource surveys have been done, but sites were recorded in areas surveyed. Known cultural features include two historic logging camps, several small prehistoric structures, and an historic railroad alignment. Some sites may be eligible for listing under the National Historic Preservation Act.</p>	<p>3.a yes 3.b no 3.c.yes, eligible sites 3.d no 3.e no</p>
Manageability	<p>The presence and extent of other uses and/or management considerations in the area is pervasive, making it impossible to manage the majority of the area to preserve wilderness characteristics. Other uses and management considerations include high-use administrative and visitor use associated with power line maintenance, range management, recreation, and forest management occurring adjacent to and within the polygon. Motorized and mechanized management of associated allotments is authorized for range permittees. The shape of the polygon is very irregular with narrow pinch points and a high edge-to-interior ratio. A portion of the area is within a wildland-urban interface and there is a signed NEPA decision to conduct thinning and burning across approximately 30 percent of this area.</p>	<p>4.a no</p>



**Cu28 – 10,100.67 acres – Overall Determination of Wilderness Characteristics: Moderate**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	The composition of plant and animal communities appears natural in this area with only minimal invasive species evident on some roadsides. Dominant vegetation is mixed conifer with aspen and spruce-fir intermixed in the higher elevations. Valley bottoms are meadows of native perennial grasses. Overall, there is a high concentration of wildlife throughout the area. Notable wildlife species include Mexican spotted owl (threatened), Rio Grande cutthroat trout (species of conservation concern), Jemez Mountain salamander (endangered), northern goshawk (Regional Forester sensitive species), and American peregrine falcon. Ecological functioning is intact with only minimal evidence of past human interventions including minimal evidence of several old logging units on the eastern edge of the polygon. Prevalence of improvements is overall low throughout the area. Range improvements include earthen stock tanks and McKinney dam, remnants of concrete foundations associated with the Lazy Ray ranch, corrals, troughs, water lines for cattle, and the Calaveras well with solar panel, pump, and storage tank. Other improvements include National Forest System motorized and non-motorized (Rio Cibola) trails and several closed roads that are still apparent on the landscape.	1.a high 1.b high 1.c moderate
Solitude or Primitive or Unconfined Recreation	Opportunities to experience solitude can be found throughout much of the area, especially in the canyons or on ridges. Human activities are generally rare and a feeling of being alone or remote from civilization is possible. There is one picnic site adjacent to the area, but it receives little use. There may be traditional uses. High-quality primitive recreation opportunities like hiking, hunting, and fishing can also be experienced in the area.	2. a high 2. b high
Unique Features	The animal community in this area is considered a unique feature due to the concentration and diversity of species and critical habitat. The area has critical habitat for the New Mexico meadow jumping mouse and Jemez Mountain salamander. There are six Mexican spotted owl protected activity centers, American peregrine falcon nesting sites, northern goshawk, Gunnison's prairie dog, Jemez wood snail, Rio Grande cutthroat (hybridized), and wood lily, to name a few. Cultural and historic features are also considered a unique feature in this area. Cultural sites are located in specific areas related to water and springs in surveyed areas. Survey away from water sources suggests low site density. Sites near water sources suggest there may be continued use for traditional purposes. Some sites may be eligible for listing under the National Historic Preservation Act.	3. a Yes 3.b No 3.c yes 3.d no 3.e no
Manageability	The degree to which the area can be managed to preserve its wilderness characteristics is influenced by a variety of factors. Motorized and mechanized management of associated allotments is authorized for range permittees. Range maintenance occurs in all canyons for fence and water lines. A portion of the area is within the Rio Las Vacas wildland-urban interface. There is a pipeline laid that will be buried in the coming months. Due to existing uses, the easternmost portion of the area would pose the greatest degree of management challenges, while the remaining two-thirds would have relatively few barriers to managing to preserve the area's wilderness characteristics. Calaveras pipeline has an existing special use authorization.	4.a moderate

**Cu29 – 7,660.12 acres – Overall Determination of Wilderness Characteristics: No**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species. The overstory plant community is predominantly composed of ponderosa pine, Gambel oak, and mixed-conifer. Common forest animals can be found in the area. The extent to which the area reflects ecological conditions without human intervention is low due to past logging activity associated with the Blue Bird timber sale in the 1990s and clear cuts in the 1980s, leaving many stumps that are still apparent on the landscape. Vegetation appears obviously patchy from above from past clear cuts. Apparent naturalness is also affected by the presence of improvements. Prevalence of improvements is overall low throughout the area. Improvements include fence and spring developments, water tanks (most blend into the landscape), a steel corral, and old roadbeds that are still evident on the landscape.	1.a moderate 1.b low 1.c moderate
Solitude or Primitive or Unconfined Recreation	Human activities or presence is common and little opportunity of feeling alone can be experienced in the area. There is a motorized dispersed camping corridor adjacent to the area that receives moderately high use. ATV and UTV use is prevalent on National Forest System Road 98, which almost completely bisects the area and is a motorized dispersed camping corridor. Some high-quality hunting, camping, and hiking opportunities may be found away from area boundaries and cherry stem roads.	2.a low 2.b moderate
Unique Features	No known rare, unique, or outstanding features are found within this area.	3.a no 3.b no 3.c no 3.d unknown 3.e no 3.f no
Manageability	The presence and extent of other uses and/or management considerations in the area is pervasive, making it impossible to manage the majority of the area to preserve wilderness characteristics. Other uses and management considerations include irregular shape of the area with many narrow pinch points, deeply dissecting cherry stem roads including one that almost completely dissects the area (National Forest System Road 98), and a wildland-urban interface that extends into the polygon. Motorized and mechanized management of associated allotments is authorized for range permittees.	4.a no

**Cu30 – 7,047.90 acres – Overall Determination of Wilderness Characteristics: No**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species including bull thistle and musk thistle in isolated areas near disturbances. Overstory plant communities are ponderosa pine, pinyon juniper, and dense sagebrush. Common forest animals can be found within the area. Of note, the area has elk winter range and American peregrine falcon.</p> <p>Vegetation does not appear natural in isolated or scattered spots due to past thinning, mowing, and prescribed burning (Jacquez burn 2009) especially in the southern area. In the north, past vegetation treatments and stumps are evident from the 1980s and 1990s.</p> <p>Apparent naturalness is also affected by the presence of improvements. Prevalence of improvements is overall high throughout this area and is concentrated in some spots. Improvements include six existing capped oil wells in the southern portion of area with a motorized pump jack and small tank accessed by trucks, an aboveground mine structure, earthen tanks throughout the area that are visible due to terrain and vegetation, troughs and fence line for range management. There are also old roads evident throughout the area. The northern part of the polygon is somewhat more natural appearing than the southern portion.</p>	<p>1.a moderate 1.b moderate 1.c low</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities are uncommon, especially away from roads, making opportunities to feel alone possible in much of the area. However, visitors can easily see signs of civilization from within the area including cell towers, homes, and well-traveled roads. There are a few opportunities to engage in primitive and unconfined recreation including elk and deer hunting; however, most opportunities are of low quality. More risk and challenge exists in the north area where there are no trails.</p>	<p>2.a moderate 2.b low</p>
Unique Features	<p>Cultural and historic features are considered a unique feature in this area. Spotty survey suggests a high site density. Located adjacent to other areas with very high site density. Unknown for traditional uses, but potential for both Jicarilla Apache and Navajo. Though not considered a unique feature, peregrine falcon is also found in the area.</p>	<p>3.a no 3. b no 3.c yes 3.d no 3. e no</p>
Manageability	<p>The presence and extent of other uses and/or management considerations in the area is pervasive, making it impossible to manage the majority of the area to preserve wilderness characteristics. Of particular challenge is the long, narrow shape with two very narrow sections that segment the area. In addition, there is ongoing authorized motorized access to pumps and oil and gas mines, and motorized and mechanized management of associated allotments is authorized for range permittees. The area is potentially used by the Jicarilla Apache and Navajo for traditional purposes. Further, the area has active oil and gas claims and there is a signed NEPA decision for forest restoration in the southeastern corner.</p>	<p>4.a no</p>

**Cu31 – 10,555.79 acres – Overall Determination of Wilderness Characteristics: Low**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species. Dominant plant communities include some Intermountain Basin Big Sagebrush shrublands, ponderosa pine and pinyon juniper. Common forest animals can be found in the area and there is elk winter and summer range.</p> <p>Vegetation does not appear natural in isolated or scattered spots due to past shelter wood cuts from the 1990s, and mowing and thinning in 2014 that are still visible on the landscape.</p> <p>Apparent naturalness is also affected by the presence of improvements. There is obvious evidence of human activity in this polygon with the prevalence of improvements being very high throughout. There are very few or no spots where improvements are absent or unseen. There are range improvements scattered throughout the area including a variety of water developments including dams and stock tanks, troughs, and fences. Additionally, there are oil and gas wells that have pumps and tanks, a buried pipeline visible on the landscape, a broken windmill, and many old roads visible on the landscape.</p>	<p>1.a moderate 1.b moderate 1.c no</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities or presence is common and little opportunity of feeling alone can be experienced in the area. Chance to see uses associated with range and mines impacts solitude including motorized sounds from pumps and ATVs, making opportunities to experience solitude difficult in the area. Motorized sounds echo off nearby canyons, amplifying their effect in the area. There are a few high-quality opportunities to engage in primitive and unconfined recreation including hunting, shed hunting, and seasonal pinyon picking.</p>	<p>2.a low 2.b low</p>
Unique Features	<p>Cultural and historic features are considered a unique feature in this area. Spotty survey suggests a high site density. Located adjacent to other areas with very high site density. Unknown for traditional uses, but potential for both Jicarilla Apache and Navajo.</p>	<p>3. a no 3.b. no 3. c. yes 3.d. no 3.e. no</p>
Manageability	<p>The presence and extent of other uses and/or management considerations occurs across most of the area, making it difficult to manage the area to preserve its wilderness characteristics. Some other uses and considerations include active oil and gas leases, pumps, and tanks. Historic motorized access for hunting use, potential traditional use by Jicarilla Apache and Navajo, existing closed road that are still in use provide access cross-country, cherry stem roads, and four-wheeler use. Motorized and mechanized management of associated allotments is authorized for range permittees. Comments from land grant council San Juan del Rio de Chama show this polygon within the land grant, which means traditional uses associated with land grants are possible. There are also several signed NEPA decisions for restoration (burning) and range improvement (meadow restoration) within the area.</p>	<p>4.a low</p>

**Cu32 – 6,887.55 acres – Overall Determination of Wilderness Characteristics: No**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species. Dominant plant communities include ponderosa pine, pinyon juniper and sage. Common forest animals including deer, elk, bear and coyote. The area has summer and winter range for elk and deer.</p> <p>Vegetation does not appear natural in isolated or scattered spots due to sage mowing in much of the area away from rocky steep sections.</p> <p>Apparent naturalness is also affected by the presence of improvements. Prevalence of improvements is overall high throughout this area and is concentrated in some spots. Improvements include oil and gas wells, old roads, range improvements including stock tanks, drinkers, wells, fence, and corrals.</p>	<p>1.a moderate                      1.b moderate                      1.c low</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities or presence is common and little opportunity of feeling alone can be experienced due to activities associated with oil and gas wells, range management, and road use. There are a few opportunities to engage in primitive and unconfined recreation like hunting, shed hunting and pinyon picking, but they tend to be of low quality.</p>	<p>2.a low                      2.b low</p>
Unique Features	<p>Cultural and historic features are considered a unique feature in this area. Spotty survey suggests a high site density. Located adjacent to other areas with very high site density. Unknown for traditional uses, but potential for both Jicarilla Apache and Navajo Nations.</p>	<p>3.a no                      3.b. no                      3.c yes                      3. d no                      3.e no</p>
Manageability	<p>The presence and extent of other uses and/or management considerations in the area is pervasive making it impossible to manage the majority of the area to preserve wilderness characteristics. Other uses and management considerations include adjacent land is private property, multiple cherry stem roads including National Forest System Road 518 that nearly bisects the entire area, and expected traditional use by Jicarilla Apache and Navajo.</p>	<p>4.a no</p>

**Cu33 – 5,438.90 acres – Overall Determination of Wilderness Characteristics: High**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with minimal presence of invasive species. Dominant plant communities include ponderosa pine, mixed-conifer, and some aspen. Along with common forest species, the area has elk and deer summer and winter range and a possible elk calving area in the north.</p> <p>Vegetation appears natural, though there was some thinning in the north in the 1990s.</p> <p>Apparent naturalness is also affected by the presence of improvements. Prevalence of improvements is rare or scattered in this area and does not detract from apparent naturalness. Improvements include several old roads that are minimally evident on the landscape. Range improvements exist (one tank and one drinker), but are only around the road edge and not in the interior of the polygon.</p>	<p>1.a moderate/high 1.b high 1.c high</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities are rare and opportunities to experience solitude are common throughout. Terrain is steep, rugged, and uninterrupted by roads or other improvements. Vegetation and terrain provide opportunities to experience solitude and provide a feeling of remoteness from civilization.</p> <p>There are abundant opportunities for engaging in primitive and unconfined recreation and these opportunities tend to be high quality. Primitive recreation opportunities include hiking, camping, and hunting (mostly in the fall). The rugged and steep canyon walls and steep ravines provide opportunities to experience challenge and risk. Some impacts to solitude or primitive and unconfined recreation include hunting with dogs and sounds of pumps and other motorized activity from adjacent roads. There is also a motorized dispersed camping corridor on the northern boundary, which has moderate use during hunting season, but low use the remainder of the year.</p>	<p>2.a high 2.b high</p>
Unique Features	<p>Cultural and historic features are considered a unique feature in this area. Spotty survey suggests a high site density. Located adjacent to other areas with very high site density. Unknown for traditional uses, but potential for both Jicarilla Apache and Navajo Nations.</p>	<p>3.a no 3.b. no 3.c yes 3.d no 3.e no</p>
Manageability	<p>The presence and extent of other uses and management considerations affects isolated spots and makes management to preserve the area's wilderness characteristics possible throughout the area. There is private property along the eastern boundary (though owner supports wilderness).The area has an oil and gas lease, so future development could occur. Steep and rugged terrain limits motorized access to the area. Some traditional uses possible by the Jicarilla Apache and Navajo Tribes associated with possible San Juan de Chama land grant.</p>	<p>4.a high</p>

**Cu34 – 6,288.43 acres – Overall Determination of Wilderness Characteristics: Low**

<b>Criteria Category</b>	<b>Description</b>	<b>Determination of Wilderness Characteristics</b>
Apparent Naturalness	The composition of plant and animal communities appears natural within most of the area with some minimal presence of invasive species near disturbed areas. Plant dominance types include ponderosa pine, pinyon juniper and sage. Vegetation does not appear natural in isolated or scattered spots due to some logging in the north in the late 1980s that left many stumps. Some thinning and logging evidence is apparent throughout the polygon. Improvements include old roading and oil and gas leases along the edge. The presence of improvements affects the apparent naturalness. Prevalence of improvements is overall high and often concentrated. Range improvements along edges and interior include dirt tanks, water developments, fences, and a pit house with a silver metal roof.	1.a moderate 1.b moderate 1.c low
Solitude or Primitive or Unconfined Recreation	Human activities or presence is unavoidable and signs of civilization are pervasive. Opportunities to experience solitude are unlikely due to the location of the polygon and adjacent uses. National Forest System Road 112 runs along the eastern edge of the area and heavily affects opportunities for solitude due to sights and sounds of motorized activity. There is also a motorized dispersed camping corridor along the entire western edge. There is little opportunity to feel remote from civilization, as visitors can see nearby towns easily from any high point in the area. There are few (hunting, hiking, bird watching) opportunities to engage in primitive and unconfined recreation and most opportunities are of low quality.	2.a no 2.b low
Unique Features	Cultural and historic features are considered unique or outstanding in this area. Some of these features may be eligible for the National Register of Historic Places.	3.a no 3.b no 3.c yes 3.d no 3.e. no
Manageability	The presence and extent of other uses and/or management considerations occurs across most of the area, making it difficult to manage the area to preserve its wilderness characteristics. Some other uses and considerations include presence of private inholdings, adjacent private land, wildland-urban interface area, cherry stem roads, and traditional uses associated with land grant status.	4.a low

**Cu35 – 7,422.54 acres – Overall Determination of Wilderness Characteristics: Moderate**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural. Non-native species are present in low numbers not apparent on the landscape. Plant dominance types include ponderosa pine, mixed-conifer and some pinyon juniper. Common forest animal species are present. Some sensitive and listed species present include the northern goshawk and Gunnison's prairie dog. There is also an identified Mexican spotted owl protected activity center.</p> <p>Vegetation does not appear natural in isolated or scattered spots due to a prescribed fire in 1992 (though this looks fairly natural), and thinning in the late 1980s and early 1990s that left some stumps scattered throughout the area. There has been mastication along the entire western edge in 2012, which is apparent on the landscape.</p> <p>Apparent naturalness is also affected by the presence of improvements. Prevalence of improvements is generally low and includes several old roads (present in more open areas) and scattered range improvements including a tank, water development, and fence.</p>	<p>1.a high                      1.b moderate                      1.c moderate</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities are uncommon, making opportunities to feel alone possible in much of the area. The remote and rugged terrain provides risk and challenge and limits the number of visitors to the area. Three small motorized camping corridors adjacent to the area would detract from opportunities for solitude when close enough to hear motorized sounds. No trails access the area. There are also motorized grazing maintenance activities that could detract from feeling remote from civilization. There are some opportunities to engage in primitive and unconfined recreation (hunting, camping, hiking) and at least some of these are of high quality.</p>	<p>2.a moderate                      2.b moderate</p>
Unique Features	<p>There are no known unique or outstanding features in this area. There are a Mexican spotted owl protected activity center, northern goshawk, and Gunnison's prairie dog, but the presence and concentration of these species is not considered regionally or nationally unique or outstanding.</p>	<p>3.a no                      3.b no                      3.c no                      3.d no                      3.e no</p>
Manageability	<p>The presence and extent of other uses and management considerations in this polygon is scattered and makes management to preserve the area's wilderness characteristics possible throughout much of the area. Some management challenges include the presence of cherry stem roads, and ongoing traditional use of the area for fuelwood, herbs, and pinyon gathering. Motorized and mechanized management of associated allotments is authorized for range permittees.</p>	<p>4.a moderate</p>



**Cu36A – 12,840.34 acres – Overall Determination of Wilderness Characteristics: Low**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some minimal presence of invasive species. Plant dominance types include ponderosa pine, juniper, and mixed-juniper. Common forest wildlife species including elk and deer are present. In the eastern portion of the area, vegetation does not appear natural, commonly due to thinning and past logging activities that have left stumps from the 1980s and through the early 2000s. Vegetation in the northern portion of the area is more natural appearing.</p> <p>Apparent naturalness is also affected by the presence of improvements. Prevalence of improvements is overall high and often concentrated. A dense network of old roads is still apparent on the landscape, especially in eastern sliver but also in the north. Range improvements include fence, tanks, wells, cattle guards, spring well developments, and dirt tanks.</p>	<p>1.a moderate 1.b low in the eastern sliver, moderate in the northern portion. 1.c low</p>
Solitude or Primitive or Unconfined Recreation	<p>In the north, opportunities to feel alone are possible in much of the area. However, in the eastern sliver, opportunities to experience solitude are low. Some activities that impact opportunities for solitude include: noise from pump jacks associated with oil and gas lease management activities, hunting with dogs, and activities on adjacent motorized dispersed camping corridors.</p> <p>There are some opportunities to engage in primitive and unconfined recreation, and at least some of these are of high quality including dispersed camping, hunting and hiking. There are no trails and the terrain provides challenge and risk to visitors.</p>	<p>2.a moderate in the north and low in the eastern sliver 2.b moderate</p>
Unique Features	<p>Cultural and historic features are considered unique or outstanding in this area. Spotty survey suggests a high site density. Some of these features may be eligible for the National Register of Historic Places. Located adjacent to other areas with very high site density. Unknown for traditional uses, but potential for both Jicarilla Apache and Navajo Nations.</p>	<p>3.a no 3.b no 3.c yes, high site density likely 3.d no 3.e no</p>
Manageability	<p>The presence and extent of other uses and/or management considerations occurs across most of the area, making it difficult to manage the area to preserve its wilderness characteristics. Some other uses and considerations include traditional uses by Jicarilla Apache and Navajo Nations, a long cherry stem road with offshoots, a wildland-urban interface on the eastern edge, and challenges associated with mixed adjacent land ownership (private, tribal, and BLM). Motorized and mechanized management of associated allotments is authorized for range permittees.</p>	<p>4.a low</p>

**Cu36B – 13,469.01 acres – Overall Determination of Wilderness Characteristics: High**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	The composition of plant and animal communities appears natural. Non-native species are present in disturbed areas, but are in low numbers and generally not apparent on the landscape. Plant dominance types include mostly ponderosa pine, pinyon juniper, and scrub oak, with some aspen interspersed throughout. Common forest animals can be found in the area including elk and deer. Less common species include bald eagle, golden eagle, and other large raptors. There is a nest site for American peregrine falcon in the south and suitable raptor habitat throughout the polygon. Approximately 75 percent of the polygon is part of the Pollywog Inventoried Roadless Area. Within the inventoried roadless area, vegetation appears natural. Outside the inventoried roadless area, thinning (1980s), fire (BMG fire), and salvage cutting (BMG fire) have altered the appearance of vegetation. Apparent naturalness is also affected by the presence of improvements. Prevalence of improvements is rare within the inventoried roadless area and overall low elsewhere. Improvements associated with range management include earthen tanks, troughs, and old roadbeds. Some roadbeds are beginning to fade (north), while others remain obvious on the landscape (middle).	1.a high 1.b within the IRA it is high, outside the IRA it is moderate 1.c high in the IRA moderate elsewhere
Solitude or Primitive or Unconfined Recreation	Human activities are rare everywhere but in the southernmost portion of the area. Common or significant feeling of being alone or remote from civilization can be found everywhere except in the south. The area receives minimal visitor use (there are no system trails) and has steep, rugged terrain that limits the use of the area. For those interested in steep and rugged terrain, hiking in the area provides opportunities for challenge and risk. Opportunities for solitude are greatest away from adjacent roads. There are abundant opportunities for engaging in primitive and unconfined recreation and many of these opportunities are of high quality. Some primitive recreation opportunities include hunting, hiking, and camping.	2.a high everywhere except low in the southern portion 2.b high in the IRA low elsewhere
Unique Features	Cultural and historic features are considered unique or outstanding in this area. The Nogales cliff dwelling is within this polygon as well as other cliff houses. The area has high site density and some of these features may be eligible for the National Register of Historic Places.	3.a no 3.b no 3.c. yes 3.d no 3.e no
Manageability	Presence and extent of other uses and management considerations affects isolated spots and makes management to preserve the area's wilderness characteristics possible throughout the area. Particular attention should be made to the boundary and area outside the inventoried roadless area, as ranking would be lower if non-inventoried roadless area is included. Eastside border along the cliff would make management to preserve wilderness characteristics possible. Some management considerations include that motorized and mechanized management of associated allotments is authorized for range permittees. There is a wildland-urban interface in the southeastern portion of polygon. Some traditional use by Jicarilla Apache and Navajo.	4.a high if boundary adjusted

E37 – 6,786.19 acres – Overall Determination of Wilderness Characteristics: Moderate

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural. Plant dominance types include perennial grass mix, big sagebrush, pinyon juniper, spruce fir, and ponderosa pine. Some animal species present in the area include Gray vireo (Regional Foresters sensitive species), burrowing owls, pinyon jay, and Gunnison's prairie dogs. Tadpoles found in natural ponds. The area is an important bird area (IBA-globally important-12,000 IBAs worldwide protected and legally recognized) for all Caja polygons. Wild horses are also present in the area.</p> <p>Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention.</p> <p>Apparent naturalness is affected by the presence and appearance of improvements in the area. Improvements in the area are rare or scattered, and do not detract from apparent naturalness. Improvements include hang glider improvements along the southern portion of the area, range improvements including metal tanks, fence, enclosures, dirt tanks, and old cement storage tank. Most old roads are not apparent on the landscape, but several may still be noticeable.</p>	<p>1.a high                      1.b high                      1.c high</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities are uncommon, making opportunities to feel alone possible in much of the area. Terrain and location are remote and rugged, limiting the number of people who use the area. However, the area is popular for hang gliders that may affect opportunities to feel alone and remote from civilization. Some high-quality opportunities to engage in primitive and unconfined recreation exist in the area including hunting, sport shooting, hiking, and horseback riding.</p>	<p>2.a moderate                      2.b moderate</p>
Unique Features	<p>Cultural resources in this area are considered unique or rare, and some of them may be eligible for the National Register of Historic Places. The area has a high site density for level of survey in the area.</p>	<p>3.a no                      3.b no                      3.c yes                      3.d no                      3.e no</p>
Manageability	<p>The presence and extent of other uses and management considerations in the area is scattered and makes management to preserve the area's wilderness characteristics possible throughout much of the area. Motorized and mechanized management of associated allotments is authorized for range permittees.</p>	<p>4.a moderate</p>

**E38 – 11,548.98 acres – Overall Determination of Wilderness Characteristics: No**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species (knapweed) in disturbed areas. Plant dominance types include juniper, pinyon-juniper, and big sagebrush. Elk, deer and other common species are found in the area. Pinyon jays are also present.</p> <p>Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention. There has been some fuelwood cutting and thinning.</p> <p>Prevalence of improvements is overall high throughout the area. Range improvements include metal tanks, pit tanks, drinker, two large metal tanks (50,000 gallons), and five mixed material corrals. Other improvements include a user-created route where a pipeline had been, barbed wire fence line, a 50/50 mix of roads that are visible and those that are mostly obscured.</p>	<p>1.a moderate 1.b high 1.c low</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities or presence is common and little opportunity of feeling alone can be experienced in the area, though some solitude can be experienced when away from roads and range management activities and infrastructure. An airport 5 miles away further affects solitude and a feeling of being remote from civilization.</p> <p>Some high-quality opportunities to engage in primitive and unconfined recreation exist in the area including recreational shooting, hiking, horseback riding, and exploring side canyons.</p>	<p>2.a low 2.b moderate</p>
Unique Features	<p>There is a blowhole in the area that is considered a unique feature in the area. Cultural resources in this area are also considered unique or rare and some of them may be eligible for the National Register of Historic Places.</p>	<p>3.a no 3.b yes (blow hole landscape feature) 3.c yes 3.d no 3.e no</p>
Manageability	<p>The presence and extent of other uses and management considerations (shape and configuration) in the area is pervasive, making it impossible to manage the majority of the area to preserve its wilderness characteristics. There are events under special use permits and heavy range improvement management. Motorized and mechanized management of associated allotments is authorized for range permittees. Further, the area has a doughnut-shaped cut out of the middle with a cherry stem road that leads to it. The area is adjacent to the National Guard Headquarters where training has historically taken place. There is also a mine and a landfill on edge of the area in the south.</p>	<p>4.a no</p>

**E39 – 19,258.96 acres – Overall Determination of Wilderness Characteristics: High**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural. Non-native species are present (Siberian elm along the Rio Grande), but are in low numbers and generally not apparent on the landscape. Plant dominance types include pinyon juniper, sagebrush, open meadows, and ponderosa pine patches along the west. Wildlife species found in the area include pinyon jay, gray vireo, southwestern willow flycatcher, peregrine falcon, elk, bald eagle, Rio Grande chub and Rio Grande sucker.</p> <p>Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention.</p> <p>The presence and appearance of improvement in the area is rare or scattered and does not detract from apparent naturalness. Improvements are concentrated in the eastern portion of the polygon and include a green storage tank, dirt tank, old roads—mostly rehabilitated or recovered—but some evident on the landscape especially near National Forest System Road 24, some wood structures associated with range management, and some barbed wire fence.</p>	1.a high 1.b high 1.c high
Solitude or Primitive or Unconfined Recreation	<p>Opportunities to experience solitude can be found throughout much of the area, particularly in the western half. The city of Los Alamos is visible from many viewpoints in the north and Forest System Road 24 is visible along the eastern boundary, both of which may detract from a feeling of being remote from civilization. In addition to some recreational use, tribal members from the Cochiti use the area as part of a tribal pilgrimage at certain times of the year. High-quality primitive recreation opportunities like hiking and horseback riding can be found in the area.</p>	2.a high 2.b high
Unique Features	<p>Several unique features have been identified as regionally or nationally significant within this area including rare plant or animal communities (Rio Grande sucker and chub, and endangered southwest willow flycatcher), landscape features (Caja del Rio to the Dome and Frijoles Falls), cultural and historic resources, and important watershed features. See notes from 44a for rift valley. And very high site density and modern traditional uses for cultural resources, some of which may be eligible for the National Register of Historic Places.</p>	3.a yes 3.b yes 3.c Yes 3.d no 3.e yes
Manageability	<p>The presence and extent of other uses and management considerations affects isolated spots and makes management to preserve the area’s wilderness characteristics possible throughout the area. The area is separated by the Rio Grande from the Bandelier Wilderness and is adjacent to the Pueblo de Cochiti Indian Reservation. There may be some access needs including motorized access in the corner where the Pueblo de Cochiti Indian Reservation abuts the polygon. Additionally, motorized and mechanized management of associated allotments is authorized for range permittees, concentrated in the eastern portion of the polygon. Approximately 45 percent of area is in an inventoried roadless area.</p>	4.a high

**E40A – 4,327.01 acres – Overall Determination of Wilderness Characteristics: High**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural. Non-native species are present in disturbed areas, but are in low numbers and generally not apparent on the landscape. Plant dominance types include ponderosa pine, pinyon juniper and deciduous mixed-conifer in the lower elevations, and spruce-fir, white pine and aspen in the higher elevations. There are many common forest animal species in the area as well as a Mexican spotted owl protected activity center on the east edge and a sensitive shrew species.</p> <p>Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention. However, watershed restoration treatments in the closed watershed area do reflect modern human intervention on the landscape. Within the closed watershed area, there are stumps, piling, thinning (2000s), and mastication lines on ridgelines along the watershed, and all represent departures from natural conditions.</p> <p>The presence and appearance of improvement in the area is rare or scattered and does not detract from apparent naturalness. No roads or range improvements are in the area, though there are several system non-motorized trails that access the area.</p>	<p>1.a high                      1.b outside the shed is high, inside the shed is low                      1.c high</p>
Solitude or Primitive or Unconfined Recreation	<p>Opportunities to experience solitude can be found throughout much of the area outside the watershed closure. No opportunities exist for solitude within the closure, as no public use is allowed. On system trails visitors are likely to encounter other visitors but unlikely to see people when away from trails. High-quality primitive recreation opportunities like cross-country hiking, horseback riding, and wildlife and aspen viewing can be experienced in the area. Within the closure area, no primitive recreation can be experienced.</p>	<p>2.a high in open area/no in closed area                      2.b high/no</p>
Unique Features	<p>Several unique features have been identified in this area including regionally important viewsheds (aspen viewing area); cultural and historic resources; Civilian Conservation Corps features in the north; longtime traditional use of the Santa Fe River corridor; and important watershed features (Santa Fe Watershed in the south and Tesuque Creek headwaters in the north). The Santa Fe River contributes half the municipal water for the city of Santa Fe.</p>	<p>3.a no                      3.b yes, aspen (north)                      3.c yes (South), CCC features in the North.                      3.d no                      3.e yes, Santa Fe watershed (south)                      3.e North, Tesuque Creek headwaters</p>
Manageability	<p>The presence and extent of other uses and management considerations in the area is scattered and makes management to preserve the area's wilderness characteristics possible. The area is an inventoried roadless area, and some wildland-urban interface.</p>	<p>4.a moderate</p>

**E40B – 4,156.82 acres – Overall Determination of Wilderness Characteristics: No**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural. Non-native species are present in disturbed areas but are in low numbers and generally not apparent on the landscape. Plant dominance types include ponderosa pine, pinyon juniper and deciduous mixed-conifer in the lower elevations, and spruce-fir, white pine and aspen in the higher elevations. There are many common forest animal species in the area as well as a Mexican spotted owl protected activity center on the east edge and a sensitive shrew species.</p> <p>Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention. However, watershed restoration treatments in the closed watershed area do reflect modern human intervention on the landscape. Within the closed watershed area, there are stumps, piling, thinning (2000s), and mastication lines on ridgelines along the watershed; all represent departures from natural conditions.</p> <p>The presence and appearance of improvement in the area is rare or scattered and does not detract from apparent naturalness. No roads or range improvements are in the area, though there are several system non-motorized trails that access the area.</p>	<p>1. a high 1.b low 1.c high</p>
Solitude or Primitive or Unconfined Recreation	<p>Opportunities to experience solitude can be found throughout much of the area outside the watershed closure. No opportunities exist for solitude within the closure, as no public use is allowed. On system trails, visitors are likely to encounter other visitors, but unlikely to see people when away from trails. High-quality primitive recreation opportunities like cross-country hiking, horseback riding, and wildlife and aspen viewing can be experienced in the area. Within the closure area, no primitive recreation can be experienced.</p>	<p>2. a no 2. b no</p>
Unique Features	<p>Several unique features have been identified in this area including regionally important viewsheds (aspen viewing area); cultural and historic resources (Civilian Conservation Corps features in the north and longtime traditional use of the Santa Fe River corridor; and important watershed features (Santa Fe Watershed in the south and Tesuque Creek headwaters in the north). The Santa Fe River contributes half the municipal water for the city of Santa Fe.</p>	<p>3.a no 3.b yes, aspen (north) 3.c yes (South), CCC features in the North. 3.d no 3.e yes, Santa Fe watershed (south) 3.e North, Tesuque creek headwaters</p>
Manageability	<p>The presence and extent of other uses and management considerations is pervasive, making it impossible to manage the area to preserve its wilderness characteristics. Most significantly, there is a signed NEPA decision that closes the watershed to public use.</p>	<p>4.a No</p>

**E41 – 2.25 acres – Overall Determination of Wilderness Characteristics: High**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>*This polygon was lumped with E45 for evaluation.</p> <p>The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species along the Borrego trail and around section 36. Much of the area is burned; however, remaining plant dominance types include spruce fir and aspen in the higher elevations, mixed-conifer and ponderosa pine elsewhere.</p> <p>Common forest animals can be found in the area as well as bighorn sheep in the east.</p> <p>Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention.</p> <p>Prevalence of improvements is overall low throughout the area. Improvements include old roads that are in various phases of becoming renaturalized, range fence made of barbed wire and native wood posts, old fire line, and a non-motorized trail.</p>	<p>1.a moderate 1.b high 1.c moderate</p>
Solitude or Primitive or Unconfined Recreation	<p>Opportunities to experience solitude can be found throughout much of the area, though visitors can see and hear the ski basin and lifts from some points within the area. Opportunities to experience solitude are higher in the north and in the inventoried roadless areas.</p> <p>High-quality primitive recreation opportunities like hiking, camping, fishing, hunting, mushroom collecting, and horseback riding can be experienced in the area.</p>	<p>2.a high in the north, moderate in the south/southeast 2.b high</p>
Unique Features	<p>Cultural and historic resources and high-quality water resources are identified as unique features for the area. While little or no survey has been completed for cultural resources, there are known traditional uses and areas of traditional concern including places and areas for resource procurement and known locations of traditional significance on the east side of the polygon. The important water resource is Rio Nambe Creek that flows into Nambe Reservoir.</p>	<p>3.a unknown 3.b no 3.c yes 3.d no 3.e yes</p>
Manageability	<p>The presence and extent of other uses and management considerations in the area is scattered and makes management to preserve the area's wilderness characteristics possible throughout much of the area. The area is adjacent to congressionally designated wilderness on the north and east sides, by Pueblo in the west and private land to the south. A portion of the area is managed as an inventoried roadless area (Rancho Viejo) and a portion is managed as a wildland-urban interface (south).</p>	<p>4.a high</p>



E42 – 10,958.39 acres – Overall Determination of Wilderness Characteristics: High

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural. Non-native species (Siberian elm and spotted knapweed) are present in low numbers but are generally not apparent on the landscape. Plant dominance types include ponderosa pine, mixed-conifer, and some aspen in the east, and pinyon juniper and grass and forbs in the west.</p> <p>Wildlife species include marmot, elk, deer, turkey, grouse, bear, and mountain lion. There is also a Mexican spotted owl protected activity center in the area.</p> <p>Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention.</p> <p>The presence and appearance of improvement varies between the northern and southern portions of the polygon. In the northern half, improvements are rare or scattered and do not detract from apparent naturalness. In the southern half, prevalence of improvements is overall high and often concentrated. These improvements include a national recreation trail (Winsor trail), a large network of user-created trails, two gravel pits, and minimal presence of old roads in the east.</p>	<p>1.a high                      1.b high                      1.c high for northern/low for southern</p>
Solitude or Primitive or Unconfined Recreation	<p>Opportunities for solitude are split between the northern and southern half. In the northern half, human activities are uncommon, making opportunities to feel alone possible in much of the area, no trails exist, and the area receives very little use. However, in the southern half, there is little opportunity of feeling alone and human activities and presence is common along the Winsor National Recreation Trail (Trail # 254) that transects the area and receives high use, especially on the weekends, as well as along with many user-created trails. Mountain bike use is also very popular in the area.</p> <p>High-quality primitive recreation opportunities like hiking, hunting, wildlife and scenery viewing, and camping can all be experienced in the area.</p>	<p>2.a high for northern/low for southern                      2.b high</p>
Unique Features	<p>High-quality water resources (the Pecos River) has been identified as a unique feature in this area for its cultural and natural resources value to the nearby Pueblo.</p>	<p>3.a unknown/no                      3.b no                      3.c unknown                      3.d no                      3.e yes</p>
Manageability	<p>The presence and extent of other uses and management considerations in the area occur in isolated spots and makes it possible to preserve wilderness characteristics throughout much of the area. In addition, the area is in wildland-urban interface on all the edges. However, the area is already an inventoried roadless area, which has preserved some wilderness characteristics (roadlessness) of the area.</p>	<p>4.a high</p>

**E43 – 5,048.64 acres – Overall Determination of Wilderness Characteristics: High**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural. Non-native species (Siberian elm) are present along creeks, but are in low numbers and generally not apparent on the landscape. Plant dominance types include mixed-conifer, aspen, and ponderosa pine in the west with pinyon juniper and scrub oak in the lower elevations. Common forest animal species are present including deer, elk, and turkey, as well as the Lincoln's sparrow (state-listed species of concern).</p> <p>Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention. There was a prescribed burn in 1995, very little evidence of it remains on the landscape.</p> <p>Prevalence of improvements is overall low throughout the area but does include a wide-open ATV trail used for turkey hunting during hunting season. Old, closed roads are mostly naturalized.</p>	<p>1.a high 1.b high 1.c moderate</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities are uncommon, making opportunities to feel alone possible in much of the area. However, there is a motorized trail (Trail # 860) that runs into the middle of the area and gets used during the month of April for turkey hunting. There is also a non-motorized trail (en Medio Trail) that is used for downhill mountain biking. High-quality primitive recreation opportunities in the area include hunting, hiking, and skiing.</p>	<p>2.a moderate 2.b high</p>
Unique Features	<p>Cultural resources in this area are considered unique or rare, and some of them may be eligible for the National Register of Historic Places. Traditional area used by Tesuque Pueblo. Acequia and the Rio and Medio Rivers are all considered regionally or nationally unique.</p>	<p>3.a no 3.b no 3.c yes 3.d no 3.e yes</p>
Manageability	<p>The presence and extent of other uses and management considerations in the area occur in isolated spots and makes it possible to preserve wilderness characteristics throughout much of the area. A small portion of the area is a wildland-urban interface (western edge).</p>	<p>4.a high</p>

**E44A – 10,157.11 acres – Overall Determination of Wilderness Characteristics: High**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species (Siberian elm and knapweed) around range water developments. Plant dominance types include pinyon juniper, sagebrush, and open meadows. Wildlife in the area include many common forest species as well as several protected or listed species including the American peregrine falcon, pinyon jay, gray vireo, Rio Grande chub and Rio Grande sucker. The area is also a wild burro and wild horse territory. Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention.</p> <p>The presence and appearance of improvement in the area is rare or scattered and does not detract from apparent naturalness. Improvements include range fence and water developments (several metal, several dirt), some old roads, and two system trails. The farther north in the polygon, the more natural and less apparent the roads are—so the southern point is less natural appearing due to more apparent roads.</p>	<p>1.a moderate 1.b high 1.c high</p>
Solitude or Primitive or Unconfined Recreation	<p>Opportunities to experience solitude can be found throughout much of the area though there is a small camping corridor in the south used by range permittees during round-up that could affect opportunities for solitude at certain times. Other activities that could affect solitude include an annual horse endurance ride and use associated with viewing the carnivorous dragon fly (Odonate) present in the area.</p> <p>High-quality primitive recreation opportunities like hiking, backpacking, and horseback riding all occur in the area. Opportunities for challenge and risk are present due to rugged and hilly terrain.</p>	<p>2.a high 2.b high</p>
Unique Features	<p>Several unique features of regional or national significance have been identified in the area including:</p> <p>Landscape features: tent rocks, tent rocks canyon, scenic vistas, and presence of the second largest rift valley in the world</p> <p>Cultural and historic features: level of survey indicates a moderate to high site density. Significant resources associated with Ancestral Pueblo use along river corridor. Currently used for recreation and some traditional gathering as well as other traditional purposes.</p> <p>High-quality or important water resources: presence of the Rio Grande.</p>	<p>3.a no 3.b yes 3.c yes 3.d no 3.e yes</p>
Manageability	<p>The presence and extent of other uses and management considerations affects isolated spots and makes management to preserve the area’s wilderness characteristics possible throughout the area. The northern portion of the polygon is an inventoried roadless area (Arroyo Montoso) that supports preservation of some wilderness characteristics.</p> <p>However, some management challenges include possible use of the area for Air National Guard training, special use authorizations for university geology classes, and presence of a wildland-urban interface due to adjacent powerline. Motorized and mechanized management of associated allotments is authorized for range permittees. Most of the use is occurring in the south, so management to preserve wilderness characteristics is more possible away from the southern boundary.</p> <p>The area is bordered by the Rio Grande to the north and Forest Service to the south, west and east.</p>	<p>4.a high (may consider a haircut along pinavente and southern tip)</p>

**E44B – 2,282.85 acres – Overall Determination of Wilderness Characteristics: No**

<b>Criteria Category</b>	<b>Description</b>	<b>Determination of Wilderness Characteristics</b>
Apparent Naturalness	The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species (Siberian Elm and spotted knapweed) along roads and streams. Plant dominance types include pinyon juniper and sagebrush. Wildlife species include peregrine falcon, and pinyon jay as well as other more common animal species typical for the area. Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention. The presence and appearance of improvement in the area is rare or scattered and does not detract from apparent naturalness. Improvements include a small amount of range fence and a pit tank.	1.a moderate 1.b high 1.c high
Solitude or Primitive or Unconfined Recreation	Opportunities to experience solitude can be found in the southern portion of the area, but are more difficult to find in the north due to heavy traffic on Buckman Road, history of special use permits for commercial filming, climbing activity, and motorized sounds from road use. Some high-quality opportunities to engage in primitive and unconfined recreation exist in the area including hiking, dog walking, horseback riding, and climbing.	2.a high/low(north) 2.b moderate
Unique Features	Two unique features have been identified for the area including outstanding landscape features (Diablo Canyon) and cultural and historic resources of regional or national significance, some of which may be eligible for the National Register of Historic Places.	3.a no 3.b yes 3.c yes 3.d no 3.e no
Manageability	The presence and extent of other uses and management considerations in the area is pervasive, making it impossible to manage the majority of the area to preserve wilderness characteristics. Of particular concern is the long, slender shape of the area with a narrow pinch point in the north. The eastern edge of the polygon goes to the national forest boundary and highway 77 (Buckman Road), and is adjacent to the Bureau of Land Management-managed lands. Some established uses like commercial filming and heavy road use would pose further management challenges to preserving wilderness characteristics.	4.a no

**E45 – 4,888.81 acres – Overall Determination of Wilderness Characteristics: High**

<b>Criteria Category</b>	<b>Description</b>	<b>Determination of Wilderness Characteristics</b>
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species along the Borrego trail and around section 36. Much of the area is burned; however, remaining plant dominance types include spruce fir and aspen in the higher elevations, mixed-conifer and ponderosa pine elsewhere.</p> <p>Common forest animals can be found in the area as well as bighorn sheep in the east.</p> <p>Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention.</p> <p>Prevalence of improvements is overall low throughout the area. Improvements include old roads that are in various phases of becoming renaturalized, range fence made of barbed wire and native wood posts, old fire line, and a non-motorized trail.</p>	<p>1.a moderate 1.b high 1.c moderate</p>
Solitude or Primitive or Unconfined Recreation	<p>Opportunities to experience solitude can be found throughout much of the area, though visitors can see the ski basin from viewpoints within the area. Opportunities to experience solitude are higher in the north and in the inventoried roadless areas.</p> <p>High-quality primitive recreation opportunities like hiking, camping, fishing, hunting, mushroom collecting, and horseback riding can be experienced in the area.</p>	<p>2.a high in the north, moderate in the south/southeast 2.b high</p>
Unique Features	<p>Cultural and historic resources and high-quality water resources are identified as unique features for the area. While little or no survey has been completed for cultural resources, there are known traditional uses and areas of traditional concern including places and areas for resource procurement and known locations of traditional significance on east side of the polygon. The important water resource is Rio Nambe Creek, which flows into Nambe Reservoir.</p>	<p>3.a unknown 3.b no 3.c yes, 3.d no 3.e yes</p>
Manageability	<p>The presence and extent of other uses and management considerations affects isolated spots and makes management to preserve the area’s wilderness characteristics possible throughout the area. The area is adjacent to congressionally designated wilderness on the north and east sides and by Pueblo in the west. A portion of the area is managed as an inventoried roadless area (Rancho Viejo) and a portion is managed as a wildland-urban interface (south).</p>	<p>4.a high</p>

E46 – 5,717.81 acres – Overall Determination of Wilderness Characteristics: Low

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural in some areas, but weeds (musk and Canada thistle) are common in dense spots where fire, roads, and trails are present. Plant dominance types include aspen, native grass meadows, sagebrush, juniper, mixed-conifer and ponderosa pine. <i>Lilium philadelphicum</i> (wood lily), a New Mexico state-listed species is also found in the area. Common forest wildlife species are in the area as well as habitat for elk winter and summer range, northern goshawk, and Jemez Mountains salamander. Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention. However, some evidence of post-fire seeding, thinning, and burning (Valle project) can be seen in isolated areas. Prevalence of improvements is overall low throughout the area, though there are several improvements in the area including non-motorized trails, old roads, spring well development near American spring, an elk enclosure, and a small structure made of stone and wood.</p>	<p>1.a low                      1.b high                      1.c moderate</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities are uncommon, making opportunities to feel alone possible in much of the area, especially when away from the adjacent ski area, motorized dispersed camping corridors, and the Los Alamos National Laboratory. The motorized dispersed camping corridor on cherry stem roads, Pajarito ski area adjacent to the polygon in the north, and loud explosions from the Los Alamos National laboratory all affect opportunities for solitude in the area. Views to the east from within the polygon are filled with lab infrastructure and improvements that are reminders of nearby civilization, and some traditional and historic use for recreation and resource procurement occurs. However, when in the canyons, opportunities to experience solitude are possible. High-quality primitive recreation opportunities include hiking, hunting, horseback riding, cross-country skiing, climbing, and mountain biking. The area provides a high level of challenge and risk to visitors.</p>	<p>2.a moderate                      2.b high</p>
Unique Features	<p>Several unique or outstanding features have been identified for the area including rare animal communities for the federally endangered and endemic Jemez Mountain salamander (critical habitat and presence). Pajarito Canyon is considered a unique landscape or important viewshed feature for the internationally recognized aspen viewing capitol of the world. Cultural and historical features are identified as a unique feature in this area, though there is low site density, sites are associated with resource procurement in the Valles Caldera. Some traditional and historic use of the area is ongoing and is currently used intensely for recreation and resource procurement.</p>	<p>3.a yes                      3.b yes (aspen)                      3.c yes                      3.d no                      3.e no</p>
Manageability	<p>The presence and extent of other uses and/or considerations occurs throughout most of the area, making it difficult to manage the area to preserve its wilderness characteristics. Management uses and considerations include cherry stem roads in the south with mechanized or motorized maintenance of post-fire water structures, established special use permits for filming, and a variety of recreation events (Jemez Mountains 50k/50 mi footrace and a mountain bike race) that occur in the area. The area is adjacent to the Pajarito ski area and the Valles Caldera National Monument. A portion of the area in the east is in a wildland-urban interface.</p>	<p>4.a low</p>

**E47 – 9,175.30 acres – Overall Determination of Wilderness Characteristics: No**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural in some areas, but weeds (locus and thistle) are common in areas affected by fire.</p> <p>Plant dominance types include oak scrub, ponderosa pine, and pinyon juniper in the lower elevations, and aspen and locus in the higher elevations.</p> <p>Common forest wildlife species are in the area as well as Mexican spotted owl, peregrine falcon, elk winter and summer range and critical habitat for Jemez Mountains salamander.</p> <p>Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention. Tree planting took place in 2002, but looks natural. There is a fuel break in the south, but it is not obvious on the landscape.</p> <p>Prevalence of improvements is overall low throughout the area. Improvements include non-motorized system trails throughout, a motorized trail (Trail #284), user-created trails in the south, old roads, and the Pine Springs cabin structure.</p>	<p>1.a low 1.b high 1.c moderate</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities are uncommon, making opportunities to feel alone possible in much of the area, especially in Guaje Ridge and Guaje Canyon. However, near trails (motorized and non-motorized), visitor use and motorized sounds make it difficult to experience a sense of solitude.</p> <p>Some high-quality opportunities to engage in primitive and unconfined recreation exist in the area including hiking, hunting, and cross-country travel. Mitchell Trail has a high level of challenge and risk.</p>	<p>2.a moderate 2.b moderate</p>
Unique Features	<p>Unique or rare animal communities are identified in this area. Jemez Mountains salamander (endangered) critical habitat, Mexican spotted owl (threatened), and American peregrine falcon (Regional Forester sensitive species) are all found in the area. Cultural and historic features are also considered outstanding in the area.</p> <p>There is low to moderate site density with significant Ancestral Pueblo sites and traditional use by Pueblo communities. The area is actively used for recreation by Los Alamos.</p>	<p>3.a yes 3.b no 3.c yes 3.d no 3.e no</p>
Manageability	<p>The presence and extent of other uses and management considerations in the area is pervasive, making it impossible to manage the majority of the area to preserve wilderness characteristics. Access (including motorized and mechanized) for and to the Pueblo land in the northwestern corner occurs. There is a wildland-urban interface on the southern edge where fuels reduction or fire suppression could take place to protect life and property in the area. The area is adjacent to Los Alamos. There are motorized routes in the northeastern portion of polygon and a signed NEPA decision for an additional motorized trail (#279) in the area. Recreation events are established in the area. Adjacent Pueblo land is undergoing some restoration activities. Regdija Inventoried Roadless Area makes up 20 percent of the polygon.</p>	<p>4.a no</p>

E48 – 6,580.29 acres – Overall Determination of Wilderness Characteristics: High

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some noticeable presence of New Mexican locust, which can dominate a landscape in areas affected by fire. Plant dominant types include ponderosa pine and mixed-conifer. Common forest animal species are present in the area as well as the Jemez Mountains salamander (endangered, endemic), American peregrine falcon nesting (in the northwest), a Mexican spotted owl protected activity center (in the east), and elk summer and winter range.</p> <p>Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention.</p> <p>The presence and appearance of improvement in the area is rare or scattered and does not detract from apparent naturalness. Improvements include short pieces of pipeline with concrete and other remnants present, non-motorized system rails, and some closed road that is not apparent on the landscape.</p>	1.a moderate 1.b high 1.c high
Solitude or Primitive or Unconfined Recreation	<p>Minimal use and remote and rugged terrain make opportunities to experience solitude possible throughout much of the area.</p> <p>High-quality primitive recreation opportunities like hiking, camping, cross-country travel, and nature viewing can be experienced in the area.</p>	2.a high 2.b high
Unique Features	<p>The Jemez Mountains salamander is a federally listed endangered species and is endemic to the Jemez Mountains, making it a regionally or nationally unique feature in the area.</p> <p>Tent rocks, a volcanic geologic feature, is also found in the area.</p>	3.a yes 3.b no 3.c no 3.d no 3.e no
Manageability	<p>The presence and extent of other uses and management considerations affects isolated spots and makes management to preserve the area’s wilderness characteristics possible throughout the area. There is no grazing, no trails, no wildland-urban interface, and 98 percent of the area is in an inventoried roadless area. The adjacent Pueblo is doing stream-stabilizing activities on adjacent land, which could affect management in the area. Possible traditional uses by Santa Clara and San Ildefonso may also occur.</p>	4.a high



**E49A – 4,618.96 acres – Overall Determination of Wilderness Characteristics: No**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species (bull thistle) along roads. Plant dominance types include ponderosa pine, mixed-conifer to the east, pinyon juniper and oak scrub to the west. Common forest animals are present as well as American peregrine falcon, marmot, and elk winter and summer range. The extent to which the area reflects ecological conditions without human intervention is low due to past and current vegetation treatments including: salvage cut in 2014, thinning and prescribed burned (1980s and 1990s), which has resulted in some stumps, and dense thickets in some areas. Fuelwood gathering is also popular in the area, leaving stumps and debris on the landscape. Prevalence of improvements is overall high throughout the area. Improvements include a spring development around the private property, trailheads, and closed roads that are visible on the landscape.	1.a moderate 1.b low 1.c low
Solitude or Primitive or Unconfined Recreation	Human activities or presence is common and little opportunity of feeling alone can be experienced in the area. There is heavy motorized traffic on the roads, including a vast network of closed roads. The area receives frequent late night or overnight use, as well as some drag racing that occurs on Road 306 that is very audible from within the area. Trash and other signs of use are apparent in many places. There are some opportunities to engage in primitive and unconfined recreation (hunting, hiking and camping), but they tend to be of poor quality.	2.a low 2.b low
Unique Features	No known rare, unique, or outstanding features are found within this area.	3.a no 3.b no 3.c unknown 3.d no 3.e no
Manageability	The presence and extent of other uses and management considerations in the area is pervasive, making it impossible to manage the majority of the area to preserve wilderness characteristics. In addition to recreation and range use, fuelwood gathering, private land, and cherry stem roads, the area is part of a collaborative fuels reduction project with a signed NEPA decision for future fuels reduction.	4.a No

**E49B – 5,503.84 acres – Overall Determination of Wilderness Characteristics: Moderate**

<b>Criteria Category</b>	<b>Description</b>	<b>Determination of Wilderness Characteristics</b>
Apparent Naturalness	The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species along roads. Plant dominance types include pinyon juniper, ponderosa pine, mixed-conifer, and aspen. Common forest species are present in the area as well as American peregrine falcon, elk summer and winter range. Bears. Lots of thistle in areas affected by fire. Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention, though there is some evidence of historic logging activity (stumps). In the northern part of the polygon, presence and appearance of improvements is rare and does not detract from apparent naturalness. In the southern part of the polygon, improvements include some old roads and three trick tanks used for range management.	1.a moderate 1.b high 1.c south moderate, north part high
Solitude or Primitive or Unconfined Recreation	Human activities are rare and access into the area is difficult, making it common to experience a feeling of being alone or remote from civilization. Some high-quality opportunities to engage in primitive and unconfined recreation exist in the area including hiking, hunting, and fishing. Horseback riding, cross-country hiking, or orienteering. The area is remote and rugged, allowing visitors to experience challenge and risk in the area.	2.a high 2.b moderate
Unique Features	The Rio Medio is considered a unique feature as a high-quality water resource with regional or national significance.	3.a unknown 3.b no 3.c unknown 3.d no 3.e yes
Manageability	The presence and extent of other uses and management considerations in the area is scattered and makes management to preserve the area's wilderness characteristics possible throughout much of the area. Adjacent land is designated wilderness and Santo Domingo De Cundiyo Land Grant. There is a 1/4 section of land in the middle of the area that is private land. Approximately 50 percent of the area is an inventoried roadless area, and access to the area is difficult due to geographic and political boundaries. Motorized and mechanized management of associated allotments is authorized for range permittees.	4.a moderate

**E50 – 8,534.51 acres – Overall Determination of Wilderness Characteristics: Moderate**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some patchy presence of invasive species along roads. Plant dominance types include ponderosa pine, pinyon juniper, some deciduous shrub and meadows in the east, mixed-conifer, aspen and spruce-fir in the remaining area. Common animal species as well as American peregrine falcon, Goat Peak pika, and elk summer and winter range are in the area.</p> <p>Vegetation does not appear natural in isolated or scattered spots due to thinning, salvage cuts, and broadcast burning in the late 1990s. There is also a clear cut with plantations in the western portion of the polygon. Prevalence of improvements is overall low throughout the area but can be found in some areas. Improvements include a cabin, old roads, earthen tank, and barbed wire fence.</p>	<p>1.a moderate 1.b moderate 1.c moderate</p>
Solitude or Primitive or Unconfined Recreation	<p>Opportunities to experience solitude can be found throughout much of the area especially when away from roads, motorized camping corridor, and range management activities. Signs of civilization can be seen from viewpoints within the polygon.</p> <p>Some high-quality opportunities to engage in primitive and unconfined recreation exist in the area including hunting and hiking. There are no system trails and the rugged terrain provides opportunity for challenge and risk.</p>	<p>2.a high 2.b moderate</p>
Unique Features	<p>Several unique features have been identified within the area: rare animal community, outstanding landscape feature, and regionally or nationally important cultural and historic resources. Goat Peak pika is endemic to the Chicoma Peak area around the caldera, and is considered regionally or nationally important. Chicoma Peak is the second tallest mountain on the western side of the forest and is considered a unique landscape feature. Cultural and historic resources are identified as a unique feature in the area. Low archaeological site density is noted, but the area gets significant use by modern Pueblo communities for traditional uses and resource procurement.</p>	<p>3.a yes 3.b yes 3.c yes 3.d no 3.e no</p>
Manageability	<p>The presence and extent of other uses and management considerations in the area is scattered and makes management to preserve the area's wilderness characteristics possible throughout much of the area. Some other uses and considerations include significant use by modern Pueblo communities for traditional uses and resource procurement (including motorized access to Pueblo from the forest); established fuelwood gathering area; authorized motorized and mechanized management of associated allotments for range permittees; and considerations associated with the long, slender shape of polygon.</p>	<p>4.a moderate</p>

**E51 – 5,559.52 acres – Overall Determination of Wilderness Characteristics: No**

<b>Criteria Category</b>	<b>Description</b>	<b>Determination of Wilderness Characteristics</b>
Apparent Naturalness	The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species in disturbed areas. Plant dominance types include mixed-conifer deciduous with aspen, ponderosa pine, and some open meadows. Some wildlife species of note include Rio Grande cutthroat trout, Jemez Mountains salamander, and elk summer and winter range. Vegetation does not appear natural in isolated or scattered spots due to logging from the 1960s, and fuel break and large safety zone created in 2011. Prevalence of improvements is overall high throughout the area. Improvements include motorized trails, many old roads, spring developments, pit tanks, and fence.	1.a moderate 1.b moderate 1.c low
Solitude or Primitive or Unconfined Recreation	Human activities are uncommon, making opportunities to feel alone possible in much of the area, especially away from the motorized camping corridors and trails. There is also a motorized trail through eastern portion of the polygon. Some high-quality opportunities to engage in primitive and unconfined recreation exist in the area including hiking, camping and horseback riding.	2.a moderate 2.b moderate
Unique Features	Several unique features are identified for this area: rare plant or animal species (Rio Grande cutthroat trout (Regional Forester's sensitive species list)); cultural and historic resource (Historic and cultural resources are present in low archaeological site density but sites present are associated with resource procurement on large lithic sources as well as current use for traditional purposes by Pueblo and Hispanic communities); and watershed resource (Rio Grande).	3.a yes 3.b no 3.c yes 3.d no 3.e yes
Manageability	The presence and extent of other uses and management considerations in the area is pervasive, making it impossible to manage the majority of the area to preserve wilderness characteristics.	4.a no

**E52A – 1,961.26 acres – Overall Determination of Wilderness Characteristics: No**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	The composition of plant and animal communities appears natural. Non-native species are present in disturbed areas but are in low numbers and generally not apparent on the landscape. Plant dominance types include ponderosa pine, pinyon juniper, and some mixed forb and grass meadow. Common forest animals are in the area. Vegetation does not appear natural in isolated or scattered spots due to precommercial thinning activities that took place in the 1990s. There was some seeding with nonnative species following precommercial thinning. Prevalence of improvements is overall low throughout the area. Range improvements include trick tanks, drinkers, dug out tanks and fence. Some old roads are still evident on the landscape throughout the area.	1.a high 1.b moderate 1.c moderate
Solitude or Primitive or Unconfined Recreation	Human activities or presence is common, and little opportunity of feeling alone can be experienced in the area. There are dispersed camping corridors on the western edge of the area (54a) that receive frequent use during hunting season. Visitors travel on roads that cherry stem deep into the interior of the polygon making motorized sounds and activity common and pervasive. The area is heavily used by range permittees, and there is some traditional uses in the area (including motorized), further affecting opportunities to feel alone and remote from civilization. There are few primitive recreation opportunities and they tend to be of low quality due to the high density of cherry stem roads, fences, and other improvements that detract from a visitor's ability to feel a part of nature.	2.a low 2.b low
Unique Features	Cultural resources are identified as unique features of regional or national significance in the area. There is high site density with intensive use along the Rio del Oso and in the Vallecitos/Lobato Mesa areas. Intensive traditional cultural use for resource procurement and access to areas of traditional cultural importance for both Pueblo and Hispanic communities is also noted for the area.	3.a no 3.b no 3.c yes, both 3.d no 3.e no
Manageability	The presence and extent of other uses and management considerations (shape and configuration) in the area is pervasive, making it impossible to manage the majority of the area to preserve wilderness characteristics. Of particular concern is the very high number of cherry stem roads that deeply dissect the area and bring motorized sounds and uses into the center of the polygon. In addition, the configuration of roads has created a polygon shape that has many pinch points. Other considerations include adjacency to the Abiquiu land grant area, authorized motorized or mechanized management of associated allotments for range permittees, and a wildland-urban interface (54a).	4.a no

**E52B – 9,143.49 acres – Overall Determination of Wilderness Characteristics: Moderate**

<b>Criteria Category</b>	<b>Description</b>	<b>Determination of Wilderness Characteristics</b>
Apparent Naturalness	The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species along roads and disturbance areas. Plant dominance types include pinyon juniper, ponderosa pine, sagebrush, oak and grassy meadows. Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention. Prevalence of improvements is overall low, but does include trick tanks, fence, minimal old roads along polygon edges, a trough, and spring well developments. Water developments are mostly earthen and natural looking.	1.a moderate 1.b high 1.c moderate
Solitude or Primitive or Unconfined Recreation	Opportunities to experience solitude can be found throughout much of the area especially when away from roads. The beautiful expansive views give a feeling of solitude and vastness. High-quality primitive recreation opportunities like hiking, camping, and horseback riding can be found in the area.	2.a high 2.b high
Unique Features	"Gates of Hell" is an interesting geologic feature, rocks carved by arroyos, picture-worthy, hiker destination. Cultural resources are identified as unique features of regional or national significance in the area. There is high site density with intensive use along the Rio del Oso and in the Vallecitos/Lobato Mesa areas. Intensive traditional cultural use for resource procurement and access to areas of traditional cultural importance for both Pueblo and Hispanic communities is also noted for the area.	3.a no 3.b yes 3.c yes see notes 3.d no 3.e no
Manageability	The presence and extent of other uses and management considerations is scattered and makes management to preserve wilderness characteristics possible throughout much of the area. Some traditional uses and range management occurs in the area. There is a wildland-urban interface in the northwestern portion of the polygon.	4.a moderate

**E53A – 16,489.53 acres – Overall Determination of Wilderness Characteristics: Moderate**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species along roads and other disturbed areas. Much of the area has had a natural underburn. Plant dominance types are ponderosa pine in the north, mixed- conifer/deciduous in the central area and spruce-fir in the south with some meadows and scrub oak throughout. Wildlife in the area include Mexican spotted owl, American peregrine falcon, elk winter and summer range, Rio Grande cutthroat trout, boreal owls (species of conservation concern), and northern leopard frog.</p> <p>Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention. Vegetation treatments include salvage cuts in the late 1990s, though subsequent fires have disguised past activities, leaving a natural looking landscape.</p> <p>Prevalence of improvements is overall low throughout the area. Improvements include pit tanks, well developments, trick tanks (some of earthen materials and some of metal), old roads, trails, and fence.</p>	<p>1.a moderate 1.b high 1.c moderate</p>
Solitude or Primitive or Unconfined Recreation	<p>Opportunities to experience solitude can be found throughout much of the area especially when away from motorized dispersed camping corridors and other roads, trails, and range management activities.</p> <p>High-quality primitive recreation opportunities like hiking, horseback riding, and hunting can be found in the area.</p>	<p>2.a low 2.b high</p>
Unique Features	<p>Several unique features are identified for the area including rare plant or animal communities (aboriginal Rio Grande cutthroat trout), unique landscape feature (Polvadera Peak), and important historic or cultural resources.</p>	<p>3.a yes 3.b yes 3.c yes 3.d no 3.e yes</p>
Manageability	<p>The presence and extent of other uses and management considerations in the area is scattered and makes management to preserve the area's wilderness characteristics possible throughout much of the area. Some other uses and considerations include adjacent land ownership (wildland-urban interface in the north, traditional uses including collection of wood and herbs, water rights and uses, and the Abiquiu land grant). Motorized and mechanized management of associated allotments is authorized for range permittees. The area within the inventoried roadless area has fewer other uses and considerations, making management to preserve wilderness characteristics more feasible in that area.</p>	<p>4.a moderate</p>

**E53B – 12,966.11 acres – Overall Determination of Wilderness Characteristics: High**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species along roads and other disturbed areas. Much of the area has had a natural underburn. Plant dominance types are ponderosa pine in the north, mixed- conifer/deciduous in the central area and spruce-fir in the south with some meadows and scrub oak throughout. Wildlife in the area include Mexican spotted owl, American peregrine falcon, elk winter and summer range, Rio Grande cutthroat trout, Boreal owls (species of conservation concern), and Northern leopard frog.</p> <p>Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention. Vegetation treatments include salvage cuts in the late 1990s, though subsequent fires have disguised past activities, leaving a natural looking landscape.</p> <p>Prevalence of improvements is overall low throughout the area. Improvements include pit tanks, well developments, trick tanks (some of earthen materials and some of metal), old roads, trails and fence.</p>	1.a moderate 1.b high 1.c moderate
Solitude or Primitive or Unconfined Recreation	<p>Opportunities to experience solitude can be found throughout much of the area especially when away from motorized dispersed camping corridors and other roads, trails and range management activities. This entire area is an inventoried roadless area, and opportunities for solitude are high.</p> <p>High-quality primitive recreation opportunities like hiking, horseback riding, and hunting can be found in the area, with few restrictions or other uses limiting unconfined recreation.</p>	2.a high 2.b high
Unique Features	<p>Several unique features are identified for the area including rare plant or animal communities (aboriginal Rio Grande cutthroat trout); unique landscape feature (Polvadera peak); and important historic or cultural resources.</p>	3.a yes 3.b yes 3.c yes 3.d no 3.e yes
Manageability	<p>The presence and extent of other uses and management considerations in the area occurs in isolated spots and makes management to preserve the wilderness characteristics throughout the area possible. The entire area is within the inventoried roadless area and has few other uses and considerations.</p>	4.a high



**E54A – 6,621.45 acres – Overall Determination of Wilderness Characteristics: No**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	The composition of plant and animal communities appears natural. Nonnative species are present in disturbed areas but are in low numbers and generally not apparent on the landscape. Plant dominance types include ponderosa pine, pinyon juniper, and some mixed forb and grass meadow. Common forest animals are in the area. Vegetation does not appear natural in isolated or scattered spots due to precommercial thinning activities that took place in the 1990s. There was some seeding with nonnative species following precommercial thinning. Prevalence of improvements is overall low throughout the area. Range improvements include trick tanks, drinkers, dug out tanks and fence. Some old roads are also still evident on the landscape throughout the area.	1.a high 1.b moderate 1.c moderate
Solitude or Primitive or Unconfined Recreation	Human activities or presence is common and little opportunity of feeling alone can be experienced in the area. There are dispersed camping corridors on the western edge of the area (54a) that receive frequent use during hunting season. Visitors travel on roads that cherry stem deep into the interior of the polygon making motorized sounds and activity common and pervasive. The area is heavily used by range permittees and has some traditional uses (including motorized), further affecting opportunities to feel alone and remote from civilization. There are few primitive recreation opportunities and they tend to be of low quality due to the high density of cherry stem roads, fences, and other improvements that detract from a visitor's ability to feel a part of nature.	2.a low 2.b low
Unique Features	Cultural resources are identified as unique features of regional or national significance in the area. There is high site density with intensive use along the Rio del Oso and in the Vallecitos/Lobato Mesa areas. Intensive traditional cultural use for resource procurement and access to areas of traditional cultural importance for both Pueblo and Hispanic communities is also noted for the area.	3.a no 3.b no 3.c yes, both 3.d no 3.e no
Manageability	The presence and extent of other uses and management considerations (shape and configuration) in the area is pervasive, making it impossible to manage the majority of the area to preserve wilderness characteristics. Of particular concern is the very high number of cherry stem roads that deeply dissect the area and bring motorized sounds and uses into the center of the polygon. In addition, the configuration of roads has created a polygon shape that has many pinch points. Other considerations include adjacency to the Abiquiu land grant area, a wildland-urban interface (54a), and that motorized and mechanized management of associated allotments is authorized for range permittees.	4.a no

**E54B – 34,390.34 acres – Overall Determination of Wilderness Characteristics: Moderate**

<b>Criteria Category</b>	<b>Description</b>	<b>Determination of Wilderness Characteristics</b>
Apparent Naturalness	The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species along roads and disturbance areas. Plant dominance types include pinyon juniper, ponderosa pine, sagebrush, oak, and grassy meadows. Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention. Prevalence of improvements is overall low but does include trick tanks, fence, minimal old roads along polygon edges, a trough, and spring well developments. Water developments are mostly earthen and natural looking.	1.a moderate 1.b high 1.c moderate
Solitude or Primitive or Unconfined Recreation	Opportunities to experience solitude can be found throughout much of the area especially when away from roads. The beautiful expansive views give a feeling of solitude and vastness. High-quality primitive recreation opportunities like hiking, camping, and horseback riding can be found in the area.	2.a high 2.b high
Unique Features	Window Rock is an interesting geologic feature. Cultural resources are identified as unique features of regional or national significance in the area. There is high site density with intensive use along the Rio del Oso and in the Vallecitos/Lobato Mesa areas. Intensive traditional cultural use for resource procurement and access to areas of traditional cultural importance for both Pueblo and Hispanic communities is also noted for the area.	3.a yes 3.b yes 3.c yes see notes 3.d no 3.e no
Manageability	The presence and extent of other uses and management considerations is scattered and makes management to preserve wilderness characteristics possible throughout much of the area. Some traditional uses and range management occurs in the area. There is a wildland-urban interface in the northwestern portion of the polygon.	4.a moderate

**E55 – 9,521.69 acres – Overall Determination of Wilderness Characteristics: Moderate**

<b>Criteria Category</b>	<b>Description</b>	<b>Determination of Wilderness Characteristics</b>
Apparent Naturalness	The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species along roads. Plant dominance types are mostly pinyon juniper with some sagebrush and ponderosa pine. Common forest species occur in the area as well as American peregrine falcon nesting sites, Gunnison's prairie dogs, and elk summer and winter range. Vegetation does not appear natural in isolated or scattered spots due to past forest management activities including chaining that occurred in the 1960s and is still evident on the landscape. Prevalence of improvements is overall low but does include water developments, trick tanks, fence, old roads, a trough, and fence.	1.a moderate 1.b moderate 1.c moderate
Solitude or Primitive or Unconfined Recreation	Few trails, rugged terrain, and minimal use make opportunities to feel alone possible in much of the area. Some high-quality opportunities to engage in primitive and unconfined recreation exist including hiking, camping, and hunting. The steep rugged nature of the area and few trails (the Baranca trail is indiscernible) allow opportunities for visitors to feel a part of nature and experience challenge and risk.	2.a moderate 2.b moderate
Unique Features	Cultural resources are identified as unique features of regional or national significance in the area. Moderate site density associated with lithic resource procurement as well as modern traditional resource procurements use for traditional purposes occurs in the area.	3.a no 3.b no 3.c yes 3.d no 3.e no
Manageability	The presence and extent of other uses and management considerations is scattered and makes management to preserve wilderness characteristics possible throughout much of the area. Approximately 75 percent of the area is in an inventoried roadless area where current management direction already limits use and development. Some management challenges exist including cherry stem roads on the eastern edge, that motorized and mechanized management of associated allotments is authorized for range permittees, and traditional uses associated with the Abiquiu land grant.	4.a moderate

**J56 – 15,768.12 acres – Overall Determination of Wilderness Characteristics: Low**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural. Non-native species include some sparse thistle are present in disturbed areas but are in low numbers and generally not apparent on the landscape. Plant dominance types include mostly pinyon juniper with ponderosa pine in the northeast. New Mexico locust occurs along roaded areas. Alligator juniper is also present. Wildlife present in the area include gray vireo (Regional Forester's Sensitive Species), wild turkey, black bear, grouse, bobcat, and elk summer and winter range. Feral horses are also in the area.</p> <p>Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention. No noticeable vegetation treatments have occurred in the area.</p> <p>Prevalence of improvements is overall low throughout the area but does include a corral, dug out stock ponds, spring trough, trick tank, and fence, old mine site, and old roads that are obvious throughout the area. The area is used by ATVs and trucks.</p>	<p>1.a high 1.b high 1.c moderate</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities are rare and opportunities to experience solitude are common throughout. However, some activities could affect these opportunities including activities in adjacent developed campgrounds and use by range permittees who access the area year-round for range management. Some firewood collecting also occurs in the area.</p> <p>Some high-quality opportunities to engage in primitive and unconfined recreation exist in the area including hunting, camping, hiking, horseback riding, and dispersed camping. The area is a large trail-less area with a mix of mesa and canyon providing opportunities for challenge and risk for visitors.</p>	<p>2.a high 2.b moderate</p>
Unique Features	<p>Cultural resources in this area are considered unique or rare and some of them may be eligible for the National Register of Historic Places. Little survey has been done, but the area has a known high site density. Area is actively used by Pueblo communities for traditional uses and procurement of traditional resources.</p>	<p>3.a no 3.b no 3.c yes 3.d no 3.e no</p>
Manageability	<p>The presence and extent of other uses and/or considerations occurs throughout most of the area making it difficult to manage the area to preserve its wilderness characteristics. There is a State land inholding in the west and long cherry stem roads. Motorized and mechanized management of associated allotments is authorized for range permittees. The area is adjacent to the Jemez Indian reservation and livestock, domestic horses, and cattle frequently come off the reservation into the area. The area is actively used by tribal communities for traditional uses and procurement of traditional resources. There is a signed NEPA decision for Southwest Jemez treatments tied to the Tribal Forest Protection Area. There is a wildland-urban interface in the northern tip by Poliza.</p>	<p>4.a low</p>

**J57 – 15,398.75 acres – Overall Determination of Wilderness Characteristics: Low**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural. Non-native species are present in disturbed areas but are in low numbers and generally not apparent on the landscape. Plant dominance types include pinyon juniper with some ponderosa pine, sagebrush, and oak scrub. Wildlife present in the area include elk, turkey, deer, and other common forest animals as well as elk summer and winter range. Spotted bat (species of conservation concern) is found in the area.</p> <p>Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention. Precommercial thins took place in 2004 and 2009, but that does not detract from apparent naturalness. Prescribed fire has occurred in the area but looks natural.</p> <p>Prevalence of improvements is overall low but does include spring well developments (six of them, but naturalized), closed roads, a community water tank and fence.</p>	<p>1.a high 1.b high 1.c moderate</p>
Solitude or Primitive or Unconfined Recreation	Human activities are uncommon, making opportunities to feel alone possible in much of the area, though firewood gathering can be heavy in some places.	<p>2.a moderate 2.b moderate</p>
Unique Features	Cultural resources in this area are considered unique or rare and some of them may be eligible for the National Register of Historic Places. Little survey has been done, but the area is likely to have high site density due to adjacency to Jemez Reservation. The area is used for traditional purposes and gathering of traditional materials.	<p>3.a no 3.b no 3.c yes 3.d no 3.e no</p>
Manageability	The presence and extent of other uses and/or considerations occurs throughout most of the area making it difficult to manage the area to preserve its wilderness characteristics. Adjacent to the Pueblo, there are many roads leading from the Pueblo into the polygon that receives frequent use for traditional and cultural purposes. Winter range for permittees is accessed through the Pueblos, and motorized and mechanized management of associated allotments is authorized for range permittees. There is a special use permit for water tanks in the area.	4.a low

**J58 – 3,071.72 acres – Overall Determination of Wilderness Characteristics: High**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	The composition of plant and animal communities appears natural. Nonnative species (Siberian elm, thistle, and cheat grass) are present along roads and in fire affected areas but are generally in low numbers. Plant dominance types are mainly scrub oak with pockets of ponderosa pine in some of the canyons. Wildlife species include bighorn sheep, mountain lion, deer, turkey, bear, rattlesnake, American peregrine falcon, two Mexican spotted owl protected activity centers, and elk winter and summer range. Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention. Vegetation treatments include tree planting circa 2011, and thinning coupled with a high mortality rate around 1992, but do not detract from apparent naturalness. Prevalence of improvements is overall low throughout the area but does include trick tank, corrals, roadbeds still apparent on the landscape, and a spring well development.	1.a high 1.b high 1.c moderate
Solitude or Primitive or Unconfined Recreation	Human activities are rare and opportunities to experience solitude are common throughout. There are a trailhead and non-motorized trail on the eastern edge of the polygon that goes to Dome Wilderness. The trail receives 5 to 10 encounters per day, fewer on weekdays, more during hunting season and weekends. High-quality primitive recreation opportunities like backpacking, hunting, and camping occur in the area. Terrain is remote and rugged, providing many opportunities for challenge and risk.	2.a high 2.b high
Unique Features	Several features are identified as unique or rare in the polygon including rare plant or animal communities due to presence of the Mexican spotted owl and American peregrine falcon; outstanding viewpoints for the view from National Forest System Road 289; cultural resources due to high site density; and high-quality water resources for tributaries that flow into the Rio Grande.	3.a yes 3.b yes 3.c yes 3.d no 3.e yes
Manageability	The presence and extent of other uses and management considerations affects isolated spots and makes management to preserve the area’s wilderness characteristics possible throughout the area. The area is adjacent to Dome Wilderness on one side.	4.a high

**J59 – 5,921.10 acres – Overall Determination of Wilderness Characteristics: High**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural. Nonnative species are present in disturbed areas but are in low numbers and generally not apparent on the landscape. Plant dominance types are mostly pinyon juniper, ponderosa pine, and a small amount of big sagebrush. Common wildlife species are present as well as elk winter and summer range.</p> <p>Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention.</p> <p>The presence and appearance of improvements in the area is rare or scattered (pit tank, and several old roads) and does not detract from apparent naturalness.</p>	<p>1.a high                      1.b high                      1.c high</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities or presence is common and little opportunity of feeling alone can be experienced in the area largely due to sights and sounds from the nearby highway (HWY 4). There is also ATV use by range permittees to manage range improvements that may affect solitude when encountered. Some traditional uses occur.</p> <p>Some high-quality opportunities to engage in primitive and unconfined recreation exist in the area including walking, hiking, exploring, and birding. The terrain is steep and rugged and provides many opportunities to experience challenge and risk.</p>	<p>2.a low                      2.b moderate</p>
Unique Features	<p>Cultural resources (some eligible for the National Register of Historical Places) and outstanding viewsheds (canyon walls) are identified as unique features of regional or national importance in the area.</p>	<p>3.a no                      3.b yes                      3.c yes,                      3.d no                      3.e no</p>
Manageability	<p>The presence and extent of other uses and management considerations affects isolated spots and makes management to preserve the area's wilderness characteristics possible throughout the area. Some concerns include: Highway 4 runs adjacent to the area, and motorized and mechanized management of associated allotments is authorized for range permittees.</p>	<p>4.a high</p>

**J60 – 8,675.36 acres – Overall Determination of Wilderness Characteristics: Moderate**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural. Non-native species are present in some disturbed areas but are in low numbers and generally not apparent on the landscape. Plant dominance types include ponderosa pine, pinyon juniper and deciduous shrub, aspen and mixed-conifer in the northwest, and some scrub oak scattered throughout.</p> <p>Common wildlife are in the area as well as a Mexican spotted owl protected activity center, Mexican spotted owl critical habitat, American Goshawk, elk summer and winter range, wild turkeys and wild horses.</p> <p>Vegetation does not appear natural in isolated or scattered spots due to current and past uses, including some thinning in the 1990s, that has left some stumps in the area. Prevalence of improvements is overall high throughout the area largely due to a high number of old roads that can be seen throughout the area. There is also a corral for range management.</p>	<p>1.a high                      1.b moderate                      1.c low</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities are rare and opportunities to experience solitude are common throughout. The area is remote and rugged and has no system trails and limited vehicle access. Some high-quality opportunities to engage in primitive and unconfined recreation exist in the area including hiking, horseback riding, and hunting.</p>	<p>2.a high                      2.b moderate</p>
Unique Features	<p>Cultural resources in this area are considered unique or rare and some of them are eligible for the National Register of Historic Places.</p>	<p>3.a no                      3.b no                      3.c yes                      3.d no                      3.e no</p>
Manageability	<p>The presence and extent of other uses and management considerations in the area is scattered and makes management to preserve the area's wilderness characteristics possible throughout much of the area. There is a network of old (closed) roads, a signed NEPA decision for future restoration work, and some traditional use by the Pueblo.</p>	<p>4.a moderate</p>



**J61 – 14,772.79 acres – Overall Determination of Wilderness Characteristics: No**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural. Nonnative species may be present in disturbed areas but are in low numbers and generally not apparent on the landscape. Plant dominance types include ponderosa pine (some old growth) and mixed-conifer deciduous in the north, pinyon juniper in the north and central area, and sage and scrub oak in the south. Common wildlife species are in the area as well as American peregrine falcon, Mexican spotted owl, leopard frog, gray vireo and northern goshawk.</p> <p>Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention. Vegetation treatments in the north include some thinning and tree planting, with some stumps apparent. Monument Canyon Research Natural Area makes up a portion of the area and boasts some of the oldest ponderosa pine stands left in the American Southwest. However, dense small stem trees now cover much of the area as a result of fewer low-intensity fires.</p> <p>Obvious evidence of human activity related to improvements is prevalent throughout the area. Improvements include old roads and range improvements (mostly dug out tanks and fence). Many user-created roads and trails are present in the southern half of the polygon.</p>	<p>1.a high 1.b high 1.c no</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities are uncommon, making opportunities to feel alone possible in much of the area. There are no system trails, but there are user-created trails and some recreation activity, and woodcutting happens in the area. There are ongoing traditional uses that may reduce feelings of solitude.</p> <p>Some high-quality opportunities to engage in primitive and unconfined recreation exist in the area including hunting and hiking. Hiking up San Juan Canyon provides a rugged and trail less experience for those looking for challenge and risk.</p>	<p>2.a moderate 2.b moderate</p>
Unique Features	<p>Unique or rare animal communities are identified as a unique feature due to the presence of American peregrine falcon, Mexican spotted owl, leopard frog, gray vireo and northern goshawk in the area. Cultural resources in this area (field houses and Pueblos, logging camp) are considered unique or rare and some of them may be eligible for the National Register of Historic Places.</p> <p>The Monument Canyon Research Natural Area makes up a portion of this polygon and boasts some of the oldest ponderosa pine forests left in the American Southwest.</p>	<p>3.a yes 3.b no 3.c yes 3.d yes 3.e no</p>
Manageability	<p>The presence and extent of other uses and management considerations in the area is pervasive, making it impossible to manage the majority of the area to preserve wilderness characteristics. Some of the management considerations include existing management decisions (NEPA) to conduct restoration treatments throughout the area (Southwest Jemez Decision), cherry stem roads, and presence of a wildland-urban interface.</p>	<p>4.a no</p>

**J62 – 6,988.32 acres – Overall Determination of Wilderness Characteristics: High**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species dispersed along roads and fire affected areas. Plant dominance types are New Mexico locust on the dry spots, aspen clones in deeper soils, a few patches of ponderosa pine, and some grassy areas. The area was heavily affected by fire multiple times. Common forest wildlife are present (bear, coyotes, turkeys, elk, deer) as well as bighorn sheep, three Mexican spotted owl protected activity centers, elk winter and summer range, two American peregrine falcon areas, and Jemez Mountains salamander critical habitat. Vegetation does not appear natural in isolated or scattered spots due to current and past uses including 1988 stand improvement cuts, tree planting in the north and along the south edge in the early 1980s that included contouring of the landscape, and some thinning. Stumps are present but often hidden by locust. The presence and appearance of improvement in the area is rare or scattered and does not detract from apparent naturalness. Much of the area is in an inventoried roadless area. Some old, closed roads exist and are noticeable and drivable by a variety of vehicles, but many are overgrown and impassable. There are a Los Alamos cinderblock and concrete foundation structure, stock ponds, spring developments, small range fence on obsidian ridge, a motorcycle trail, and two non-motorized trails.	1.a moderate 1.b moderate 1.c high
Solitude or Primitive or Unconfined Recreation	Human activities are rare and opportunities to experience solitude are common throughout. There is a motorcycle trail, two non-motorized trails, and one trailhead with a parking area near the Bandelier Wilderness that may influence opportunities for solitude. Additionally, some traditional uses and fuelwood gathering occur. Some hunting camps are set up off of National Forest System Road 289 and usually have ATVs and motorcycles. Some high-quality primitive and unconfined recreation opportunities exist in the area including hiking, rock climbing, hunting, camping, and rock hounding.	2.a high (within 1 mile of road 289, opportunities would be lower) 2.b high
Unique Features	Several unique features are identified for the area including unique or rare wildlife communities (three Mexican spotted owl protected activity centers, two peregrine falcon areas, Jemez Mountain salamander critical habitat, bighorn sheep); outstanding landscape views (Capulan Canyon); and cultural and historic resources (high site density and some eligible for the National Register of Historic Places).	3.a yes 3.b yes 3.c yes 3.d no 3.e no
Manageability	The presence and extent of other uses and management considerations affects isolated spots and makes management to preserve the area's wilderness characteristics possible throughout. The area is adjacent to the Bandelier Wilderness, has no wildland-urban interface, and part of the area is already an inventoried roadless area. However, some considerations and uses still exist that may affect managing to preserve wilderness characteristics including fence maintenance, and potentially motorized access for trail and fence maintenance.	4.a high

**J63A – 18,784.64 acres – Overall Determination of Wilderness Characteristics: No**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species (cheat grass and thistle) along roads and in areas affected by fire. Plant dominance types are aspen and scrub oak, locust, and pockets of mixed conifer. Part of the western side is not burned, but the majority of the area has burned as recently as 2011 (Las Conchas fire).</p> <p>Common wildlife are present, as well as northern leopard frog, Preble's shrew, Jemez Mountains Salamander, mountain sheep, four Mexican spotted owl protected activity centers, two goshawk post-fledgling areas (PFAs), elk summer and winter range and elk calving area. Medio dia core conservation population of Rio Grande cutthroat trout was present before the 2011 Las Conchas fire, but current status is unknown.</p> <p>Vegetation does not appear natural in isolated or scattered spots due to tree planting, thinning, and vegetation rearrangement in the 1990s and 2000s, thinning in 2004, and tree planting along National Forest System Road 282 following the Las Conchas fire.</p> <p>Prevalence of improvements is overall high throughout the area and includes corrals, trick tanks, motorcycle trails, old roads (some apparent, some washed out), a mineshaft, gold mines, fence, gravel pit, and non-motorized trails.</p>	<p>1.a moderate 1.b moderate 1.c low</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities are uncommon, making opportunities to feel alone possible. The area is very remote and rugged, and most the trails are washed out or burned over, further limiting the number of activities in the area. However, one road is drivable, and some public use occurs along and adjacent to that travel-way. The western portion of the polygon has higher opportunities for solitude than the east due to the presence of a wildland-urban interface area. Some high-quality opportunities to engage in primitive and unconfined recreation exist in the area including hiking, hunting, and dispersed camping.</p>	<p>2.a moderate 2.b moderate</p>
Unique Features	<p>Several unique features are identified for the area including unique or rare wildlife (Jemez Mountains salamander, Preble's shrew, Mexican spotted owl critical habitat, Rio Grande cutthroat, and mountain sheep); outstanding landscape feature (Tent rocks special area); and cultural resources (has undergone limited survey, but does indicate high site density and association with traditional uses of local Pueblo communities as well as critical traditional cultural places and some ties for local Hispanic communities as well as descendants of mining communities).</p>	<p>3.a yes 3.b yes 3.c yes 3.d no 3.e yes</p>
Manageability	<p>The presence and extent of other uses and management considerations in the area is pervasive, making it impossible to manage the majority of the area to preserve wilderness characteristics. Of particular note, there are many private land inholdings within the polygon that would pose access and use challenges, a wildland-urban interface and roads. There is also a signed NEPA decision (Southwest Jemez) to conduct forest restoration treatments in the western portion of the polygon.</p>	<p>4.a no</p>

J63B – 12,140.86 acres – Overall Determination of Wilderness Characteristics: High

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural. Nonnative species are present in disturbed areas but in low numbers and generally not apparent on the landscape. Much of the area has been burned by wildfire, so remaining plant dominance types include scrub oak, aspen, and locust with mixed conifer in unburned areas. Wildlife in the area include one Mexican spotted owl protected activity center and critical habitat, elk summer and winter range, elk calving, Rio Grande cutthroat trout (recreational/aboriginal population stream); mountain sheep, American pika, snowshoe hare, Gunnison's prairie dog, lynx and American peregrine falcon.</p> <p>Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention.</p> <p>The presence and appearance of improvements in the area is rare or scattered and does not detract from apparent naturalness. Improvements include non-motorized trails (most gone due to post-fire flooding), old abandoned mines in the northeastern area, a corral, and an elk enclosure.</p>	<p>1.a high                      1.b high                      1.c high</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities are rare and opportunities to experience solitude are common throughout due to the remote rugged nature of the area. Trails are mostly washed out or burned over and the area is not accessible by motorized vehicle.</p> <p>High-quality opportunities to engage in primitive or unconfined recreation (hiking, hunting) occur in the area.</p>	<p>2.a high                      2.b high</p>
Unique Features	<p>Several unique features are identified for the area including unique or rare wildlife (Mexican spotted owl protected activity center and critical habitat, elk summer and winter range, elk calving area, Rio Grande cutthroat trout recreational/aboriginal population stream; mountain sheep, American pika, snowshoe hare, Gunnison's prairie dog, lynx, and peregrine falcon are all in the area.</p> <p>Bearhead Peak and other topographic features are considered outstanding landscape features of regional or national importance.</p> <p>Cultural resources in this area are considered unique or rare, and some of them may be eligible for the National Register of Historic Places.</p> <p>High-quality water resources are identified in this area for their contribution to high-quality Rio Grande cutthroat trout habitat.</p>	<p>3.a yes                      3.b yes                      3.c yes                      3.d no                      3.e yes, Rio population</p>
Manageability	<p>The presence and extent of other uses and management considerations affects isolated spots and makes management to preserve the area's wilderness characteristics possible. The polygon is surrounded by Santa Fe National Forest and the Pueblo de Jemez. The area is steep, rugged, and generally inaccessible. The area is used for traditional purposes by adjacent Jemez and Cochiti Pueblos. The area is a part of the Bearhead Peak, Cerro a Jara, and Peralta Ridge Inventoried Roadless Areas that are already managed to limit use and development.</p>	<p>4.a high</p>

**J63C – 6,068.53 acres – Overall Determination of Wilderness Characteristics: High**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural. Nonnative species are present in disturbed areas but are in low numbers and are generally not apparent on the landscape. Plant dominance types include ponderosa pine with some pinyon juniper, sagebrush, and scrub oak. Wildlife includes two Mexican spotted owl protected activity centers, elk winter and summer range, Rio Grande chub and Rio Grande sucker.</p> <p>Vegetation does not appear natural in isolated or scattered spots due to current and past uses including thinning in 1990s, monoculture trees, stumps, plantations evident on the landscape, group selection cut, and scalping that caused terracing in the area.</p> <p>Prevalence of improvements is overall high throughout the area and includes a range pipeline, many metal drink tanks, corrals, motorized trails, fence, and old roads still evident on the landscape.</p>	<p>1.a high 1.b moderate 1.c low</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities or presence is common and little opportunity of feeling alone can be experienced in the area. There is a motorized dispersed camping corridor on the edge of the polygon, several motorized trails within the area, heavy ATV use, and a radio repeater on the edge of the polygon. Some high-quality opportunities to engage in primitive and unconfined recreation exist in the area (mostly hiking or camping in the canyons), but they are generally low quality.</p>	<p>2.a low 2.b moderate</p>
Unique Features	<p>Outstanding landscape features (tent rocks, mesa walls, and overlooks) were identified as regionally or nationally important in the area.</p> <p>Cultural resources in this area are considered unique or rare, and some of them may be eligible for the National Register of Historic Places. High site density and known use by traditional communities for access to traditional places and procurement of traditional materials in the area.</p>	<p>3.a no 3.b yes 3.c yes 3.d no 3.e</p>
Manageability	<p>The presence and extent of other uses and management considerations in the area is pervasive, making it impossible to manage the majority of the area to preserve wilderness characteristics. The area is highly dissected, a large portion of the area is in a wildland-urban interface, and there is a current NEPA decision (Southwest Jemez-Collaborative Forest Land Restoration project) to conduct restoration treatments in the area. Additionally, motorized and mechanized management of associated allotments is authorized for range permittees.</p>	<p>4.a no</p>

**J64A – 14,459.27 acres – Overall Determination of Wilderness Characteristics: No**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural. Non-native species be present in disturbed areas but are in low numbers and generally not apparent on the landscape. Plant dominance types include ponderosa pine with some pinyon juniper, sagebrush, and scrub oak. Wildlife includes two Mexican spotted owl protected activity centers, elk winter and summer range, Rio Grande chub and Rio Grande sucker. Vegetation does not appear natural in isolated or scattered spots due to current and past uses including thinning in 1990s, monoculture trees, stumps, plantations evident on the landscape, group selection cut, and scalping that caused terracing in the area.</p> <p>Prevalence of improvements is overall high throughout the area and includes a range pipeline, many metal drink tanks, corrals, motorized trails, fence, and old roads still evident on the landscape.</p>	<p>1.a high 1.b moderate 1.c low</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities or presence is common and little opportunity of feeling alone can be experienced in the area. There is a motorized dispersed camping corridor on the edge, several motorized trails within the area, heavy ATV use, and a radio repeater on edge of polygon. Some high-quality opportunities to engage in primitive and unconfined recreation exist in the area (mostly hiking or camping in the canyons) including, but they are generally low quality.</p>	<p>2.a low 2.b moderate</p>
Unique Features	<p>Outstanding landscape features (tent rocks, mesa walls and overlooks) were identified as regionally or nationally important in the area.</p> <p>Cultural resources in this area are considered unique or rare and some of them may be eligible for the National Register of Historic Places. High site density and known use by traditional communities for access to traditional places and procurement of traditional materials in the area.</p>	<p>3.a no 3.b yes 3.c yes 3.d no 3.e</p>
Manageability	<p>The presence and extent of other uses and management considerations in the area is pervasive, making it impossible to manage the majority of the area to preserve wilderness characteristics. The area is highly dissected, a large portion of the area is in a wildland-urban interface, and there is a current NEPA decision (Southwest Jemez-Collaborative Forest Land Restoration project) to conduct restoration treatments in the area. Additionally, motorized and mechanized management of associated allotments is authorized for range permittees.</p>	<p>4.a no</p>

**J64B – 9,491.17 acres – Overall Determination of Wilderness Characteristics: High**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	The composition of plant and animal communities appears natural. Non-native species are present in some areas but are in low numbers and generally not apparent on the landscape (except in riparian areas where salt cedar is present). Plant dominance types include pinyon juniper, big sagebrush, ponderosa pine, and deciduous shrub. Wildlife includes a Mexican spotted owl protected activity center in the canyon in the northern portion of the polygon, Mexican spotted owl critical habitat in the northern part, northern leopard frog, New Mexican meadow jumping mouse, and an elk calving area. Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention. Prevalence of improvements is overall low throughout the area but does include several improvements including user-created roads and old logging roads.	1.a high-except lower where salt cedar is in riparian 1.b high 1.c moderate
Solitude or Primitive or Unconfined Recreation	Human activities are uncommon, making opportunities to feel alone possible in much of the area. It is remote, rugged, and generally difficult to access, but motorized use on the western edge and Highway 4 on the eastern edge may affect opportunities for solitude when near those areas. Range permittees are in the area frequently, but they mostly stay out of the canyons. Some high-quality opportunities to engage in primitive and unconfined recreation exist in the area including hunting and hiking and are especially high quality when in the canyons.	2.a moderate, higher away from roads 2.b moderate
Unique Features	Unique features identified in the area include Rio Grande chub and Rio Grande sucker, Mexican spotted owl, New Mexico meadow jumping mouse; geologic features including outstanding springs and viewpoints, Guadalupe mesa, and views from the canyon rim; high density of cultural and historic resources, some of which may be eligible for listing; and several free flowing high-quality water resources.	3.a yes 3.b yes 3.c yes 3.d no 3.e yes
Manageability	The presence and extent of other uses and management considerations affects isolated spots and makes management to preserve the area’s wilderness characteristics possible. The area is part of an inventoried roadless area and is bordered on two sides by cliff.	4.a high

J65 – 6,038.06 acres – Overall Determination of Wilderness Characteristics: No

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some noticeable presence of nonnative species (scotch and Canada thistle) along National Forest System Road 376. Plant dominance types are mostly ponderosa pine, with some mixed-conifer deciduous, sage, deciduous shrub, and aspen. There are three Mexican spotted owl protected activity centers and critical habitat, northern goshawk, Gunnison's prairie dogs, woodland snail, Rio Grande cutthroat trout, and New Mexico meadow jumping mouse critical habitat and occupied habitat.</p> <p>The extent to which the area reflects ecological conditions without human intervention is low due to thinning in late 1980s, obvious tree plantations, and presence of stumps.</p> <p>Prevalence of improvements is overall high throughout the area and include pipeline, trough, corral, roads, New Mexico meadow jumping mouse fence, and range fence (approximately 1.5 miles).</p>	<p>1.a moderate                      1.b low                      1.c low</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities or presence is common and little opportunity of feeling alone can be experienced in the area. There is a dispersed camping corridor through the center of the area and a road along the northern boundary. Motorized sounds and encountering people is likely near roads and the dispersed camping corridor. There are some opportunities to engage in primitive and unconfined recreation, but they tend to be of poor quality due to heavy motorized use on top and along roads.</p>	<p>2.a low                      2.b low</p>
Unique Features	<p>Unique features identified in the area include unique or rare wildlife communities due to the presence of the woodland snail, New Mexico meadow jumping mouse, Mexican spotted owl critical habitat, Rio Grande cutthroat trout, Gunnison's prairie dog, and northern goshawk.</p> <p>Canyon walls are beautiful, but not considered regionally/nationally significant.</p> <p>Cultural resources in this area are considered unique or rare and some of them may be eligible for the National Register of Historic Places.</p> <p>The Rio Cebolla is identified as a high-quality water resource for its role in providing high-quality habitat for the Rio Grande cutthroat trout.</p>	<p>3.a yes                      3.b no                      3.c yes                      3.d no                      3.e yes, Rio Cebolla</p>
Manageability	<p>The presence and extent of other uses and management considerations in the area is pervasive, making it impossible to manage the majority of the area to preserve its wilderness characteristics. A dispersed camping corridor runs through the center of the area, intensive dispersed recreation use on the western side of the polygon, and cherry stem roads. The area has planned forest restoration projects associated with the Southwest Jemez NEPA decision and a small amount of wildland-urban interface in the area.</p>	<p>4.a no</p>



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**J66 – 7,018.67 acres – Overall Determination of Wilderness Characteristics: No**

<b>Criteria Category</b>	<b>Description</b>	<b>Determination of Wilderness Characteristics</b>
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species in disturbed areas or along roads (a little salt cedar and Russian olive). Plant dominance types are ponderosa pine with mixed-conifer deciduous (some aspen), and pinyon juniper in the area. Wildlife includes two goshawk PFAs, American peregrine falcon, Rio Grande chub and Rio Grande sucker in the east fork Jemez River, northern leopard frog, and elk summer and winter range.</p> <p>The extent to which the area reflects ecological conditions without human intervention is low due to broadcast burning and thinning (thinning near private land in the 1990s) with stumps and skid roads present in some areas. Three hundred acres were cut and piled in the area.</p> <p>Prevalence of improvements is overall high throughout the area, mostly due to the presence of old roads that are still evident in flat areas. There are also a well system, drinkers, and non-motorized trail in the middle of the polygon.</p>	<p>1.a moderate 1.b low 1.c low</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities or presence is unavoidable, and signs of civilization are pervasive. The trail is very popular, and hundreds of people travel on the East Fork Trail (#137) in the summer. There is dispersed camping along the road that is well developed and highly used. Visitors can expect to hear shooting, dogs, and motorized sounds. The area is used by traditional communities for access to traditional places and procurement of traditional materials.</p> <p>There are some opportunities to engage in primitive and unconfined recreation, but they tend to be of poor quality. Primitive recreation includes hunting, hiking, camping, and cross-country skiing.</p>	<p>2.a no 2.b low</p>
Unique Features	<p>Unique wildlife, landscape features, cultural resources, and high-quality water resources have been identified for this area. The Monument Canyon Research Natural Area is also in the area</p> <p>Rio Grande sucker, Rio Grande chub, peregrine falcon, northern leopard frog, and black swift are present in the area.</p> <p>Landscape features include Soda Dam, McCauley Hot Springs, Jemez Falls, and Battle Ship Rock.</p> <p>Cultural resources in this area are considered unique or rare and some of them may be eligible for the National Register of Historic Places. Yes, cultural, high site density</p> <p>High-quality water resources include the East Fork Jemez Wild and Scenic River (scenic).</p>	<p>3.a yes 3.b yes 3.c yes 3.d yes 3.e yes</p>
Manageability	<p>The presence and extent of other uses and management considerations (including shape and configuration) is pervasive, making it impossible to manage the majority of the area to preserve its wilderness characteristics.</p> <p>One-third of the area is in a wildland-urban interface where fuels reduction is planned and a NEPA decision (Southwest Jemez Mountains) is already signed to conduct this work.</p>	<p>4.a no</p>

J67 – 7,215.13 acres – Overall Determination of Wilderness Characteristics: No

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural. No invasive species are inventoried but may be present in low numbers in disturbed areas. Plant dominance types include spruce fir, deciduous shrub, and ponderosa pine. Wildlife species and habitat in the area include northern goshawk (PFA in the north), elk calving area, elk summer and winter range, Jemez Mountains Salamander critical habitat, Rio Grande sucker, Rio Grande cutthroat trout, New Mexico meadow jumping mouse occupied and critical habitat, and Gunnison's prairie dogs. Vegetation does not appear natural in isolated or scattered spots due to current and past uses including thinning (2000) around nearby communities and prescribed burning activities (Thompson Ridge Burn). Prevalence of improvements is overall high throughout the area and includes water developments (troughs and pipeline), roads, and motorized trails.</p>	<p>1.a high                      1.b moderate                      1.c low</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities or presence is common and little opportunity of feeling alone can be experienced in the area. There is heavy use associated with a motorized dispersed camping corridor and adjacent campground, road, and private property. The area is in an active range allotment with frequent motorized or mechanized use by range permittees. There is also heavy mountain bike use on roads. High-quality primitive recreation opportunities like fishing, hiking, camping, skiing, and soaking in hot springs can be found in the area.</p>	<p>2.a low                      2.b high</p>
Unique Features	<p>Unique wildlife or habitat in the area include northern goshawk (PFA in the north), elk calving area, elk summer and winter range, Jemez Mountains salamander critical habitat, Rio Grande sucker, Rio Grande cutthroat trout, New Mexico meadow jumping mouse occupied and critical habitat, and Gunnison's prairie dogs. Outstanding landscape features include a diversity of features including scenic canyon, cliffs, tent rocks, hot springs, and ice caves. Cultural resources in this area are considered unique or rare and some of them may be eligible for the National Register of Historic Places. Site density is low and no significant archaeological sites, but there is indication that the area is actively used by traditional populations for accessing important traditional cultural places on the Valles Caldera as well as procuring traditional resources. San Antonio Creek and Hot Springs are identified as high-quality water resources in the area.</p>	<p>3.a yes                      3.b yes                      3.c yes                      3.d                      3.e yes</p>
Manageability	<p>The presence and extent of other uses and management considerations (shape and configuration) in the area is pervasive, making it impossible to manage the majority of the area to preserve its wilderness characteristics. Some considerations are the presence of deep cherry stem roads, private land inholdings, presence of a wildland-urban interface, and a signed decision for future restoration work as a part of the Southwest Jemez Collaborative Forest Land Restoration Project. Motorized and mechanized management of associated allotments is authorized for range permittees.</p>	<p>4.a no</p>

**P68 – 5,681.58 acres – Overall Determination of Wilderness Characteristics: Moderate**

<b>Criteria Category</b>	<b>Description</b>	<b>Determination of Wilderness Characteristics</b>
Apparent Naturalness	The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species dispersed throughout the range allotment. Plant dominance types are mostly pinyon juniper, ponderosa pine, and mixed-conifer with some grass meadow. Common forest animals include elk, pinyon jay, rabbit, deer, songbirds and bear. Vegetation does not appear natural in isolated or scattered spots due to fuelwood gathering and stumps. Prevalence of improvements is overall low throughout the area. Improvements include many closed roads apparent on the landscape (user-created roads and level 1 roads), pit tanks, fence, some pipeline, and a water trough.	1.a moderate 1.b moderate 1.c moderate
Solitude or Primitive or Unconfined Recreation	Human activities are uncommon, making opportunities to feel alone possible in much of the area, especially away from roads. There are no system trails and the area is remote and difficult to access. Some high-quality opportunities to engage in primitive and unconfined recreation exist in the area including hiking, hunting, and horseback riding; however, unconfined recreation may be limited by the presence of roads and fences.	2.a moderate 2.b moderate
Unique Features	Though there has been minimal cultural surveys in the area, cultural and historic features are considered unique or outstanding in this area and some of these features may be eligible for the National Register of Historic Places. Presence of prehistoric land use is eligible for National Register of Historic Places.	3.a no 3.b no 3.c yes 3.d no 3.e no
Manageability	The presence and extent of other uses and management considerations in the area is scattered and makes management to preserve the area's wilderness characteristics possible throughout much of the area. Some challenges to preserving wilderness characteristics include adjacent land management practices associated with private, Bureau of Land Management, and State land ownership; a signed NEPA decision for thinning and burning in 50 percent of the area; and presence of traditional uses (San Miguel Del Bado Land Grant) in the area.	4.a moderate

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**P69 – 5,229.41 acres – Overall Determination of Wilderness Characteristics: Low**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	The composition of plant and animal communities appears natural within most of the area with isolated presence of invasive species. Plant dominance types include juniper and pinyon, oak scrub and mixed grass. Some listed or sensitive plant species are also found within the area including wheeled milkweed and mammillaria cactus (State list of rare plants). Common animals associated with pinyon juniper habitat are present in the area including pinyon jay and coyote. Vegetation does not appear natural in isolated spots due to evidence of firewood collecting. Obvious evidence of human activity can be seen throughout the area. Prevalence of improvements is very high and there are very few spots where improvements are absent or unseen. Improvements are generally for range management and include earthen tanks, fences, corrals, old roads, and a trick tank.	1.a moderate 1.b moderate 1.c no
Solitude or Primitive or Unconfined Recreation	Human activities are uncommon, making opportunities to feel alone possible in much of the area; however, the sparsely vegetated and flat nature of the terrain make seeing a long ways off easy and potential impacts to solitude from minimal human activity possible. Range management activities, when present, have the potential to impact opportunities for solitude. Minimal opportunities exist to engage in primitive recreation and most opportunities are low quality and not challenging. Some hiking can be done in the area.	2.a moderate 2.b moderate
Unique Features	Two features make this area unique including the presence of Ladrone Mesa Research Natural Area and multiple rare plants including <i>Asclepias uncialis</i> ssp. <i>uncialis</i> (wheeled milkweed) and the mammillaria cactus found in the area. Little or no cultural survey has been completed.	3.a yes 3.b no 3.c unknown 3.d yes 3.e no
Manageability	The presence and extent of other uses and/or considerations occurs throughout most of the area, making it difficult to manage the area to preserve its wilderness characteristics. Management uses and considerations include cherry stem roads and traditional uses associated with the former Anton Chico common lands and San Miguel Del Bado Land Grant. Additionally, an inventoried roadless area (700 acres) overlaps the Ladrone Mesa Research Natural Area.	4.a low

**P70 – 16,647.31 acres – Overall Determination of Wilderness Characteristics: No**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some scattered populations of invasive species throughout. Plant dominance communities include ponderosa pine, pinyon juniper, grassland, and a little mixed-conifer in the east. Common forest species are present and include deer, elk, bear and turkey. The area is elk winter and summer range. One species of conservation concern is noted in the area: pinyon jay.</p> <p>The extent to which the area reflects ecological conditions without human intervention is low due to past and current vegetation treatments including thinning, piling, prescribed burning, chipping and mulching, firewood collecting, and presence of stumps.</p> <p>Prevalence of improvements is overall high throughout the area. Improvements include a dense network of old roads that are still evident on the landscape, many miles of range fence, drinkers, pipelines, other water developments, stock ponds, earthen tanks, and storage tanks (many made of metal material).</p>	<p>1.a moderate 1.b low 1.c low</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities or presence is common and little opportunity of feeling alone can be experienced in the area. Visitors can easily hear and see the interstate from within the polygon. There are adjacent motorized dispersed camping corridors and frequent range allotment management activities. Few to no opportunities to experience solitude, given existing uses.</p> <p>Some opportunities exist to engage in primitive and unconfined recreation including hiking or horseback riding.</p>	<p>2.a low 2.b moderate</p>
Unique Features	<p>The view from Rowe Mesa East edge is noted as being regionally or nationally unique. There are also cultural resources considered unique or rare, and some of them may be eligible for the National Register of Historic Places.</p>	<p>3.a no 3.b yes 3.c yes 3.d no 3.e no</p>
Manageability	<p>The presence and extent of other uses and management considerations (shape and configuration) in the area is pervasive, making it impossible to manage the majority of the area to preserve wilderness characteristics. The primary management consideration is the long and slender shape of the polygon. Additional considerations related to traditional use associated with the San Miguel Del Bado Land Grant, cherry stemming, and a private land inholding pose significant challenges to managing to preserve wilderness character. The area is also a part of a collaborative forest restoration planning effort and has a signed NEPA decision for forest restoration activities (Rowe Mesa Decision)</p>	<p>4.a no</p>

**P71 – 6,344.63 acres – Overall Determination of Wilderness Characteristics: Low**

<b>Criteria Category</b>	<b>Description</b>	<b>Determination of Wilderness Characteristics</b>
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some presence of invasive species in disturbed areas. Plant dominance communities are ponderosa pine, pinyon juniper, and scrub oak. The area has common forest animal species present with elk winter and summer range.</p> <p>Vegetation does not appear natural in isolated or scattered spots due to some tree planting in the 1990s and evidence of prescribed fires (stumps from both), but generally ecological processes are intact and natural appearing on the landscape.</p> <p>Prevalence of improvements is overall low throughout the area. Improvements include old roads still evident on the landscape and range improvements including fences and water developments.</p>	<p>1.a moderate 1.b moderate 1.c moderate</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities are uncommon, making opportunities to feel alone possible in much of the area. However, visitors can see the highway from within the polygon. There is also a motorized dispersed camping corridor adjacent to the area, but it does not receive a high level of use.</p> <p>Some high-quality opportunities to engage in primitive and unconfined recreation exist in the area including hiking, hunting, horseback riding, dispersed camping, pinyon picking, and fossil finding. The area is remote and rugged and provides a high level of challenge and risk.</p>	<p>2.a moderate 2.b moderate</p>
Unique Features	<p>There are no known regionally or nationally unique or outstanding qualities or features present in this area.</p>	<p>3.a no 3.b no 3.c unknown 3.d no 3.e no</p>
Manageability	<p>The presence and extent of other uses and/or considerations (e.g., shape or configuration) occurs throughout most of the area, making it difficult to manage the area to preserve its wilderness characteristics. Additionally, traditional uses associated with the San Miguel Del Bado Land Grant must be considered.</p>	<p>4.a low</p>

**P72 – 10,187.82 acres – Overall Determination of Wilderness Characteristics: Low**

<b>Criteria Category</b>	<b>Description</b>	<b>Determination of Wilderness Characteristics</b>
Apparent Naturalness	The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species in disturbed areas (approximately 40 to 50 acres of bull thistle). Plant dominance communities include ponderosa pine in the northeast, pinyon juniper in the southwest, and a little deciduous shrub and mixed conifer throughout. Common forest species can be found in the area including elk, cougar, bear, and deer. The northern goshawk (a regional forester’s sensitive species) is also found in the area. Vegetation does not appear natural in isolated or scattered spots due to thinning and fuelwood harvesting, burning in the 1990s in the northern areas, managed fire, heavy firewood collecting, stumps, and some obvious grubbing. Prevalence of improvements is overall low throughout the area. Improvements include a dense network of old roads, a weather station, spring well development, and a pit tank.	1.a moderate 1.b moderate 1.c moderate
Solitude or Primitive or Unconfined Recreation	Human activities are uncommon, making opportunities to feel alone possible in much of the area especially away from roads and private land. There is also a motorized dispersed camping corridor, but it does not get a lot of use outside of hunting season. There are no system trails in the area. Some high-quality opportunities to engage in primitive and unconfined recreation exist in the area including hiking, hunting, and horseback riding. The area provides challenge and risk to visitors.	2.a moderate 2.b moderate
Unique Features	Cultural resources are considered unique or rare in the area, and there is a known prehistoric site that is eligible for listing on the National Register of Historic Places. There is some indication of Apache and other mobile group use in Apache Canyon.	3.a no 3.b no 3.c yes 3.d no 3.e no
Manageability	The presence and extent of other uses and/or considerations (i.e., shape and configuration) occurs throughout most of the area, making it difficult to manage the area to preserve its wilderness characteristics. There are a dense network of old roads and considerations related to Delgato Land Grant traditional uses.	4.a low

**P73 – 6,896.10 acres – Overall Determination of Wilderness Characteristics: Moderate**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species in disturbed areas (approximately 40 to 50 acres of bull thistle). Plant dominance communities include ponderosa pine in the northeast, pinyon juniper in the southwest, and a little deciduous shrub and mixed conifer throughout. Common forest animal species can be found in the area including elk, cougar, bear, and deer. The northern goshawk (a regional forester’s sensitive species) is also found in the area.</p> <p>Vegetation does not appear natural in isolated or scattered spots due to thinning and fuelwood harvesting, burning in the 1990s in the northern areas, managed fire, heavy firewood collecting, stumps, and some obvious grubbing.</p> <p>Prevalence of improvements is overall low throughout the area. Improvements include a dense network of old roads, a weather station, spring well development, and a pit tank.</p>	1.a moderate 1.b moderate 1.c moderate
Solitude or Primitive or Unconfined Recreation	<p>Human activities are uncommon, making opportunities to feel alone possible in much of the area, especially away from roads and private land. There is also a motorized dispersed camping corridor but is does not get a lot of use outside of hunting season. There are no system trails in the area.</p> <p>Some high-quality opportunities to engage in primitive and unconfined recreation exist in the area including hiking, hunting, and horseback riding. The area provides challenge and risk to visitors.</p>	2.a moderate 2.b moderate
Unique Features	<p>There are no known regionally or nationally unique or outstanding qualities or features present in this area.</p>	3.a 3.b 3.c unknown 3.d 3.e
Manageability	<p>The presence and extent of other uses and/or considerations (i.e., shape and configuration) occurs throughout most of the area, making it difficult to manage the area to preserve its wilderness characteristics. There are a dense network of old roads and considerations related to Delgato land grant traditional uses.</p>	4.a low



**P74 – 11,109.52 acres – Overall Determination of Wilderness Characteristics: Moderate**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the polygon with some isolated presence of invasive species in disturbed areas. Plant dominance communities are mostly juniper, pinyon-juniper, ponderosa pine, and some grass and forb mixes in meadows. Lowlands are Southern Rocky Mountain pinyon-juniper woodland. Common animal species include deer, turkey, mountain lion, and pinyon jays (species of conservation concern).</p> <p>Vegetation does not appear natural in isolated or scattered spots due to thinning in the early 1990s that has left stumps on the landscape. Other vegetation-altering activities include woodcutting, slash piling, and stumps from prescribed fires.</p> <p>Prevalence of improvements is overall high throughout the area. Improvements include tanks, old roads, motorized trails, and user-created trails.</p>	<p>1.a moderate 1.b moderate 1.c low</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities are uncommon, making opportunities to feel alone possible in much of the area, especially when away from the highway, motorized trail in the middle of the polygon, and fuel woodcutters.</p> <p>Some high-quality opportunities to engage in primitive and unconfined recreation exist in the area including hiking, hunting, horseback riding, and pinyon picking. Visitors can find challenge and risk when in the area.</p>	<p>2.a moderate 2.b moderate</p>
Unique Features	<p>Cultural resources in this area are considered unique or rare and some of them may be eligible for the National Register of Historic Places. The area has higher site density as you move toward Pecos Valley. The area is near the Pecos National Monument, which is the largest Pueblo in the area.</p>	<p>3.a no 3.b no 3.c yes 3.d no 3.e no</p>
Manageability	<p>The presence and extent of other uses and/or considerations (e.g., shape or configuration) occurs throughout most of the area, making it difficult to manage the area to preserve its wilderness characteristics. Among other uses and considerations are: traditional uses associated with the San Miguel del Bado land grant, a wildland-urban interface along the eastern edge, a very long cherry stem road, and presence of many old roads still being used today. The area is also adjacent to the Pecos National Historic Park.</p>	<p>4.a low</p>

**P75 – 1,698.74 acres – Overall Determination of Wilderness Characteristics: Low**

<b>Criteria Category</b>	<b>Description</b>	<b>Determination of Wilderness Characteristics</b>
Apparent Naturalness	The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species along roads. Plant dominance communities consist of ponderosa pine, mixed-conifer, and some aspen and oak scrub mixed in throughout. Noted forest animal species include elk, deer, peregrine falcon, Mexican spotted owl on edge, Mexican spotted owl critical habitat, elk winter and summer range. Vegetation does not appear natural in isolated or scattered spots due to vegetation treatments along the eastern edge including thinning and burning in 2001 that has left stumps and slash piles in the area. The presence and appearance of improvement in the area is rare or scattered and does not detract from apparent naturalness. There are no range improvements and existing old roads are mostly revegetated and unnoticeable.	1.a moderate 1.b moderate 1.c high
Solitude or Primitive or Unconfined Recreation	Human activities or presence is common and little opportunity of feeling alone can be experienced in the area, especially when away from private land and roads and when nearer to the Pecos Wilderness. However, roads and villages are visible from high points within area and would remind visitors of their proximity to civilization. One system trail (Porvenir Divide Trail) is within the area. Some high-quality opportunities to engage in primitive and unconfined recreation exist in the area including picnicking and camping along the southern boundary; hunting for grouse, turkey and elk; and hiking. Opportunities to experience challenge and risk can be found in the area.	2.a low 2.b moderate
Unique Features	The Gallinas River is considered regionally or nationally significant water resource due to its importance as part of the municipal water supply for the city of Las Vegas.	3.a no 3.b no 3.c no 3.d no 3.e yes
Manageability	The presence and extent of other uses and/or considerations (e.g., shape or configuration) occurs throughout most of the area, making it difficult to manage the area to preserve its wilderness characteristics. The area has a difficult shape to manage, with very narrow areas within the polygon. Other considerations include traditional use claims regarding historic traditional use from the 1835 boundary for the Santa Gertrudis de lo de Mora Land Grant including fuelwood and other forest product gathering. There is a wildland-urban interface in the eastern portion and private land adjacent to the area with a high level of mixed use.	4.a low

**P76 – 101.61 acres – Overall Determination of Wilderness Characteristics: Low**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>*Due to small size and adjacency, this evaluation was combined with P75.</p> <p>The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species along roads. Plant dominance communities consist of ponderosa pine, mixed-conifer, and some aspen and oak scrub mixed in throughout. Noted forest animal species include elk, deer, peregrine falcon, Mexican spotted owl on edge, Mexican spotted owl critical habitat, elk winter and summer range. Vegetation does not appear natural in isolated or scattered spots due to vegetation treatments along the eastern edge including thinning and burning in 2001 that has left stumps and slash piles in the area. The presence and appearance of improvement in the area is rare or scattered and does not detract from apparent naturalness. There are no range improvements and existing old roads are mostly revegetated and unnoticeable.</p>	<p>1.a moderate 1.b moderate 1.c high</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities or presence is common and little opportunity of feeling alone can be experienced in the area, especially when away from private land and roads and when nearer to the Pecos Wilderness. However, roads and villages are visible from high points within area and would remind visitors of their proximity to civilization. One system trail (Porvenir Divide Trail) is within the area.</p> <p>Some high-quality opportunities to engage in primitive and unconfined recreation exist in the area including picnicking and camping along southern boundary; hunting for grouse, turkey and elk; and hiking. Opportunities to experience challenge and risk can be found in the area.</p>	<p>2.a low 2.b moderate</p>
Unique Features	<p>The Gallinas River is considered regionally or nationally significant water resource due to its importance as part of the municipal water supply for the city of Las Vegas.</p>	<p>3.a no 3.b no 3.c no 3.d no 3.e yes</p>
Manageability	<p>The presence and extent of other uses and/or considerations (e.g., shape or configuration) occurs throughout most of the area, making it difficult to manage the area to preserve its wilderness characteristics. The area has a difficult shape to manage due to existing roads. Other considerations include traditional use claims regarding historic traditional use from the 1835 boundary for the Santa Gertrudis de lo de Mora Land Grant including fuelwood and other forest product gathering. There is a wildland-urban interface in the eastern portion and private land adjacent to the area with a high level of mixed use.</p>	<p>4.a low</p>

P77 – 5,329.60 acres – Overall Determination of Wilderness Characteristics: Low

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species (musk thistle) in disturbed areas. Plant dominance communities include mixed-conifer and ponderosa pine with some bristlecone pine in the peninsula. Rare plants- Sapello Canyon larkspur and <i>Calochortus</i> Gunnison lily can be found in the area. The area has Mexican spotted owl critical habitat and elk winter and summer range. Other common forest animal species are present in the area.</p> <p>The extent to which the area reflects ecological conditions without human intervention is low due to past and current vegetation treatments including: thinning around Chaperito, thinning evident from the mid-1990s along the northern edge, stumps evident, and evidence of restoration with seeding and mulching. Prevalence of improvements is overall high throughout the area. Improvements include old roads evident on the landscape—especially in the north, spring well developments (large 700-gallon tanks made of metal), corrals, fence, and dozer line around past fires is evident. The southern portion of the area is more natural appearing.</p>	1.a moderate 1.b low 1.c low
Solitude or Primitive or Unconfined Recreation	<p>Human activities or presence is common and little opportunity of feeling alone can be experienced in the area especially when near roads, private property, and dispersed camping corridors. There are existing traditional and cultural uses, and visitors can hear motorized sounds from Highway 63 and along National Forest System Road 646. Motorized sounds from range management activities can be heard commonly in the area.</p> <p>There are few opportunities to engage in primitive and unconfined recreation and existing opportunities are generally of poor quality. Visitors to the area can engage in hunting, hiking, and camping. There is steep and rugged terrain in the west that could provide risk and challenge.</p>	2.a low 2.b low
Unique Features	<p>Cultural resources in this area are considered unique or rare and some of them may be eligible for the National Register of Historic Places. Extensive use historically for mining and other uses in canyon.</p> <p>Other notes: Mexican spotted owl critical habitat with some sightings within the polygon. Rare plants- Sapello Canyon larkspur, <i>Calochortus</i> Gunnison lily, and bristlecone pine are in the area.</p> <p>A little of the Pecos Wild and Scenic River (Recreation) on the west side. Pecos River watershed is important. Headwaters of the Pecos River—important for recreation, fishing, camping, economic, and water quality.</p>	3.a no 3.b no 3.c yes 3.d no 3.e no
Manageability	<p>The presence and extent of other uses and/or considerations (e.g., shape or configuration) occurs throughout most of the area, making it difficult to manage the area to preserve its wilderness characteristics. Motorized and mechanized management of associated allotments is authorized for range permittees, a wildland-urban interface on the west side, and private property or inholding in the interior of the polygon.</p>	4.a low

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Appendix J. Documentation of Wilderness Recommendation Process*

**P78 – 3,573.24 acres – Overall Determination of Wilderness Characteristics: Low**

<b>Criteria Category</b>	<b>Description</b>	<b>Determination of Wilderness Characteristics</b>
Apparent Naturalness	The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species in disturbed areas. Plant dominance communities are ponderosa pine with some mixed-conifer. Animals found in the area include deer, elk, northern goshawk, and American peregrine falcon. The area contains elk winter and summer range. The extent to which the area reflects ecological conditions without human intervention is low due to thinning, piling and burning (2003), and evidence of heavy firewood harvesting. Prevalence of improvements is overall low throughout the area. Improvements include fences, old roads apparent on the landscape, user-created and system trails, and one spring well development.	1.a moderate 1.b low 1.c moderate
Solitude or Primitive or Unconfined Recreation	Human activities or presence is common and little opportunity of feeling alone can be experienced in the area. The area is generally easy to access and there is a motorized dispersed camping corridor on the eastern edge that receives moderate use. The area is popular for fuelwood gathering. Opportunities to experience solitude are higher when closer to the adjacent wilderness area. Some high-quality opportunities to engage in primitive and unconfined recreation exist in the area including hiking, hunting, and horseback riding. Visitors can experience some challenge and risk in the area and higher quality experiences when closer to the designated wilderness.	2.a low 2.b moderate
Unique Features	Cultural resources are considered unique or rare and some of them may be eligible for the National Register of Historic Places. Hermit's peak is a traditional cultural property. Most other uses are mining, homesteading and ranching. The Gallinas watershed is considered a unique or outstanding water resource due to its importance as a part of municipal water for Las Vegas.	3.a no 3.b no 3.c yes 3.d no 3.e yes
Manageability	The presence and extent of other uses and/or considerations (e.g., shape or configuration) occurs throughout most of the area, making it difficult to manage the area to preserve its wilderness characteristics. Other considerations include Santa Gertrudis de lo de Mora land grant claims, forest restoration projects associated with the collaborative forest restoration planning effort, wildland-urban interface, private land inholdings, and private land rights-of-way. A consideration that supports management of the area to preserve wilderness characteristics is its adjacency to an existing wilderness area.	4.a low

**P79A – 18,942.82 acres – Overall Determination of Wilderness Characteristics: No**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species (brome and thistle) in disturbed areas. Plant dominance types include aspen, mixed-conifer-deciduous, ponderosa pine, spruce-fir in the north and northeast, and oak scrub scattered throughout. Douglas-fir, limber pine, white pine, and mountain mahogany can be found to a lesser degree in the area. The rare plant, Pecos fleabane has been documented in the area. Common forest animals and critical habitat can be found in the area including four Mexican spotted owl protected activity centers, three goshawk protected activity centers, an elk calving area, elk winter range, and American martin.</p> <p>The extent to which the area reflects ecological conditions without human intervention is low due vegetation treatments including salvage cuts throughout the 2000s, thinning, and heavy firewood collecting. Stumps are present in many areas. Seeding and mulching in areas affected by cleared salvage is apparent.</p> <p>Obvious evidence of human activity can be seen throughout the area. Prevalence of improvements is very high and there are very few spots where improvements are absent or unseen. Improvements include water developments, approximately 15 miles of livestock fencing, skyline trail, and many old roads very visible on the landscape.</p>	<p>1.a moderate 1.b low 1.c no</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities or presence is unavoidable, and signs of civilization are pervasive. Opportunities to experience solitude are unlikely due to historic and ongoing heavy firewood gathering, historic and ongoing motorized hunting, and a heavily used motorized dispersed camping in the interior of the polygon that makes a doughnut shape in the polygon with National Forest System Road 93. There is a dense network of roads and motorized sights and sounds prevalent throughout the polygon that limit one's ability to feel remote from civilization.</p> <p>There are a few opportunities to engage in primitive and unconfined recreation, but they tend to be of low quality due to roads and sights and sounds of motorized use.</p>	<p>2.a no 2.b low</p>
Unique Features	<p>Due to the presence of multiple Mexican spotted owl protected activity centers, Pecos fleabane (rare plant species in the northern corner), and Rio Grande cutthroat trout (Regional Forester's sensitive species) in the polygon, rare or unique plant and animal communities have been identified as a unique feature in this polygon.</p> <p>Important watershed resources have also been identified as a unique feature in this polygon due to the presence of the Gallinas drainage and Pecos watershed, which are considered regionally or nationally important due to their value as habitat for the Rio Grande cutthroat trout and as a part of the municipal water supply for Las Vegas.</p>	<p>3.a yes 3.b no 3.c no 3.d no 3.e yes</p>
Manageability	<p>The presence and extent of other uses and management considerations in the area is pervasive, making it impossible to manage the majority of the area to preserve wilderness characteristics. The shape and configuration of this area makes managing for wilderness characteristics particularly difficult. Other management considerations that pose significant challenges include the presence of private land inholdings, that motorized and mechanized management of associated allotments is authorized for range permittees, and some cherry stem roads that dissect the area.</p>	<p>4.a no</p>

P79B – 16,520.29 acres – Overall Determination of Wilderness Characteristics: Low

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species in disturbed areas. Plant dominance communities include mixed conifer/deciduous, aspen, spruce-fir in higher elevations, and high-elevation grasses and forbs. The rare wood lily (<i>Lilium philadelphicum</i>) is present in one location. Common forest species including elk, deer, cougar, bear, and turkey are present. Of note, northern goshawk and two Mexican spotted owl protected activity centers are within the area.</p> <p>Vegetation does not appear natural in isolated or scattered spots due to thinning, piling and burning in the area (Nanaka 2015 and Terrell Ranch Thin 2010). Dozer line, stumps, and piles are still evident on the landscape.</p> <p>Prevalence of improvements is overall low throughout the area. Improvements include the Skyline trail and Nanaka trail, several range improvements including 6 to 7 miles of fence, water development, and an old corral.</p>	1. a moderate 1.b moderate 1.c moderate
Solitude or Primitive or Unconfined Recreation	<p>Human activities are uncommon, making opportunities to feel alone possible in much of the area. However, there is historic and established motorized use in an inventoried roadless area. Opportunities for solitude are lower during hunting season.</p>	2.a moderate 2.b high
Unique Features	<p>Important watershed resources have also been identified as a unique feature in this polygon due to the presence of the Gallinas drainage and Pecos watershed, which are considered regionally or nationally important due to their value as habitat for the Rio Grande cutthroat trout and as a part of the municipal water supply for Las Vegas.</p>	3.a no 3.b no 3.c no 3.d no 3.e yes
Manageability	<p>The presence and extent of other uses and/or considerations (e.g., shape or configuration) occurs throughout most of the area, making it difficult to manage the area to preserve its wilderness characteristics. Some other considerations and uses include established wildland-urban interface in a portion of the area, that motorized and mechanized management of associated allotments is authorized for range permittees, access and use issues related to adjacent private land, and the long, narrow shape of the polygon. Approximately 10 percent of the area has a signed decision for the Galinas watershed restoration project with heavy machinery and chainsaw use to protect watershed health downstream. The area is adjacent to the Pecos Wilderness.</p>	4.a low

**P79C – 9,638.84 acres – Overall Determination of Wilderness Characteristics: No**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species in disturbed areas. Plant dominance communities are ponderosa pine, mixed-conifer/deciduous, with some bristlecone pine present. Common forest species are in the area as well as two northern goshawks and six Mexican spotted owl protected activity centers. The extent to which the area reflects ecological conditions without human intervention is low due to vegetation treatments including thinning from the 1980s to present, burning and heavy firewood collecting, seeding, and Christmas tree harvesting. Prevalence of improvements is overall high throughout the area. Improvements include dozer line from past burns, old closed roads, fence, water developments, and non-motorized trails.	1.a moderate 1.b low 1.c low
Solitude or Primitive or Unconfined Recreation	Human activities or presence is common and little opportunity of feeling alone can be experienced in the area. Two motorized camping corridors are adjacent to the area as well as utility and power lines that can be seen from within the area. Firewood gathering and Christmas tree harvesting occur often, and noise from a variety of uses carries in the canyons. Further, the shape of the area does not allow for a getting away from roads and developments. There are few opportunities to engage in primitive and unconfined recreation and existing opportunities are generally of poor quality. Some primitive opportunities include horseback riding, hiking, and camping. Challenge and risk are generally low due to the number of developments or roads present in the area.	2. a low 2.b low
Unique Features	Cultural and watershed resources were identified as unique features for this area. Gallinas drainage has significant historic structures associated with forest development and recreation residences. Other areas of significance are scattered throughout the large area. Some of these areas may be eligible for the National Register of Historic Places. Gallinas is a municipal watershed and considered regionally important. Other notes for the area: Six Mexican spotted owl protected activity centers; Johnson Mesa is beautiful, but not regionally or nationally significant.	3.a no 3.b no 3.c yes 3.d no 3.e yes
Manageability	The presence and extent of other uses and management considerations in the area is pervasive, making it impossible to manage the majority of the area to preserve wilderness characteristics. Some of those uses and considerations include forest restoration as a part of a collaborative forest restoration planning project in the northern lobe, presence of a wildland-urban interface in northern and eastern areas, cherry stem roads, private lands, and the roads and shape of the polygon are highly dissected in many locations. Finally, motorized and mechanized management of associated allotments is authorized for range permittees.	4.a no



P79D – 22,988.51 acres – Overall Determination of Wilderness Characteristics: No

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species in disturbed areas. Plant dominance types include ponderosa pine, mixed-conifer, oak, aspen, deciduous shrub, spruce-fir in higher elevations, and some pinyon juniper in the lower elevations. Common forest animal species can be found in the area as well as northern goshawk, and elk winter and summer range.</p> <p>Vegetation does not appear natural in isolated or scattered spots due to vegetation treatments and fires over the past 50 years. The Cat and Dog fire (1971), thinning, prescribed burning (through the 1990s), and continued thinning and burning up until 2003 have left noticeable signs of human intervention on the landscape.</p> <p>Prevalence of improvements is overall high throughout the area. Improvements include range improvements including metal tank and spring well development and several miles of fence, in addition to many old roads and skid trails still very visible in the area as well as a system trail.</p>	1. a moderate 1.b moderate 1. c low
Solitude or Primitive or Unconfined Recreation	<p>Human activities or presence is common and little opportunity of feeling alone can be experienced in the area. There are several motorized dispersed camping corridors near the area and high visitor use during the hunting season that limits opportunities to feel alone. There is heavy Christmas tree activity in November and December and heavy dispersed camping use in the summer and fall throughout the area. Traditional uses and pinyon picking also occur. Weekend driving is popular on cherry stem and adjacent roads.</p> <p>Some high-quality opportunities to engage in primitive and unconfined recreation exist in the area including hiking, horseback riding, and hunting. The area is managed for semi-primitive non-motorized use in 50 percent of the area and roaded natural elsewhere. The rugged terrain provides some challenge and risk.</p>	2.a low 2.b moderate
Unique Features	<p>Cultural and watershed resources were identified as unique features for this area. Gallinas drainage has significant historic structures associated with forest development and recreation residences. Other areas of significance are scattered throughout the large area. Some of these areas may be eligible for the National Register of Historic Places.</p>	3.a no 3.b no 3.c yes 3.d no 3.e no
Manageability	<p>The presence and extent of other uses and management considerations in the area is pervasive, making it impossible to manage the majority of the area to preserve wilderness characteristics. Some management challenges include the shape, cherry stems, private land inholdings, presence of roads, extensive existing uses, several small ongoing projects, and presence of a wildland-urban interface in the area. Additionally, motorized and mechanized management of associated allotments is authorized for range permittees.</p>	4.a no

**P79E – 11,147.48 acres – Overall Determination of Wilderness Characteristics: Low**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species in disturbed areas. Plant dominance types include ponderosa pine and pinyon-juniper. Common forest animal species are present including elk, deer, and turkey, with some elk winter and summer range present. Northern goshawk is also present in the area. Vegetation does not appear natural in isolated or scattered spots due to thinning and post fire activities associated with the Cat and Dog fire and the Pecos fire in the 1970s. Tree planting occurred in the late 1980s and early 1990s. Prevalence of improvements is overall low throughout the area. Improvements include some minimal range improvements—spring well developments, and one mine; some old roads are visible on the landscape.	1.a moderate 2.b Moderate 1.c moderate
Solitude or Primitive or Unconfined Recreation	Human activities are uncommon, making opportunities to feel alone possible in much of the area. There is a dispersed camping corridor in the west that is not heavily used, but motorized activity is present on the road. The area is remote, rugged, and difficult to access, which improves opportunities for solitude. Visibility of small villages and Interstate 25 from within the polygon detract from a feeling of being remote from civilization. Some high-quality opportunities to engage in primitive and unconfined recreation exist in the area including hiking, pinyon picking, and hunting. The area is steep, rocky, and rugged, providing for recreation with risk and challenge.	2.a moderate 2.b moderate
Unique Features	There are no known regionally or nationally unique or outstanding qualities or features present in this area. Barrow Peak is a destination peak, but not regionally or nationally unique or iconic.	3.a no 3.b no 3.c. no 3.d no 3.e no
Manageability	The presence and extent of other uses and/or considerations (e.g., shape or configuration) occurs throughout most of the area, making it difficult to manage the area to preserve its wilderness characteristics. The southern third of the area is heavily used by permittees and traditional uses. San Miguel del Bado land grant claims historic use of the land. There is a small cherry stem.	4.a low

P80 – 1,004.90 acres – Overall Determination of Wilderness Characteristics: Low

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species in disturbed areas. Plant dominance types include ponderosa pine, mixed-conifer deciduous, some deciduous shrub (oak) and areas with grassy forbs mix present. The area is steep and rugged. Common forest species are in the area as well as some elk summer and winter range and Mexican spotted owl critical habitat on the eastern edge.</p> <p>Vegetation does not appear natural in isolated or scattered spots due to some burning and thinning in the 2000s in the southern portion of the polygon (section 18 area). There is a lot of regeneration in that area as well that detracts from apparent naturalness.</p> <p>Prevalence of improvements is overall low throughout the area. Improvements include some old roads and a small amount of range fence in the sliver adjacent to the wilderness in the north.</p>	<p>1.a moderate                      1.b moderate                      1.c moderate</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities are uncommon, making opportunities to feel alone possible in much of the area. However, a county road is obvious from most areas in the polygon and noise from adjacent private land detracts from a feeling of being alone and remote from civilization. Woodcutting is popular in the area as well. Opportunities for solitude increase when adjacent to wilderness. There are no trails in the area and the terrain is steep, rugged, and heavily forested. Primitive recreation opportunities include cross-country hiking, though quality of opportunities is generally low, but does increase when closer to the wilderness area.</p>	<p>2.a moderate                      2.b low, but higher quality increases near wilderness boundary</p>
Unique Features	<p>There are no known regionally or nationally unique or outstanding qualities or features present in this area. Sapello North, no survey but adjacent to historic and modern communities.</p>	<p>3.a no                      3.b no                      3.c unknown, no                      3.d no                      3.e no</p>
Manageability	<p>The presence and extent of other uses and management consideration in the area is overall low in polygons 81 and 82, which are closer to the designated wilderness. While presence and extent of other uses in polygons 80 and 83 are higher and result in more management challenges. Some considerations include use of the area for traditional uses (claim Santa Gertrudis de lo de Mora Land Grant), and private land adjacent to the area.</p>	<p>4.a low</p>

**P81 – 155.26 acres – Overall Determination of Wilderness Characteristics: High**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species in disturbed areas. Plant dominance types include ponderosa pine, mixed-conifer deciduous, some deciduous shrub (oak) and areas with grassy forbs mix present. The area is steep and rugged. Common forest species are in the area as well as some elk summer and winter range and Mexican spotted owl critical habitat on the eastern edge.</p> <p>Vegetation does not appear natural in isolated or scattered spots due to some burning and thinning in the 2000s in the southern portion of the polygon (section 18 area). There is a lot of regeneration in that area that detracts from apparent naturalness.</p> <p>Prevalence of improvements is overall low throughout the area. Improvements include some old roads and a small amount of range fence in the sliver adjacent to the wilderness in the north.</p>	<p>1.a moderate                      1.b moderate                      1.c moderate</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities are uncommon, making opportunities to feel alone possible in much of the area. However, a county road is obvious from most areas in the polygon, and noise from adjacent private land detracts from a feeling of being alone and remote from civilization. Woodcutting is popular in the area. Opportunities for solitude increase when adjacent to wilderness. There are no trails in the area and the terrain is steep, rugged, and heavily forested. Primitive recreation opportunities include cross-country hiking, though quality of opportunities is generally low, but does increase when closer to the wilderness area.</p>	<p>2.a moderate                      2.b low, but higher quality increases near wilderness boundary</p>
Unique Features	<p>There are no known regionally or nationally unique or outstanding qualities or features present in this area. Sapello North, no survey but adjacent to historic and modern communities.</p>	<p>3.a no                      3.b no                      3.c unknown, no                      3.d no                      3.e no</p>
Manageability	<p>The presence and extent of other uses and management consideration in the area is overall low in polygons 81 and 82, which are closer to the designated wilderness. Some considerations include use of the area for traditional uses (claim Santa Gertrudis de lo de Mora Land Grant).</p>	<p>4.a high</p>

P82 – 14.14 acres – Overall Determination of Wilderness Characteristics: High

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species in disturbed areas. Plant dominance types include ponderosa pine, mixed-conifer deciduous, some deciduous shrub (oak) and areas with grassy forbs mix present. The area is steep and rugged. Common forest species are in the area as well as some elk summer and winter range and Mexican spotted owl critical habitat on the eastern edge.</p> <p>Vegetation does not appear natural in isolated or scattered spots due to some burning and thinning in the 2000s in the southern portion of the polygon (section 18 area). There is a lot of regeneration in that area that detracts from apparent naturalness.</p> <p>Prevalence of improvements is overall low throughout the area. Improvements include some old roads and a small amount of range fence in the sliver adjacent to the wilderness in the north.</p>	1.a moderate 1.b moderate 1.c moderate
Solitude or Primitive or Unconfined Recreation	<p>Human activities are uncommon, making opportunities to feel alone possible in much of the area. However, a county road is obvious from most areas in the polygon and noise from adjacent private land detracts from a feeling of being alone and remote from civilization. Woodcutting is popular in the area. Opportunities for solitude increase when adjacent to wilderness. There are no trails in the area and the terrain is steep, rugged, and heavily forested. Primitive recreation opportunities include cross-country hiking, though quality of opportunities is generally low, but does increase when closer to the wilderness area.</p>	2.a moderate 2.b low, but higher quality increases near wilderness boundary
Unique Features	<p>There are no known regionally or nationally unique or outstanding qualities or features present in this area. Sapello North, no survey but adjacent to historic and modern communities.</p>	3.a no 3.b no 3.c unknown, no 3.d no 3.e no
Manageability	<p>The presence and extent of other uses and management consideration in the area is overall low in polygons 81 and 82, which are closer to the designated wilderness. Some considerations include use of the area for traditional uses (claim Santa Gertrudis de lo de Mora Land Grant).</p>	4.a high

**P83 – 1,731.57 acres – Overall Determination of Wilderness Characteristics: Low**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species in disturbed areas. Plant dominance types include ponderosa pine, mixed-conifer deciduous, some deciduous shrub (oak) and areas with grassy forbs mix present. The area is steep and rugged. Common forest species are in the area as well as some elk summer and winter range and Mexican spotted owl critical habitat on eastern edge.</p> <p>Vegetation does not appear natural in isolated or scattered spots due to some burning and thinning in the 2000s in the southern portion of the polygon (section 18 area). There is a lot of regeneration in that area that detracts from apparent naturalness.</p> <p>Prevalence of improvements is overall low throughout the area. Improvements include some old roads and a small amount of range fence in the sliver adjacent to the wilderness in the north.</p>	<p>1.a moderate 1.b moderate 1.c moderate</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities are uncommon, making opportunities to feel alone possible in much of the area. However, a county road is obvious from most areas in the polygon and noise from adjacent private land detracts from a feeling of being alone and remote from civilization. Woodcutting is popular in the area. Opportunities for solitude increase when adjacent to wilderness. There are no trails in the area and the terrain is steep, rugged and heavily forested. Primitive recreation opportunities include cross-country hiking, though quality of opportunities is generally low, but does increase when closer to the wilderness area.</p>	<p>2.a moderate 2.b low, but higher quality increases near wilderness boundary</p>
Unique Features	<p>There are no known regionally or nationally unique or outstanding qualities or features present in this area. Sapello North, no survey but adjacent to historic and modern communities.</p>	<p>3.a no 3.b no 3.c unknown, no 3.d no 3.e no</p>
Manageability	<p>The presence and extent of other uses and management consideration in the area is overall low. Some considerations include use of the area for traditional uses (claim Santa Gertrudis de lo de Mora Land Grant).</p>	<p>4.a low</p>

**P84A – 4,195.20 acres – Overall Determination of Wilderness Characteristics: Low**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species along the roads. Plant dominance types include mixed-conifer, ponderosa pine, scrub oak, and some aspen.</p> <p>The area has an elk calving area and elk summer and winter range. Northern goshawk is present in the north. Vegetation does not appear natural in isolated or scattered spots due to concentration of vegetation treatments in the southwest. Most recent thinning has occurred near the southern boundary in the late 1980s and early 1990s, leaving stumps and other signs of disturbance.</p> <p>Prevalence of improvements is overall low throughout the area. Improvements include tanks, fences, troughs, pump jacks, water developments, iron gate, and an OHV camping area. Several old roads are evident on the landscape.</p>	<p>1.a moderate                      1.b moderate                      1.c moderate</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities are uncommon, making opportunities to feel alone possible in much of the area especially when away from roads and trails. Several motorized dispersed camping corridors on the south side of the area reduce opportunities to experience solitude (motorized sights and sounds). Two non-motorized system trails are within the area. Several power lines and a weather station along the area edges can be seen from within the polygon. There are established fuelwood gathering areas.</p> <p>Some high-quality opportunities to engage in primitive and unconfined recreation exist in the area including hiking, hunting, and horseback riding. Within the inventoried roadless area, opportunities for primitive recreation tend to be higher quality as fewer activities and signs of civilization are present.</p>	<p>2.a moderate                      2.b moderate</p>
Unique Features	<p>There are no known regionally or nationally unique or outstanding qualities or features present in this area.</p>	<p>3.a no                      3.b no                      3.c no                      3.d no                      3.e no</p>
Manageability	<p>P84a is the non-inventoried roadless area portion of polygon 84. The presence and extent of other uses and/or considerations (e.g., shape or configuration) occurs throughout most of the area, making it difficult to manage the area to preserve its wilderness characteristics. Other uses and considerations include cherry stem roads in the south. Finally, motorized and mechanized management of associated allotments is authorized for range permittees.</p>	<p>4.a low</p>

**P84B – 4,652.05 acres – Overall Determination of Wilderness Characteristics: High**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species along the roads. Plant dominance types include mixed-conifer, ponderosa pine, scrub oak, and some aspen.</p> <p>The area has an elk calving area and elk summer and winter range. Northern goshawk is present in the north. Vegetation does not appear natural in isolated or scattered spots due to concentration of vegetation treatments in the southwest. Most recent thinning has occurred near the southern boundary in the late 1980s and early 1990s, leaving stumps and other signs of disturbance.</p> <p>Prevalence of improvements is overall low throughout the area. Improvements include tanks, fences, troughs, pump jacks, water developments, iron gate, and an OHV camping area. Several old roads are evident on the landscape.</p>	<p>1.a moderate 1.b moderate 1.c moderate</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities are uncommon, making opportunities to feel alone possible in much of the area especially when away from roads and trails. Several motorized dispersed camping corridors on the south side of the area reduce opportunities to experience solitude (motorized sights and sounds). Two non-motorized system trails are within the area. Several power lines and a weather station along the area edges can be seen from within the polygon.</p> <p>Some high-quality opportunities to engage in primitive and unconfined recreation exist in the area including hiking, hunting, and horseback riding. Within the inventoried roadless area, opportunities for primitive recreation tend to be higher quality as fewer activities and signs of civilization are present.</p>	<p>2.a moderate 2.b moderate</p>
Unique Features	<p>There are no known regionally or nationally unique or outstanding qualities or features present in this area.</p>	<p>3.a no 3.b no 3.c no 3.d no 3.e no</p>
Manageability	<p>P84b is the inventoried roadless area portion of polygon 84. It has few other uses and considerations, making it possible to manage the area to preserve wilderness characteristics.</p>	<p>4.a high</p>



**P85A – 4,585.51 acres – Overall Determination of Wilderness Characteristics: No**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species in disturbed areas, especially along roads. Plant dominance types include mixed-conifer, ponderosa pine and some spruce-fir in the higher elevations. Common forest animals can be found in the area as well as northern goshawk in the north, American water shrew (Regional Forester sensitive species), Holy Ghost ipomopsis (endangered and endemic to the Holy Ghost Canyon), three known reaches with pure Rio Grande cutthroat trout (Regional Forester sensitive species), and elk summer range.</p> <p>The extent to which the area reflects ecological conditions without human intervention is low due to obvious signs of human intervention associated with the Santa Lina fire in the southeastern portion of the polygon.</p> <p>Prevalence of improvements is overall high throughout the area and includes system trails, a road, fire lines, and recreation residences that are adjacent to the polygon, but very visible.</p>	<p>1.a moderate 1.b low 1.c low</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities or presence is common and little opportunity of feeling alone can be experienced in the area. Opportunities for solitude are greater (though still low) in the southwestern portion of the polygon, and fewer in the north due to proximity to roads, nearby trail use, private land, and activities related to recreation residence use. Signs of civilization are apparent from the tops of ridges and further affect the feeling of being remote and alone. There are a few opportunities to engage in primitive and unconfined recreation (hiking and hunting), but they tend to be of low quality due to existing uses and roads.</p>	<p>2.a low 2.b low</p>
Unique Features	<p>Several unique features are identified for this area including rare plant or animal communities, cultural and historic resources, and high-quality water resources. The endangered, endemic Holy Ghost ipomopsis in in the area and three known reaches with pure Rio Grande cutthroat trout make this area unique.</p> <p>There has been a low level of survey for historic and cultural resources, but significant historic resources along the margin of the area and high use along margins by historic and modern communities make significance likely. Pecos watershed is considered regionally or nationally important due to its value as habitat for the pure Rio Grande cutthroat trout and as a part of the municipal water supply for Las Vegas.</p>	<p>3.a yes 3.b no 3.c yes 3.d no 3.e yes</p>
Manageability	<p>The presence and extent of other uses and management considerations in the area is pervasive, making it impossible to manage the majority of the area to preserve wilderness characteristics. Of particular concern is the shape and configuration of the area. The polygon has several thin peninsulas with cherry stem roads. Land ownership is Federal, State, and private along the river. The area is a part of a wildland-urban interface where fire would not likely be allowed to play its natural role because of the structures and communities present. The area is an inventoried roadless area.</p>	<p>4.a no</p>

**P85B – 21,849.36 acres – Overall Determination of Wilderness Characteristics: High**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species in disturbed areas. Plant dominance types include mixed conifer, ponderosa pine, pinyon juniper in lower elevation, and some aspen. Common forest animal species are present, plus the American peregrine falcon, and Rio Grande cutthroat trout in Dalton Creek, Indian Creek and Doctor Creek. There is a Mexican spotted owl protected activity center touching the eastern edge and Mexican spotted owl critical habitat in the middle of the polygon.</p> <p>Vegetation appears natural throughout the area.</p> <p>Prevalence of improvements is overall low throughout the area and includes one system trail and several closed roads in the north that are still evident on the landscape. There are no range developments. A lookout tower with metal flashing just outside the polygon is visible from within the polygon.</p>	1.a moderate 1.b high 1.c moderate
Solitude or Primitive or Unconfined Recreation	<p>Opportunities to experience solitude can be found throughout much of the area, especially when away from roads and motorized sounds. Human activities are generally rare and a feeling of being alone or remote from civilization is possible; however, when visitors are on ridges, they can see signs of civilization outside the polygon.</p> <p>High-quality primitive recreation opportunities like hiking, hunting, and backpacking can also be experienced in the area. The terrain and lack of amenities provide a high level of challenge or risk for visitors.</p>	2.a high 2.b high
Unique Features	<p>Several unique features are identified for this area including rare plant or animal communities, cultural and historic resources, and high-quality water resources. Of note, there are three reaches with pure Rio Grande cutthroat trout (a species of conservation concern and Regional Forester sensitive species) present.</p> <p>There has been a low level of survey for historic and cultural resources, but significant historic resources along the margin of the area and high use along margins by historic and modern communities make significance likely.</p> <p>Pecos watershed is considered regionally or nationally important due to its value as habitat for the pure Rio Grande cutthroat trout</p>	3.a yes 3.b no 3.c yes 3.d no 3.e yes
Manageability	<p>Presence and extent of other uses and management considerations affects isolated spots and makes management to preserve the area's wilderness characteristics possible throughout the area. The entire area is an inventoried roadless area with few other uses or considerations, though there are small areas of adjacent private land. No active mining claims (as of 2019) and no range improvements in the area, but there is a proposed exploratory drilling project on an old mining site on the eastern boundary of the polygon.</p>	4.a high

P85C – 29,022.43 acres – Overall Determination of Wilderness Characteristics: No

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural in some areas, with noticeable presence of invasive species commonly throughout (e.g., Siberian elm), especially along roads (e.g., National Forest System Road 375). Plant dominance types include ponderosa pine, mixed-conifer, pinyon juniper in lower elevations, and some aspen in higher elevations. Common forest species are present in the area as well as four Mexican spotted owl protected activity centers, Rio Grande cutthroat trout, and peregrine falcon.</p> <p>The extent to which the area reflects ecological conditions without human intervention is low due to Christmas tree cutting, firewood cutting, thinning, and prescribed burning. Stumps are evident throughout. The presence and appearance of improvements affects the apparent naturalness of the area. Prevalence of improvements in this polygon is very high and there are very few spots where improvements are absent or unseen. Improvements include a dense network of old roads, trails, water developments, and range fence.</p>	1.a low 1.b low 1.c no
Solitude or Primitive or Unconfined Recreation	<p>Human activities or presence is common and little opportunity of feeling alone can be experienced in the area. There are two motorized camping corridors around Dalton and La Cueva and additional heavy dispersed recreation around trailheads, both of which limit opportunities to feel alone or remote from civilization.</p> <p>There are few opportunities to engage in primitive and unconfined recreation and existing opportunities are generally of poor quality. Some primitive opportunities include hunting and hiking. There is some opportunity for challenge and risk, but visitors quickly encounter roads and other developments that inhibit opportunities for unconfined recreation.</p>	2.a low 2.b low
Unique Features	<p>Two unique features are identified for this area including rare plant or animal communities and cultural and historic resources. The area has critical habitat for Rio Grande cutthroat trout, a Regional Forester sensitive species.</p> <p>There has been a low level of survey for historic and cultural resources, but significant historic resources along the margin of the area and high use along margins by historic and modern communities make significance likely.</p>	3.a yes 3.b no 3.c yes 3.d no 3.e no
Manageability	<p>The presence and extent of other uses and management considerations in the area is pervasive, making it impossible to manage the majority of the area to preserve wilderness characteristics. Of note are private land inholdings, private land in the southern and eastern portions, cherry stem roads, a signed NEPA decision (La Cueva) for thinning, and the presence of a wildland-urban interface throughout. Additionally, motorized and mechanized management of associated allotments is authorized for range permittees.</p>	4.a no

**P85D – 3,117.12 acres – Overall Determination of Wilderness Characteristics: Moderate**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species (Siberian elm, knapweed, and Dalmatian toadflax) along roads. Plant dominance types include ponderosa pine and mixed-conifer to the east, and pinyon juniper to the west. Turkey, deer, elk, mountain lion, bear, and Mexican spotted owls can be found in the area.</p> <p>Vegetation does not appear natural in isolated or scattered spots due the presence of a fuel break (2000s), with some stumps visible in the affected area. Prevalence of improvements is overall low but includes a network of trails all along Atalaya Mountain as well as user-created trails from mountain bike use.</p>	<p>1.a moderate                      1.b moderate                      1.c moderate</p>
Solitude or Primitive or Unconfined Recreation	<p>There is little opportunity to feel alone in much of this polygon as human activities and presence are common and signs of civilization are pervasive. The polygon is near a large urban population, resulting in views of the city from most of the polygon as well as heavy use (e.g., hiking, mountain biking, by St. John's College) throughout the Atalaya trail system.</p> <p>There are some opportunities for high-quality primitive recreation opportunities including hiking, hunting, camping, and wildlife viewing.</p>	<p>2.a low                      2.b moderate</p>
Unique Features	<p>Cultural resources are identified as unique features of regional or national significance in the area. Low level of survey has been completed, but there are significant historic resources along the margin of the area and high use along margins by historic and modern communities.</p>	<p>3.a no                      3.b no                      3.c yes,                      3.d no                      3.e no</p>
Manageability	<p>The presence and extent of other uses and management considerations in the area is scattered and makes management to preserve the area's wilderness characteristics possible in much of the area. However, some management challenges exist. This polygon has some wildland-urban interface in the south.</p>	<p>4.a moderate</p>

P85E – 4,577.09 acres – Overall Determination of Wilderness Characteristics: No

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural. Nonnative species are present in disturbed areas, but are in low numbers and generally not apparent on the landscape. Plant dominance types include ponderosa pine, pinyon juniper and deciduous mixed-conifer in the lower elevations, and spruce-fir, white pine, and aspen in the higher elevations. There are many common forest animal species in the area as well as a Mexican spotted owl protected activity center on the eastern edge and a sensitive shrew species.</p> <p>Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention. However, watershed restoration treatments in the closed watershed area reflect modern human intervention on the landscape. Within the closed watershed area, there are stumps, piling, thinning (2000s), and mastication lines on ridgelines along the watershed and all represent departures from natural conditions.</p> <p>The presence and appearance of improvement in the area is rare or scattered and does not detract from apparent naturalness. No roads or range improvements are in the area, though there are several system non-motorized trails that access the area.</p>	<p>1. a high                      1.b low                      1.c high</p>
Solitude or Primitive or Unconfined Recreation	<p>Opportunities to experience solitude can be found throughout much of the area outside the watershed closure. No opportunities exist for solitude within the closure, as no public use is allowed. On system trails, visitors are likely to encounter other visitors, but unlikely to see people when away from trails.</p> <p>High-quality primitive recreation opportunities like cross-country hiking, horseback riding, and wildlife and aspen viewing can be experienced in the area. Within the closure area, no primitive recreation can be experienced.</p>	<p>2. a no                      2. b no</p>
Unique Features	<p>Several unique features have been identified in this area including regionally important viewsheds (aspen viewing area); cultural and historic resources (Civilian Conservation Corps features in the north, and longtime traditional use of the Santa Fe River corridor; and important watershed features (Santa Fe watershed in the south and Tesuque Creek headwaters in the north). The Santa Fe River contributes half the municipal water for the city of Santa Fe.</p>	<p>3.a no                      3.b yes, aspen (north)                      3.c yes (south), CCC features in the north.                      3.d no                      3.e yes, Santa Fe watershed (south)                      3.e north, Tesuque Creek headwaters</p>
Manageability	<p>The presence and extent of other uses and management considerations is pervasive, making it impossible to manage the area to preserve its wilderness characteristics. Most significantly, there is a signed NEPA decision that closes the watershed to public use.</p>	<p>4.a no</p>

P86A – 1,122.08 acres – Overall Determination of Wilderness Characteristics: High

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area, with some noticeable presence of invasive species in disturbed areas. Plant dominance types include mixed conifer, aspen, some ponderosa pine in the east, and a small amount of spruce-fir near the wilderness in the higher elevations. There are no mapped invasive plants, but weeds exist along roads and other disturbed areas. <i>Delphinium sapellonis</i> (Sapello canyon larkspur) is on the New Mexico rare plant list and is found in the area. Common forest animal species are present as well as northern goshawk. Mexican spotted owl critical habitat and elk winter and summer range are identified for this area.</p> <p>Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention.</p> <p>Apparent naturalness is also affected by the presence and appearance of improvements in the area. Improvements in the area are rare or scattered and do not detract from apparent naturalness. Improvements include several mines on the eastern edge of the polygon and a non-motorized trail that goes into the Pecos Wilderness.</p>	1.a moderate 1.b high 1.c high
Solitude or Primitive or Unconfined Recreation	<p>Human activities are uncommon, making opportunities to feel alone possible in much of the area, especially when away from private property or houses. When near private land, sounds of dogs barking, woodcutting, and other motorized uses are present. Opportunities for solitude increase closer to the wilderness area and away from roads and private lands.</p> <p>There are abundant opportunities to engage in high-quality primitive and unconfined recreation. Some primitive recreation opportunities include horseback riding, fishing, backpacking, hiking, and hunting. Opportunities to experience challenge and risk are possible, especially closer to the wilderness area.</p>	2.a moderate 2.b high
Unique Features	<p>There are no known regionally or nationally unique or outstanding qualities or features present in this area.</p>	3.a no 3.b no 3.c unknown/NO 3.d no 3.e no
Manageability	<p>Presence and extent of other uses and management considerations affects isolated spots and makes management to preserve the area's wilderness characteristics possible throughout the area. Traditional uses associated with the Santa Gertrudis de lo de Mora Land Grant are recognized in the area. Adjacency to wilderness and steep terrain supports management to preserve wilderness characteristics.</p>	4.a high

P86B – 655.19 acres – Overall Determination of Wilderness Characteristics: Moderate

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species in disturbed areas. Plant dominance types include mixed conifer, aspen, some ponderosa pine in the east, and a small amount of spruce-fir near the wilderness in the higher elevations. There are no mapped invasive plants, but weeds exist along roads and other disturbed areas. <i>Delphinium sapellonis</i> (Sapello canyon larkspur) is on the New Mexico rare plant list and is found in the area. Common forest animal species are present as well as northern goshawk. Mexican spotted owl critical habitat and elk winter and summer range are identified for this area.</p> <p>Vegetation does not appear natural in isolated or scattered spots due to current and past uses including some thinning that has left some stumps in the area.</p> <p>Apparent naturalness is also affected by the presence and appearance of improvements in the area. Improvements in the area are rare or scattered and do not detract from apparent naturalness. Improvements are limited to an old road near the drainage in the southern part of the polygon.</p>	<p>1.a moderate                      1.b moderate                      1.c high</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities are uncommon, making opportunities to feel alone possible in much of the area, especially when away from private property or houses. When near private land, sounds of dogs barking, woodcutting, and other motorized uses are present. Opportunities for solitude increase closer to the wilderness area and away from roads and private lands.</p> <p>There are abundant opportunities to engage in high-quality primitive and unconfined recreation. Some primitive recreation opportunities include horseback riding, fishing, backpacking, hiking, and hunting. Opportunity to experience challenge and risk possible, especially closer to the wilderness area.</p>	<p>2.a moderate                      2.b high</p>
Unique Features	<p>There are no known regionally or nationally unique or outstanding qualities or features present in this area.</p>	<p>3.a no                      3.b no                      3.c unknown/no                      3.d no                      3.e no</p>
Manageability	<p>Presence and extent of other uses and management considerations is scattered making management to preserve the area's wilderness characteristics possible throughout much of the area. Traditional uses associated with the Santa Gertrudis de lo de Mora land grant are recognized in the area. Adjacency to wilderness supports management to preserve wilderness characteristics. Private property between this polygon and Pecos Wilderness can only be accessed through this polygon, which would be challenging.</p>	<p>4.a moderate</p>

P87 – 236.33 acres – Overall Determination of Wilderness Characteristics: High

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species in disturbed areas. Plant dominance types include mixed conifer, aspen, some ponderosa pine in the east, and a small amount of spruce-fir near the wilderness in the higher elevations. There are no mapped invasive plants, but weeds exist along roads and other disturbed areas. <i>Delphinium sapellonis</i> (Sapello canyon larkspur) is on the New Mexico rare plant list and is found in the area. Common forest animal species are present as well as northern goshawk. Mexican spotted owl critical habitat and elk winter and summer range are identified for this area. Vegetation does not appear natural in isolated or scattered spots due to current and past uses including some thinning that has left some stumps in the area. Apparent naturalness is also affected by the presence and appearance of improvements in the area. There are no noted improvements in the area.</p>	<p>1.a moderate                      1.b moderate                      1.c high</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities are uncommon, making opportunities to feel alone possible in much of the area, especially when away from private property or houses. When in proximity to private land, sounds of dogs barking, woodcutting and other motorized uses are present. Opportunities for solitude increase closer to the wilderness area and away from roads and private lands. There are abundant opportunities to engage in high-quality primitive and unconfined recreation. Some primitive recreation opportunities include horseback riding, fishing, backpacking, hiking, and hunting. Opportunity to experience challenge and risk is possible, especially closer to the wilderness area.</p>	<p>2.a moderate                      2.b high</p>
Unique Features	<p>There are no known regionally or nationally unique or outstanding qualities or features present in this area.</p>	<p>3.a no                      3.b no                      3.c unknown/no                      3.d no                      3.e no</p>
Manageability	<p>Presence and extent of other uses and management considerations affects isolated spots and makes management to preserve the area's wilderness characteristics possible throughout the area. Traditional uses associated with the Santa Gertrudis de lo de Mora land grant are recognized in the area. Adjacency to wilderness supports management to preserve wilderness characteristics.</p>	<p>4.a high</p>



**P88A – 925.12 acres – Overall Determination of Wilderness Characteristics: High**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species in disturbed areas. Plant dominance types include mixed-conifer deciduous, spruce fir, mixed grass/forb meadows, ponderosa pine, scrub oak, and sparsely vegetated rocky areas. Many common forest animal species are within the area. Rio Grande cutthroat trout are present.</p> <p>Vegetation does not appear natural in isolated or scattered spots due to current and past uses including Christmas tree harvest, firewood cutting, and evidence of past fire and fire suppression activities.</p> <p>Prevalence of improvements is overall low throughout the area. Improvements include some roads evident on the landscape, system and user created trails in the southern area. No fence or other range improvements present in the area.</p>	<p>1.a moderate 1.b moderate 1.c moderate</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities are uncommon, making opportunities to feel alone possible in much of the area, especially in the west, less so in the eastern portion of the area.</p> <p>There are abundant opportunities to engage in high-quality primitive and unconfined recreation. Some primitive recreation opportunities include hiking, hunting, fishing, wildflower viewing, horseback riding, and nature viewing. The west half of the area has high-quality primitive recreation (p88a) but diminishes as you go east (p88b). The area is steep and rugged with elevations over 10,000 feet, providing opportunity for risk and challenge.</p>	<p>2.a moderate 2.b high</p>
Unique Features	<p>Several unique features are identified for this area including rare plant or animal communities (Rio Grande cutthroat trout), iconic landscape features (high mountain lakes), and high-quality water resources (due to habitat for Rio Grande cutthroat trout and dependence of agriculture on water resources).</p>	<p>3.a yes, Rio Grande cutthroat 3.b yes due to high mtn lakes 3.c unknown/no 3.d no 3.e yes, due to Rio Grande cutthroat and dependence of agriculture on this water</p>
Manageability	<p>Presence and extent of other uses and management considerations affects isolated spots and makes management to preserve the area's wilderness characteristics possible throughout the area. The area is adjacent to designated wilderness and could be managed to preserve wilderness characteristics.</p> <p>The shape of the area is not dissected with narrow areas or cherry stem roads that make management difficult. There is an inventoried roadless area in place in the north half that also supports preservation wilderness characteristics. Further, rugged and steep terrain allows for natural barriers to motorized access.</p>	<p>4.a high</p>

**P88B – 2,151.14 acres – Overall Determination of Wilderness Characteristics: Low**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species in disturbed areas. Plant dominance types include mixed-conifer deciduous, spruce fir, mixed grass and forb meadows, ponderosa pine, scrub oak, and sparsely vegetated rocky areas. Many common forest animal species are within the area. Rio Grande cutthroat trout are present. Vegetation does not appear natural in isolated or scattered spots due to current and past uses including Christmas tree harvest, firewood cutting, and evidence of past fire and fire suppression activities. Prevalence of improvements is overall low throughout the area. Improvements include some roads evident on the landscape and system and user-created trails in the southern area. No fence or other range improvements are present in the area.	1.a moderate 1.b moderate 1.c moderate
Solitude or Primitive or Unconfined Recreation	Human activities are uncommon, making opportunities to feel alone possible in much of the area, especially in the west, less so in the eastern portion of the area. There are abundant opportunities to engage in high-quality primitive and unconfined recreation. Some primitive recreation opportunities include hiking, hunting, fishing, wildflower viewing, horseback riding, and nature viewing. The west half of the area has high-quality primitive recreation (p88a), but diminishes as you go east (p88b). The area is steep and rugged with elevations over 10,000 feet, providing opportunity for risk and challenge.	2.a moderate 2.b high
Unique Features	Several unique features are identified for this area including rare plant or animal communities (Rio Grande Cutthroat), iconic landscape features (high mountain lakes), and high-quality water resources (due to habitat for Rio Grande cutthroat and dependence of agriculture on water resources).	3.a yes, Rio Grande cutthroat 3.b yes due to high mtn lakes 3.c unknown/no 3.d no 3.e yes, due to Rio Grande cutthroat and dependence of agriculture on this water
Manageability	The presence and extent of other uses and/or considerations (e.g., shape or configuration) occurs throughout most of the area making it difficult to manage the area to preserve its wilderness characteristics. Other considerations include adjacent private land, private land inholding, cherry stem roads, a popular fuelwood gathering area, use of the area for traditional uses, and established ATV use.	4.a low

**P89A – 3,421.01 acres – Overall Determination of Wilderness Characteristics: Moderate**

Criteria Category	Description	Determination of Wilderness Characteristics
Apparent Naturalness	<p>The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species in disturbed areas. Spruce-fir is present at higher elevations, aspen in the middle elevations, and ponderosa pine in the lower elevations of the east slopes. Open meadows and oak scrub are present to a lesser degree throughout.</p> <p>Common forest species can be found in the area as well as peregrine falcon (Regional Forester sensitive species) in the southwest. The area has an elk calving area and elk summer and winter range.</p> <p>Vegetation appears natural with minimal evidence of past human interventions on ecological processes. Prevalence of improvements is overall low throughout the area, but includes range fence, trails, and minimal roads.</p>	<p>1.a moderate                      1.b high                      1.c moderate</p>
Solitude or Primitive or Unconfined Recreation	<p>Human activities are uncommon, making opportunities to feel alone possible in much of the area. There is some trail use by equestrians and hikers especially along the eastern boundary, but solitude is possible when away from trails.</p> <p>There are abundant opportunities to engage in high-quality primitive and unconfined recreation. Some primitive recreation opportunities include hunting, hiking, backpacking, and horseback riding.</p>	<p>2.a-moderate                      2.b-high</p>
Unique Features	<p>Cultural and historic resources are considered unique features in this area. A moderate amount of survey indicates a strong presence of Jicarilla Apache use in the area both historically and during the modern period. This is concurred by consultation with the Tribe. Walker Flats Falls is considered a regionally significant unique landscape feature in the area. High-quality water resources are identified in this area as a unique feature due to the presence of high-quality habitat for the Rio Grande cutthroat trout.</p>	<p>3.a no                      3.b yes for (a), Walker flats falls regionally important.                      3.c yes                      3.d no                      3.e yes, cutthroat</p>
Manageability	<p>The presence and extent of other uses and management considerations in the area is scattered and makes management to preserve the area's wilderness characteristics possible throughout much of the area. The area is an inventoried roadless area and adjacent to designated wilderness, making management to preserve the area wilderness characteristics possible Traditional uses associated with the Santa Gertrudis de lo de Mora land grant may occur in the area.</p>	<p>4.a moderate</p>

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Appendix J. Documentation of Wilderness Recommendation Process*

***P89B – 5,657.60 acres – Overall Determination of Wilderness Characteristics: No***

<b>Criteria Category</b>	<b>Description</b>	<b>Determination of Wilderness Characteristics</b>
Apparent Naturalness	The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species (bull thistle) in disturbed areas or along roads. The extent to which the area reflects ecological conditions without human intervention is low due to obvious signs of past vegetation treatments including thinning in the late 1980s and 2013, prescribed burning, piling, firewood collecting, and Christmas tree harvesting. Obvious evidence of human activity related to improvements is prevalent throughout the area. Improvements include a dense network of old roads and a variety of range improvements (corral, fencing, cattle guard, and drinkers).	1.a moderate 1.b low 1.c no
Solitude or Primitive or Unconfined Recreation	Human activity or presence is unavoidable, and signs of civilization are pervasive throughout the area due to high use of motorized dispersed camping corridors on cherry stem roads in the area, and heavy adjacent and cherry stem road use. There is historic and ongoing traditional use in the area. There are a few opportunities to engage in primitive and unconfined recreation (hiking and hunting), but they tend to be of low quality due to existing uses and roads.	2.a no 2.b low
Unique Features	Cultural and historic resources are considered unique features in this area. A moderate amount of survey indicates a strong presence of Jicarilla Apache use in the area both historically and during the modern period. This is concurred by consultation with the Tribe.	3.a no 3.b no 3.c yes 3.d no 3.e no
Manageability	The presence and extent of other uses and/or management considerations in the area is pervasive, making it impossible to manage the majority of the area to preserve wilderness characteristics. Some considerations include many cherry stem roads that dissect the area, presence of wildland-urban interface, and many old roads that continue to receive use.	4.a no

**P89C – 945 acres – Overall Determination of Wilderness Characteristics: High**

<b>Criteria Category</b>	<b>Description</b>	<b>Determination of Wilderness Characteristics</b>
Apparent Naturalness	<p>The composition of plant and animal communities appears natural with little evidence of nonnative species. Spruce-fir is present at higher elevations, aspen in the middle elevations, and ponderosa pine in the lower elevations of the east slopes. Open meadows and oak scrub are present to a lesser degree throughout.</p> <p>Common forest species can be found in the area as well as peregrine falcon (Regional Forester sensitive species) in the southwest. The area has an elk calving area and elk summer and winter range.</p> <p>Vegetation appears natural with minimal evidence of past human interventions on ecological processes. Prevalence of improvements is rare or scattered as the area.</p>	1.a high 1.b high 1.c high
Solitude or Primitive or Unconfined Recreation	<p>There is a common or significant feeling of being alone and finding solitude in much of the area.</p> <p>There are abundant opportunities to engage in high-quality primitive and unconfined recreation. Some primitive recreation opportunities include hunting, hiking, backpacking, and horseback riding.</p>	2.a-high 2.b-high
Unique Features	<p>Cultural and historic resources are considered unique features in this area. A moderate amount of survey indicates a strong presence of Jicarilla Apache use in the area both historically and during the modern period. This is concurred by consultation with the Tribe. Middle Fork Rio de la Casa Falls is considered a regionally significant unique landscape feature in the area. High-quality water resources are identified in this area as a unique feature due to the presence of high-quality habitat for the Rio Grande cutthroat trout.</p>	3.a no 3.b yes for (a), Walker Flats Falls regionally important. 3.c yes 3.d no 3.e yes, cutthroat
Manageability	<p>The presence and extent of other uses and management considerations in the area occurs in isolated spots and makes management to preserve the area's wilderness characteristics possible throughout much of the area. The area is an inventoried roadless area and adjacent to designated wilderness, making management to preserve the area's wilderness characteristics possible.</p>	4.a high

### Evaluation Maps

The evaluation maps show the overall wilderness characteristics determination for each area evaluated (Figure J-9-west and Figure J-9-east). Designated Wilderness on the Santa Fe NF and adjacent land management agencies (National Park Service, Bureau of Land Management) are also shown.

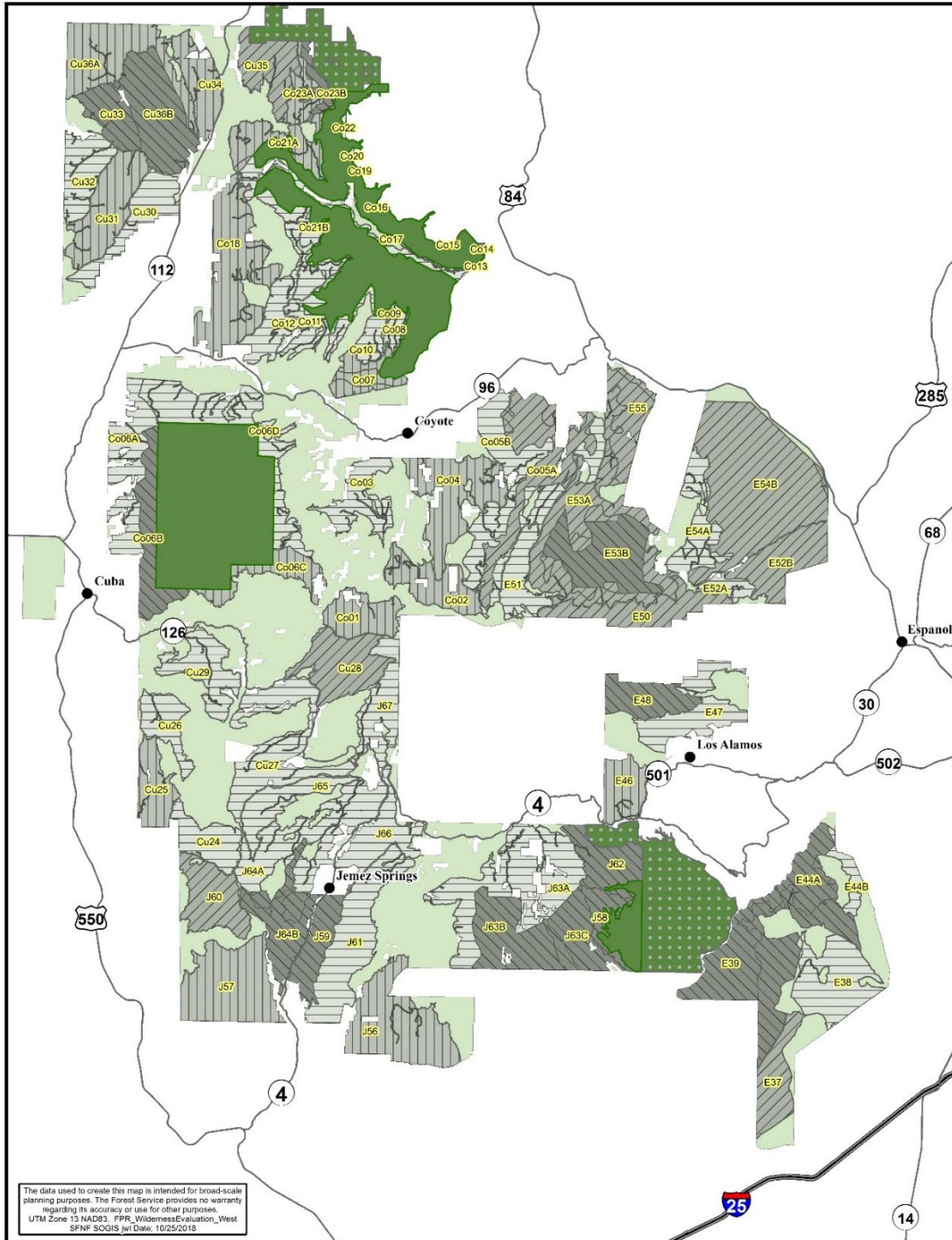


Figure J-9-west. Final evaluation map for the western half of the Santa Fe NF, from Cuba to Española. For legend see Figure J-9-east.



## **Step 3: Analysis of Recommended Wilderness by Alternative**

Santa Fe NF staff developed criteria for selecting recommended wilderness areas for each alternative. These areas are analyzed as part of the environmental impact statement. Not all lands included in the inventory or evaluation are required to be carried forward to an alternative.

In addition to including the environmental effects analysis in the recommended wilderness section of the final environmental impact statement, the Forest Service Handbook 1909.12 Chap. 70 requires that each area included in one or more alternatives must identify the following items:

1. the name of the area and the number of acres to be considered;
2. the location and a summarized description of a recommended boundary for each area;
3. a brief description of the general geography, topography, and vegetation of the recommended area;
4. a brief description of the current uses and management of the area;
5. a description of the area's wilderness characteristics and the ability of the national forest to protect and manage the area to preserve its wilderness characteristics;
6. a brief summary of the factors considered and the process used in evaluating the area and developing the alternatives; and
7. a brief summary of the ecological and social characteristics that would provide the basis for the area's suitability for inclusion in the National Wilderness Preservation System.

Forest staff considered several factors in determining the recommended wilderness areas in each alternative. Areas were selected based upon criteria developed that was appropriate for the theme of each alternative. The information from the wilderness evaluation (see above) was often a part of these criteria, but not the sole criterion. The following sections outline the criteria for selecting areas for wilderness recommendation in each of the alternatives, as well as the required information for each included area.

### **Alternative 1**

The no-action alternative is based on the recommendations in the 1987 Forest Plan. Alternative 1 recommends 1,853 acres as recommended wilderness as a continuation of recommendations that were never acted upon in the current plan. The differences from the 1987 Forest Plan occur in P88 (Enchanted Lakes) due to acquisition of the southern half of the P88 (Enchanted Lakes) polygon since the existing forest plan was signed. In the 1987 Forest Plan recommendation, slightly more acres in the original polygon were recommended; however, during the evaluation phase in 2017, the eastern half of this polygon was not determined to have high wilderness characteristics due to many old roads and the presence of invasive species creating difficulties for manageability. Therefore, this portion is not recommended for wilderness in this alternative (Figure J-10).

(For more information on the original recommendations, see 4-149 in the final 1987 Forest Plan EIS.)



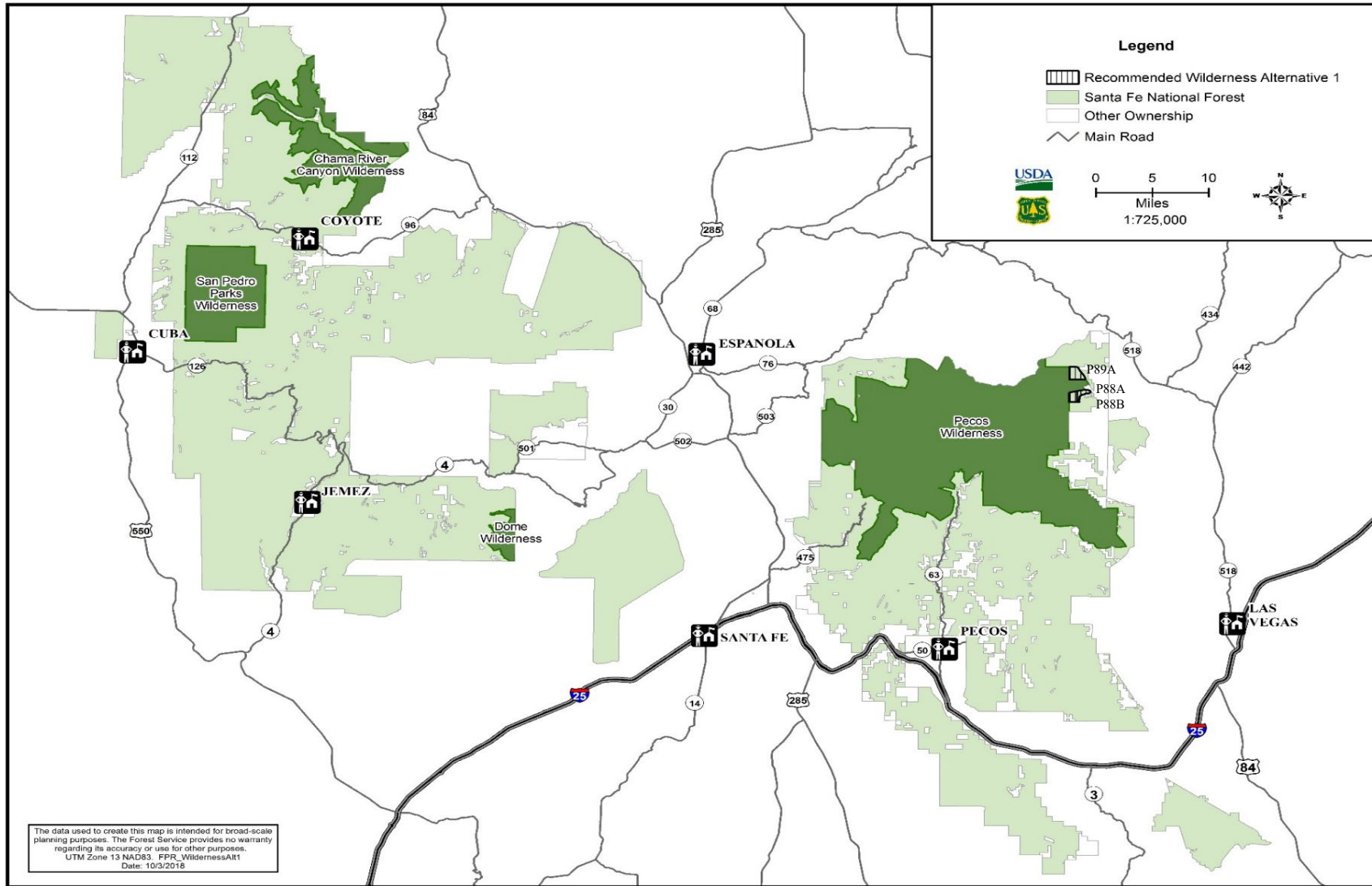


Figure J-10. Recommended wilderness areas in alternative 1

## P88A and P88B, Enchanted Lakes Recommended Wilderness Area

This recommended wilderness is located within an inventoried roadless area.

### Enchanted Lakes recommended wilderness area

Factors	Description
1. Acres	907.77 acres
2. Summarized description of the recommended boundary	An irregularly shaped polygon. The polygon’s eastern boundary is the section 17 line running through the existing Enchanted Lakes Inventoried Roadless Area. The polygon includes portions of sections 16, 9, and 10, closely following the management area boundary. The western boundary is the Pecos Wilderness and the northern boundary is the Pecos Wilderness boundary below Pyramid Peak, ending at the eastern edge of section 17.
3. Brief description of the general geography, topography, and vegetation	Plant dominance types include mixed- conifer deciduous, spruce fir, mixed grass/forb meadows, ponderosa pine, scrub oak, and sparsely vegetated rocky areas. Many common forest animal species are within the area. Rio Grande cutthroat trout are present. The topography is steep and high-elevation lakes are present.
4. Current uses and management	The dominant recreation opportunity spectrum class is primitive. Management areas is B (Wildlife/Timber); H (Wilderness); L (Semi-Primitive Non-Motorized Recreation) Adjacent to the Pecos Wilderness and includes portions of an inventoried roadless area.
5. Description of the wilderness characteristics and the Forest’s ability to protect and manage the area to preserve its wilderness characteristics	<p><b>Natural quality:</b> The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species in disturbed areas. Vegetation does not appear natural in isolated or scattered spots due to current and past uses including Christmas tree harvest, firewood cutting, and evidence of past fire and fire suppression activities.</p> <p><b>Undeveloped quality:</b> Prevalence of infrastructure is overall low throughout the area. Developments include some roads evident on the landscape, system and user created trails in the southern area. No known fence or other range developments are present in the area.</p> <p><b>Unconfined and/or primitive recreation:</b> There are abundant opportunities to engage in high-quality primitive and unconfined recreation. Some primitive recreation opportunities include hiking, hunting, fishing, wildflower viewing, horseback riding, and nature viewing. The west half of the area has high-quality primitive recreation, but diminishes as the visitor goes east. The area is steep and rugged with elevations over 10,000 feet, providing opportunity for risk and challenge.</p> <p><b>Solitude:</b> Human activities are uncommon, making opportunities to feel alone possible in much of the area, especially in the west, less so in the eastern portion of the area.</p> <p><b>Other features of value:</b> Several unique features are identified for this area including rare plant or animal communities (Rio Grande Cutthroat, Pecos fleabane), iconic landscape features (high mountain lakes), and high-quality water resources (due to habitat for Rio Grande cutthroat and dependence of agriculture on water resources).</p> <p>Presence and extent of other uses and management considerations affects isolated spots and makes management to preserve the area’s wilderness characteristics possible throughout the area. The area is adjacent to designated wilderness and could be managed to preserve wilderness characteristics. The shape of the area is not dissected with narrow areas or cherry stem roads that make management difficult. An inventoried roadless area in the northern half also supports preservation of wilderness characteristics. Further, rugged and steep terrain allows for natural barriers to motorized access.</p>

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Factors	Description
6. Brief summary of the factors considered and the process used in evaluating the area and developing the alternatives	--Recommended wilderness in 1987 Forest Plan
7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p><i>Ecological characteristics</i> that provide the basis for suitability are:</p> <ul style="list-style-type: none"> <li>-- The majority of the area appears natural</li> <li>-- The area is mostly undeveloped with little infrastructure</li> <li>-- Outstanding landscape features (high elevation lakes)</li> </ul> <p><i>Social characteristics</i> that provide the basis for suitability:</p> <ul style="list-style-type: none"> <li>-- Solitude is present due to lack of roads and adjacency to wilderness</li> <li>-- There are high-quality opportunities for primitive and unconfined recreation, especially when combined with wilderness opportunities</li> </ul>

### P89C, Grace Tract Recommended Wilderness Area

This recommended wilderness is located within an inventoried roadless area and is adjacent to the Pecos Wilderness.

#### Grace Tract recommended wilderness area

Factors	Description
1. Acres	944.99 acres
2. Summarized description of the recommended boundary	This polygon follows the Grace Tract Inventoried Roadless Area boundary. The south and west boundaries are the Pecos Wilderness; the north boundary is the southern boundary of the Falls Inventoried Roadless Area. The eastern boundary is the existing inventoried roadless area boundary and cuts diagonally through section 4.
3. Brief description of the general geography, topography, and vegetation	Spruce-fir is present in higher elevations, aspen in the middle elevations, and ponderosa pine in the lower elevations of the east slopes. Open meadows and oak scrub are present to a lesser degree throughout. Common forest species can be found in the area as well as peregrine falcon (Regional Forester sensitive species) in the southwest. The area has an elk calving area and elk summer and winter range. Steep topography and unique landscape including a waterfall.
4. Current uses and management	The dominant recreation opportunity spectrum class is semi-primitive non-motorized Management area is L (semi-primitive non-motorized recreation) Adjacent to the Pecos Wilderness and includes an inventoried roadless area. Recommended wilderness in the 1987 Forest Plan.

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Factors	Description
5. Description of the wilderness characteristics and the Forest's ability to protect and manage the area to preserve its wilderness characteristics	<p><b>Natural quality:</b> The composition of plant and animal communities appears natural with little evidence of non-native species. Vegetation appears natural with minimal evidence of past human interventions on ecological processes.</p> <p><b>Undeveloped quality:</b> Prevalence of infrastructure is rare or scattered in the area.</p> <p><b>Unconfined and/or primitive recreation:</b> There are abundant opportunities to engage in high-quality primitive and unconfined recreation. Primitive recreation opportunities include hunting, hiking, backpacking, and horseback riding.</p> <p><b>Solitude:</b> There is a common or significant feeling of being alone and finding solitude in much of the area.</p> <p><b>Other features of value:</b> Cultural and historic resources are considered unique features in this area. A moderate amount of survey indicates a strong presence of Jicarilla Apache use in the area both historically and during the modern period. This is concurred by consultation with the Tribe. Middle Fork Rio de la Casa Falls is considered a regional significant unique landscape feature in the area. High-quality water resources are identified in this area as a unique feature due to the presence of high-quality habitat for the Rio Grande cutthroat trout. The presence and extent of other uses and management considerations in the area occurs in isolated spots and makes management to preserve the area's wilderness characteristics possible throughout much of the area. The area is an inventoried roadless area and adjacent to designated wilderness, making management to preserve the area wilderness characteristics possible.</p>
6. Brief summary of the factors considered and the process used in evaluating the area and developing the alternatives	-- Recommended in the 1987 Forest Plan
7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p><i>Ecological characteristics</i> that provide the basis for suitability:</p> <ul style="list-style-type: none"> <li>-- The majority of the area appears natural</li> <li>-- The area is mostly undeveloped with little infrastructure</li> <li>-- Outstanding landscape features (high elevation lakes)</li> </ul> <p><i>Social characteristics</i> that provide the basis for suitability:</p> <ul style="list-style-type: none"> <li>-- Solitude is present due to lack of roads and adjacency to wilderness</li> <li>-- There are high-quality opportunities for primitive and unconfined recreation</li> </ul>

## **Alternative 2**

The Santa Fe NF considered several factors in developing the recommended wilderness areas in alternative 2. The 25,868 acres were selected based upon consideration of the information within the wilderness evaluation, which indicated these areas had wilderness characteristics such as naturalness; undeveloped quality; outstanding opportunities for solitude or primitive and unconfined recreation; or other special features such as ecological, geological, or scientific, educational, scenic, or historical value. See Figure J-11 for a map of the recommended wilderness areas in alternative 2.

Alternative 2 focuses on ecological health that supports human uses of the forest. The selection of the 25,868 acres recommended for wilderness under this alternative were therefore considered in the context of the other multiple uses the forest is managing. These considerations were used in developing management area recommendations for National Forest System lands, of which 292,329 acres are already designated as wilderness. The areas were chosen for the following reasons:

- Very high wilderness characteristics were identified in the evaluation process. This could include a high degree of remoteness from sights and sounds of civilization, mostly undisturbed natural processes, high scenic values, a wide diversity of opportunities for non-motorized recreational experiences, and/or lack of developments such as roads, buildings or other facilities.
- There were no untenable tradeoffs identified in the analysis (major non-conforming uses, high need for restoration treatments). Non-conforming uses would include some existing uses such as popular for mountain biking, motorized access for range management or traditional and cultural practices, motorized trails, roads regularly used for administrative needs, recurring competitive events or lands special use permits that would require construction or mechanized transport/motorized equipment to maintain. High needs for restoration treatments would include large areas that would require motorized equipment to rehabilitate them to desired conditions for vegetation.
- Difficulty for motorized intrusions or encroachments due to terrain, vegetation elevation or location of the area
- Mostly undeveloped with few or no structures
- High manageability as wilderness, including ease of boundary management, lack of private land inholdings, or lack of current activities or issues that would make this type of management difficult. Some areas may have acres within the polygons that have been managed as wilderness under the 1987 Forest Plan, while others may be in part or wholly inventoried roadless areas. Others may be adjacent to existing wilderness with no roads separating the polygon from the wilderness itself.
- Support from stakeholders: comments received during open house and other methods support wilderness recommendations
- Enhances existing wilderness by providing adjacent, unroaded acreage that would improve opportunities for solitude, provide additional non-motorized recreation opportunities, add additional protection of wildlife habitat, watersheds and native vegetation, and/or provide scenic or other special features that would enhance the wilderness experience in the area.
- These areas fit into the broader landscape of the forest plan, which seeks to provide a diversity of management areas across the forest.

The remaining acres that were within the wilderness inventory and were not selected to be included under this alternative were determined to have conflicting uses that did not reflect considerations of multiple use the forest was striving for in this alternative or to lack sufficient wilderness characteristics, wildlife conservation values, or be of such a small size or not be in line with geographic features to extend designated wilderness. The map of recommended wilderness in alternative 2 follows (Figure J-11). For more information, see the recommended wilderness analysis in the environmental impact statement, section 3.18.1.

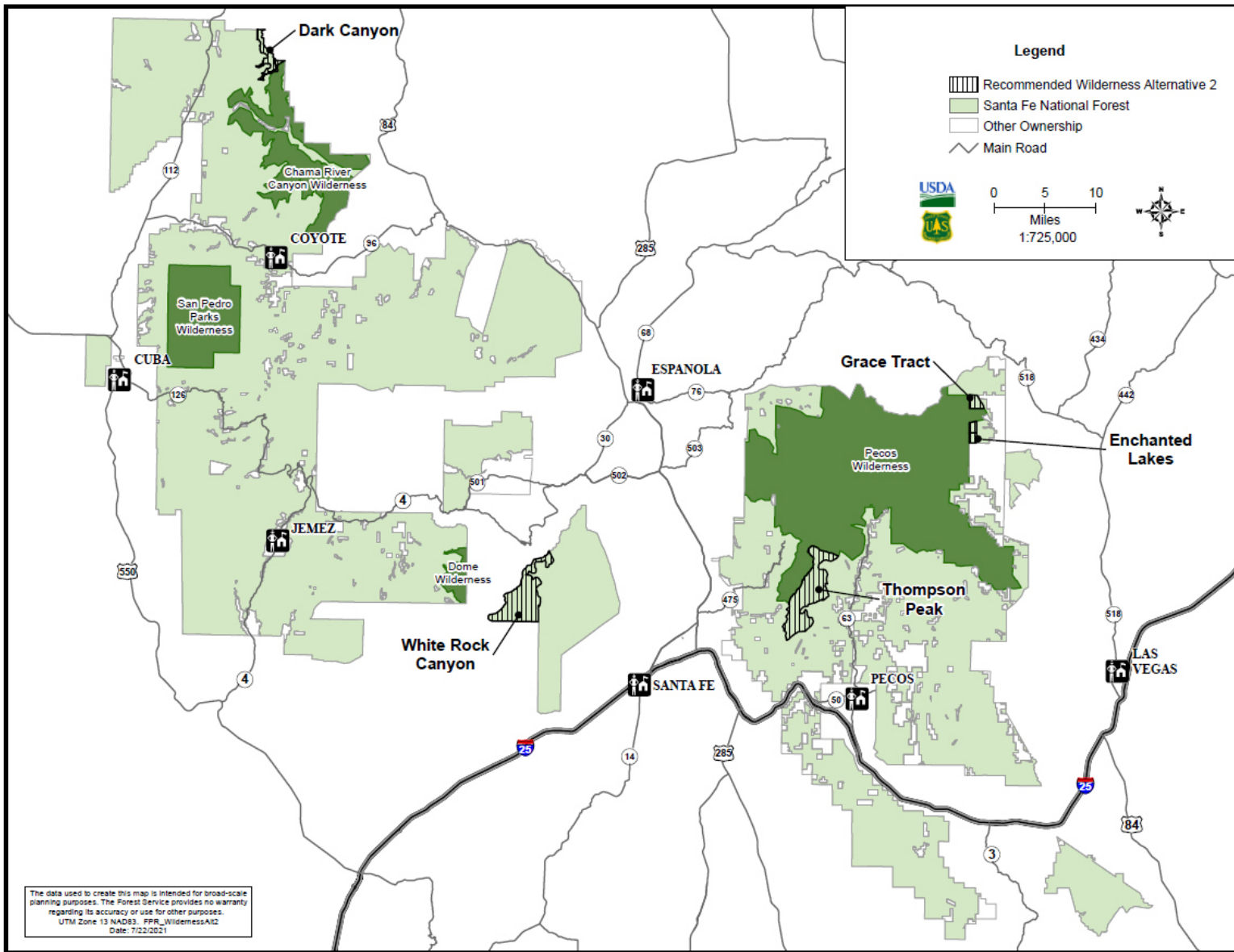


Figure J-11. Recommended wilderness areas in alternative 2

## Co23B, Dark Canyon Recommended Wilderness Area

This recommended wilderness is adjacent to the Chama River Canyon Wilderness, a Bureau of Land Management wilderness study area and is located within two inventoried roadless areas. Includes a portion of the Rio Chama Wild and Scenic River (wild classification).

### Dark Canyon recommended wilderness area

Factors	Description
1. Acres	2,217.69 acres
2. Summarized description of the recommended boundary	This is an irregularly shaped narrow polygon, following the boundary of two inventoried roadless areas (Chama Wild and Scenic River and Chama Wilderness Inventoried Roadless Areas). The northern and most of the eastern boundary follow the Bureau of Land Management wilderness study area (Rio Chama Wilderness Study Area) boundary and on the south, the Chama River Canyon Wilderness forms that boundary. To the west, the boundary is the same as the Coyote/Cuba Ranger District boundary, and fingers out to take in Dark and Mine Canyons.
3. Brief description of the general geography, topography, and vegetation	The topography is steep and rugged with dense vegetation. The dominant vegetation type is mixed conifer and Gambel oak with pockets of ponderosa pine and pinyon juniper in the southern portion of the area. Along with many common forest species, rare and sensitive species including those on the Regional Forester sensitive species list are bald eagle, otter, American peregrine falcon, Rio Grande chub, Rio Grande sucker, and northern goshawk. Three canyons incise the polygon.
4. Current uses and management	The polygon has several management areas, the most acreage being within the H/F (Wilderness and WSR), with portions of H (Wilderness), L (Semi-Primitive Non-Motorized Recreation), and R (Cultural Resources-Wildlife/Timber). The main recreation opportunity spectrum class is demi-primitive non-motorized. The area is also an inventoried roadless area. Part of the area is also the Rio Chama Wild and Scenic River (wild classification)
5. Description of the wilderness characteristics and the Forest’s ability to protect and manage the area to preserve its wilderness characteristics	<p><b>Natural quality:</b> The composition of plant and animal communities appears natural in most of the area. Dominant overstory plant species include ponderosa pine, mixed conifer, some oak scrub, pinyon juniper, big sagebrush, and sage flats.</p> <p><b>Undeveloped quality:</b> No range or other developments exist in the area.</p> <p><b>Unconfined and/or primitive recreation:</b> Some high-quality opportunities to engage in primitive and unconfined recreation exist in the area including hunting, shed hunting, hiking, rafting and enjoying beautiful vistas.</p> <p><b>Solitude:</b> Human activities are uncommon, making opportunities to feel alone possible in much of the area. The area is remote and adjacent to the Chama Wilderness. Although a road crosses the southern portion of the polygon, it is rarely used and does not affect the solitude of the polygon.</p> <p><b>Other features of value:</b> The area contains unique or outstanding features including historic and cultural features and outstanding viewpoints. There is high site density of cultural resources. Some of these features may be eligible for the National Register of Historic Places. Additionally, the view on the east side of the area, along the Chama Wild and Scenic River looking into the adjacent Chama Wilderness, is considered a regionally significant vista.</p> <p>This area has few other uses or management considerations, making managing to preserve wilderness characteristics possible. Factors that improve manageability include adjacency to a Bureau of Land Management wilderness study area and the Chama Wilderness, and entirely within the Chama Wild and Scenic River Inventoried Roadless Areas.</p>



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Factors	Description
<p>6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives</p>	<p>Overall rating of high wilderness characteristics (identified in Evaluation)</p> <p>No untenable tradeoffs --Managed as Wilderness under the 1987 Forest Plan</p> <p>Difficulty for motorized intrusions or encroachments due to terrain, vegetation elevation or location of the area</p> <p>Dark Canyon and Mine Canyon --Steep and rugged terrain, dense vegetation --Remote and difficult to access</p> <p>Mostly undeveloped with few structures --No known improvements within polygon</p> <p>High manageability --Connects Santa Fe Chama Wilderness to the BLM Wilderness Study Area --Chama Wild and Scenic River and Chama Wilderness Inventoried Roadless Areas</p> <p>Support from stakeholders --Portions of this polygon have been successfully managed as wilderness (management area H) under the 1987 Forest Plan</p> <p>Enhances existing wilderness --Connects Santa Fe Chama Wilderness to the BLM Wilderness Study Area --Includes wild portion of the Rio Chama Wild and Scenic River, views around which are considered a regionally signification vista</p>
<p>7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System</p>	<p>The <i>ecological characteristics</i> that provide the basis for suitability are -- The majority of the area appears natural, with some evidence of past human uses. -- The area is mostly undeveloped with little infrastructure. -- The area contains unique features including scenery and cultural resources</p> <p>The <i>social characteristics</i> that provide the basis for suitability are -- The area offers opportunities for solitude -- There are high-quality opportunities for primitive and unconfined recreation</p>

### E39, White Rock Canyon Recommended Wilderness Area

This recommended wilderness is located within two inventoried roadless areas. It is adjacent to Bandelier Wilderness.

#### White Rock Canyon recommended wilderness area

Factors	Description
1. Acres	10,274.10 acres
2. Summarized description of the recommended boundary	This irregularly shaped polygon includes the southwest half of the Arroyo Montoso and most of the Caja Inventoried Roadless Areas (the polygon boundary deviates from the Caja IRA boundary to remove a corral and follow an old road). The western boundary begins in the southwest at the Cochiti Reservation and follows the Rio Grande River (and forest boundary) with Bandelier Wilderness to the west to a utility corridor. The eastern boundary roughly follows the very irregular Arroyo Montoso and Caja Inventoried Roadless Area boundaries, ending at the reservation boundary.
3. Brief description of the general geography, topography, and vegetation	The Rio Grande river corridor is on the western side of the area; a canyon (White Rock Canyon), grasslands; and arroyos make up this polygon. Plant dominance types include pinyon juniper, sagebrush, open grassland, and ponderosa pine patches along the west. Wildlife species found in the area include pinyon jay, gray vireo, southwestern willow flycatcher, American peregrine falcon, elk, bald eagle, Rio Grande chub, and Rio Grande sucker
4. Current uses and management	Located in two inventoried roadless areas: Arroyo Montoso and Caja. The management area is semi-primitive remote recreation. G (Wildlife, Range, Firewood) and L (Semi-Primitive Non-Motorized Recreation) The dominant recreation opportunity spectrum class is semi-primitive non-motorized, with minor areas on the eastern edge classified as Semi-Primitive Motorized around MVUM roads.
5. Description of the wilderness characteristics and the Forest's ability to protect and manage the area to preserve its wilderness characteristics	<b>Natural quality:</b> The composition of plant and animal communities appears natural. Nonnative species are present (Siberian elm along the Rio Grande) but are in low numbers and generally not apparent on the landscape. Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention. <b>Undeveloped quality:</b> The presence and appearance of infrastructure in the area is rare or scattered and does not detract from apparent naturalness. Developments include a green storage tank, dirt tank, old roads-mostly rehabilitated or recovered but some evident on the landscape, some wood structures associated with range management, and some barbed wire fence. <b>Unconfined and/or primitive recreation:</b> High-quality primitive recreation opportunities like hiking, birding, and horseback riding can be found in the area.

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Factors	Description
<p>5. Description of the wilderness characteristics and the Forest’s ability to protect and manage the area to preserve its wilderness characteristics (continued)</p>	<p><b>Solitude:</b> Opportunities to experience solitude can be found throughout much of the area, though the city of Los Alamos is visible from many viewpoints in the north, which may detract from a feeling of being remote from civilization. In addition to some recreational use, tribal members from the Cochiti use the area as part of a tribal pilgrimage at certain times of the year.</p> <p><b>Other features of value:</b> Several unique features are identified as regionally or nationally significant including rare plant or animal communities (Rio Grande sucker and chub, and endangered southwestern willow flycatcher), landscape features (Caja del Rio, White Rock Canyon, and views of the Dome and Frijoles Falls), cultural and historic resources and important watershed features. There is very high archaeological site density and current uses for traditional and cultural resources, some of which may be eligible for the National Register of Historic Places. For example, the prehistoric Norte and Del Sol Pueblos. The Caja del Rio is identified as an important bird area that supports a number of grassland birds whose habitat has been in steep decline throughout the United States. The Rio Grande is identified as an important wildlife corridor. The adjacent Bandelier National Monument is a contender for an International Dark Skies Park designation.</p> <p>The presence and extent of other uses and management considerations affects isolated spots and makes management to preserve the area’s wilderness characteristics possible throughout the area. The area is separated by the Rio Grande from the Bandelier Wilderness and is adjacent to the Pueblo de Cochiti Indian Reservation. There may be some access needs-including motorized access needs from the Cochiti sides. Additionally, some range management may occur using motorized and mechanized tools and transportation.</p>
<p>6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives</p>	<p>Overall rating of high wilderness characteristics (identified in Evaluation)</p> <p>No untenable tradeoffs  --Difficulty for motorized intrusions or encroachments due to terrain, vegetation elevation or location of the area  --Difficult to access with no existing open roads and some rocky terrain</p> <p>Mostly undeveloped with few structures  --Adjusted boundary removed many existing structures and roads from the polygon</p> <p>High manageability  --Arroya Montosa and most of the Caja IRA  --Adjacent to Bandelier Wilderness</p> <p>Support from stakeholders  --There is public support for making this area a recommended wilderness to support wildlife connectivity. The Forest received approximately 12,000 letters of support for including all or part of the Caja Plateau in the recommended wilderness selection.  --There is public support for adding unique ecosystems to the wilderness system; the ecosystem found within the White Rock recommended wilderness polygon is uncommon both on the Forest and within the national wilderness system.</p> <p>Enhances existing wilderness  --Adjacent to the Bandelier Wilderness and Rio Grande river, creating or enhancing important wildlife corridors  --Adjacent to the Rio Grande river which has TES species habitat (southwest willow flycatcher)  --There is very high archaeological site density, including some large-scale pre-historic Pueblos  --identified as an Important Bird Area that supports a number of grassland birds whose habitat has been in steep decline throughout the United States  --Area along Rio Grande is important for rare, at-risk, and native plants as it has not been affected by agriculture. Part of the area is an Important Plant Area.</p>

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Factors	Description
7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p><i>Ecological characteristics</i> that provide the basis for suitability are</p> <ul style="list-style-type: none"> <li>-- The majority of the area appears natural, with little evidence of past human uses</li> <li>-- The area is mostly undeveloped with little infrastructure</li> <li>-- The area contains unique features including cultural resources and rare plant and animal communities</li> </ul> <p>The <i>social characteristics</i> that provide the basis for suitability are</p> <ul style="list-style-type: none"> <li>-- The area offers opportunities for solitude through much of the area</li> <li>-- There are high-quality opportunities for primitive and unconfined recreation</li> </ul>

### P85B, Thompson Peak Recommended Wilderness Area

This recommended wilderness lies within an inventoried roadless area. It is adjacent to the Pecos Wilderness.

#### Thompson Peak recommended wilderness area

Factors	Description
1. Acres	11,505.83 acres
2. Summarized description of the recommended boundary	This irregularly shaped polygon is entirely within the eastern portion of the Thompson Peak Inventoried Roadless Area; it excludes the southern and western portions of the inventoried roadless area. The polygon's western boundary is the Forest Service district boundary and the municipal watershed and Pecos Wilderness. The eastern boundary circumvents an old mining area. Where the existing inventoried roadless area boundary meets National Forest System Road 375 in the south, the recommended wilderness boundary deviates from the inventoried roadless area boundary, ending here and heading west and north through section 32 and encompassing the entirety of section 29, meeting the municipal watershed near Thompson Peak. The southern boundary excludes a route popular for mountain biking. Rugged topography with many drainages including perennial and seasonal streams.
3. Brief description of the general geography, topography, and vegetation	Plant dominance types include mixed conifer, ponderosa pine, pinyon juniper in lower elevation, and some aspen. Common forest animal species are present. There is a Mexican spotted owl protected activity center in the area and Mexican spotted owl critical habitat in the polygon. American peregrine falcon habitat exists and there is Rio Grande cutthroat trout in several creeks. Thompson Peak, a 10,554-foot mountain, is located in the southern portion of this polygon.
4. Current uses and management	The dominant recreation opportunity spectrum class is semi-primitive non-motorized. Management areas: L (semi-primitive non-motorized recreation). Area is entirely within an inventoried roadless area. The polygon has been modified to exclude known popular mountain biking routes.
5. Description of the wilderness characteristics and the Forest's ability to protect and manage the area to preserve its wilderness characteristics	<p><b>Natural quality:</b> The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species in disturbed areas.</p> <p><b>Undeveloped quality:</b> Prevalence of infrastructure is overall low throughout the area; a few closed roads are visible just outside the eastern edge. There are no range developments. A lookout tower with metal flashing just outside the polygon is visible from locations in the southern part of the polygon.</p> <p><b>Unconfined and/or primitive recreation:</b> High-quality primitive recreation opportunities like hiking, hunting, and backpacking can be experienced in the area. The terrain and lack of amenities provides a high level of challenge or risk for visitors.</p> <p><b>Solitude:</b> Opportunities to experience solitude can be found throughout much of the area, especially when away from roads and motorized sounds. Human activities are generally rare and a feeling of being alone or remote from civilization is possible, however, when visitors are on ridges, they can see signs of civilization.</p>

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Factors	Description
<p>5. Description of the wilderness characteristics and the Forest’s ability to protect and manage the area to preserve its wilderness characteristics (continued)</p>	<p><b>Other features of value:</b> Several unique features are identified for this area including rare plant or animal communities, cultural and historic resources, and high-quality water resources. Of note, there are three reaches with pure cutthroat trout (Regional Forester’s sensitive species) present.</p> <p>There has been a low level of survey for historic and cultural resources, but significant historic resources along the margin of the area and high use along margins by historic and modern communities make significance likely. Pecos watershed is considered regionally or nationally important due to its value as habitat for the pure Rio Grande cutthroat trout.</p> <p>Presence and extent of other uses and management considerations affects isolated spots and makes management to preserve the area’s wilderness characteristics possible throughout the area. The entire area is an inventoried roadless area with few other uses or considerations, though there are small areas of adjacent private land. No range developments occur in the area. There is a proposed exploratory drilling project on an old mining site on the eastern boundary of the polygon, although the old mining area and surrounding roads have been removed in this alternative.</p>
<p>6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives</p>	<p>Overall rating of high wilderness characteristics (identified in Evaluation)</p> <p>No untenable tradeoffs --Boundary changed to exclude popular mountain biking routes, old mining area is circumvented</p> <p>Difficulty for motorized intrusions or encroachments due to terrain, vegetation elevation or location of the area --Rugged, mountainous terrain</p> <p>Mostly undeveloped with few structures --Prevalence of infrastructure is overall low, with no open roads and no range developments within the boundaries of the polygon.</p> <p>High manageability --Encompasses the entirety of the Thompson Peak IRA --Adjacent to Pecos Wilderness</p> <p>Support from stakeholders --Public support for making this area a recommended wilderness to support wildlife connectivity and expand the Pecos Wilderness. The Forest received hundreds of comments, including a petition, asking us to expand the Pecos Wilderness. The petition identified the Thompson Peak area (among others) as a potential recommended wilderness area.</p> <p>Enhances existing wilderness --Pecos watershed is considered regionally or nationally important due to its value as habitat for the pure Rio Grande cutthroat trout. .</p>
<p>7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System</p>	<p><i>Ecological characteristics</i> that provide the basis for suitability are -- The majority of the area appears natural -- The area is mostly undeveloped with little infrastructure -- Unique features including nationally important watershed</p> <p><i>Social characteristics</i> that provide the basis for suitability are -- Solitude is present due to lack of roads and difficult access -- There are high-quality opportunities for primitive and unconfined recreation</p>

## P88A, Enchanted Lakes Recommended Wilderness Area

This recommended wilderness is located within an inventoried roadless area. It is adjacent to the Pecos Wilderness.

### Enchanted Lakes recommended wilderness area

Factors	Description
1. Acres	925.12 acres
2. Summarized description of the recommended boundary	The polygon eastern boundary is the eastern section 17 and 20 lines running through the existing Enchanted Lakes Inventoried Roadless Area in section 17 and continuing out of the inventoried roadless area to the south. The southern boundary is the private land to the south of section 20 and the western boundary is the Pecos Wilderness. The northern boundary is the Pecos Wilderness boundary below Pyramid Peak, ending at the eastern edge of section 17.
3. Brief description of the general geography, topography, and vegetation	Plant dominance types include mixed-conifer deciduous, spruce fir, mixed grass/forb meadows, ponderosa pine, scrub oak, and sparsely vegetated rocky areas. Many common forest animal species are within the area. Rio Grande cutthroat trout are present. The topography is steep and high-elevation lakes are present.
4. Current uses and management	The dominant ROS class is Primitive. Management areas is B (Wildlife/Timber); L (Semi-Primitive Non-Motorized Recreation) Adjacent to the Pecos Wilderness and includes portions of an inventoried roadless area.
5. Description of the wilderness characteristics and the Forest's ability to protect and manage the area to preserve its wilderness characteristics	<p><b>Natural quality:</b> The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species in disturbed areas. Vegetation does not appear natural in isolated or scattered spots due to current and past uses including Christmas tree harvest, firewood cutting, and evidence of past fire and fire suppression activities.</p> <p><b>Undeveloped quality:</b> Prevalence of infrastructure is overall low throughout the area. There are no roads in this polygon except the end of National Forest System Road 635AF. Developments include some old roads evident on the landscape, and system and user created trails in the southern area. No known fence or other range development present in the area.</p> <p><b>Unconfined and/or primitive recreation:</b> There are abundant opportunities to engage in high-quality primitive and unconfined recreation. Some primitive recreation opportunities include hiking, hunting, fishing, wildflower viewing, horseback riding, and nature viewing. The area has high-quality primitive recreation. The area is steep and rugged with elevations over 10,000 feet, providing opportunity for risk and challenge.</p> <p><b>Solitude:</b> Human activities are uncommon, making opportunities to feel alone possible in much of the area, especially in the west, less so in the eastern portion of the area.</p> <p><b>Other features of value:</b> Several unique features are identified for this area including rare plant or animal communities (Rio Grande cutthroat trout, Pecos fleabane), iconic landscape features (high mountain lakes), and high-quality water resources (due to habitat for Rio Grande cutthroat and dependence of agriculture on water resources).</p> <p>Presence and extent of other uses and management considerations affects isolated spots and makes management to preserve the area's wilderness characteristics possible throughout the area. The area is adjacent to designated wilderness and could be managed to preserve wilderness characteristics. The shape of the area is not dissected with narrow areas or cherry stem roads that make management difficult. An inventoried roadless area in the northern half also supports preservation wilderness characteristics. Further, rugged and steep terrain allows for natural barriers to motorized access.</p>

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<b>Factors</b>	<b>Description</b>
<p>6. Brief summary of the factors considered and the process used in evaluating the area and developing the alternatives</p>	<p>Overall rating of high wilderness characteristics (identified in Evaluation)</p> <p>No untenable tradeoffs --Recommended wilderness in the 1987 Forest Plan</p> <p>Difficulty for motorized intrusions or encroachments due to terrain, vegetation elevation or location of the area --Motorized intrusion potential is reduced due to steep and rugged terrain and lack of roads</p> <p>Mostly undeveloped with few structures --Few roads, and no fences or range developments</p> <p>High manageability --Includes part of the Enchanted Lakes IRA --Adjacent to the Pecos Wilderness</p> <p>Support from stakeholders --Public support for making this area a recommended wilderness to support wildlife connectivity and expand the Pecos Wilderness. The Forest received hundreds of comments, including a petition, asking us to expand the Pecos Wilderness. The petition identified the Enchanted Lakes area (among others) as a potential recommended wilderness area.</p> <p>Enhances existing wilderness --Habitat for At-Risk and rare plant and animal species --High-quality water resources that feed downstream agricultural communities</p>
<p>7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System</p>	<p><i>Ecological characteristics</i> that provide the basis for suitability are</p> <ul style="list-style-type: none"> <li>-- The majority of the area appears natural</li> <li>-- The area is mostly undeveloped with little infrastructure</li> <li>-- Outstanding landscape features (high elevation lakes)</li> </ul> <p><i>Social characteristics</i> that provide the basis for suitability are</p> <ul style="list-style-type: none"> <li>-- Solitude is present due to lack of roads and adjacency to wilderness</li> <li>-- There are high-quality opportunities for primitive and unconfined recreation, especially when combined with wilderness opportunities</li> </ul>

### P89C, Grace Tract Recommended Wilderness Area

This recommended wilderness is located within an inventoried roadless area and is adjacent to the Pecos Wilderness.

#### Grace Tract recommended wilderness area

Factors	Description
1. Acres	944.99 acres
2. Summarized description of the recommended boundary	This polygon follows the Grace Tract Inventoried Roadless Area boundary. The south and west boundaries are the Pecos Wilderness; the north boundary is the southern boundary of the Falls Inventoried Roadless Area. The eastern boundary is the existing inventoried roadless area boundary and cuts diagonally through section 4.
3. Brief description of the general geography, topography, and vegetation	Spruce-fir present in higher elevations, aspen in the middle elevations, and ponderosa pine in the lower elevations of the east slopes. Open meadows and oak scrub are present to a lesser degree throughout. Common forest species can be found in the area as well as peregrine falcon (Regional Forester sensitive species) in the southwest. The area has an elk calving area and elk summer and winter range. Steep topography and unique landscape including a waterfall.
4. Current uses and management	The dominant recreation opportunity spectrum class is semi-primitive non-motorized Management areas is L (semi-primitive non-motorized recreation) Adjacent to the Pecos Wilderness and includes an inventoried roadless area Recommended wilderness in the 1987 Forest Plan
5. Description of the wilderness characteristics and the Forest’s ability to protect and manage the area to preserve its wilderness characteristics	<p><b>Natural quality:</b> The composition of plant and animal communities appears natural with little evidence of non-native species. Vegetation appears natural with minimal evidence of past human interventions on ecological processes.</p> <p><b>Undeveloped quality:</b> Prevalence of infrastructure is rare or scattered in the area.</p> <p><b>Unconfined and/or primitive recreation:</b> There are abundant opportunities to engage in high-quality primitive and unconfined recreation. Some primitive recreation opportunities include hunting, hiking, backpacking, and horseback riding.</p> <p><b>Solitude:</b> There is a common or significant feeling of being alone and finding solitude in much of the area.</p> <p><b>Other features of value:</b> Cultural and historic resources are considered unique features in this area. A moderate amount of survey indicates a strong presence of Jicarilla Apache use in the area both historically and during the modern period. This is concurred by consultation with the Tribe. Middle Fork Rio de la Casa Falls is considered a regionally significant unique landscape feature in the area. High-quality water resources are identified as a unique feature because of the high-quality habitat for the Rio Grande cutthroat trout.</p> <p>The presence and extent of other uses and management considerations in the area occurs in isolated spots and makes management to preserve the area's wilderness characteristics possible throughout much of the area. The area is an inventoried roadless area and adjacent to designated wilderness, making management to preserve the area wilderness characteristics possible.</p>



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<b>Factors</b>	<b>Description</b>
<p>6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives</p>	<p>Overall rating of high wilderness characteristics (identified in Evaluation)</p> <p>No untenable tradeoffs --Recommended wilderness in the 1987 Forest Plan</p> <p>Difficulty for motorized intrusions or encroachments due to terrain, vegetation elevation or location of the area --Motorized intrusion potential is reduced due to steep and rugged terrain and few roads</p> <p>Mostly undeveloped with few structures --Prevalence of infrastructure is rare or scattered</p> <p>High manageability --Entire polygon is within the Grace Tract IRA --Adjacent to the Pecos Wilderness along western and southern borders</p> <p>Support from stakeholders --Public support for making this area a recommended wilderness to support wildlife connectivity and expand the Pecos Wilderness. The Forest received hundreds of comments, including a petition, asking us to expand the Pecos Wilderness. The petition identified the Grace Tract area (among others) as a potential recommended wilderness area.</p> <p>Enhances existing wilderness --Important and unique cultural and historic resources, particularly for the Jicarilla Apache --Middle Fork Rio de la Casa Falls is considered a regionally significant unique landscape feature in the area. --High-quality water resources are identified as a unique feature because of the high-quality habitat for the Rio Grande cutthroat trout</p>
<p>7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System</p>	<p><i>Ecological characteristics</i> that provide the basis for suitability: -- The majority of the area appears natural -- The area is mostly undeveloped with little infrastructure -- Outstanding landscape features (high elevation lakes)</p> <p><i>Social characteristics</i> that provide the basis for suitability: -- Solitude is present due to lack of roads and adjacency to wilderness -- There are high-quality opportunities for primitive and unconfined recreation</p>

### **Alternative 3**

In recognition of alternative 3's emphasis, which was crafted based on public comments requesting more natural management (e.g., less mechanical thinning and more use of natural fires to improve habitat) and less non-primitive human use, this alternative has the highest number of acres recommended for wilderness. These areas increase the percentage of the forest where natural processes dominate. The 270,130 recommended acres were selected based upon consideration of the information within the wilderness evaluation (Figure J-12). In some cases, areas outside inventoried roadless areas, but inside the wilderness inventory area, were added to help with boundary management (blocking up areas instead of having narrow intrusions).

The areas were chosen for the following reasons:

- High wilderness characteristics were identified, or
- The area was identified as an inventoried roadless area with low or moderate wilderness characteristics and that is at least 5,000 acres in size, or is adjacent to existing wilderness

The remaining acres that were within the wilderness inventory area and not selected to be included under this alternative were determined to be unresponsive to the input received in scoping, to have conflicting uses, and/or to lack sufficient wilderness characteristics or wildlife conservation values.

The map of the recommended wilderness areas for alternative 3 is seen in Figure J-12.

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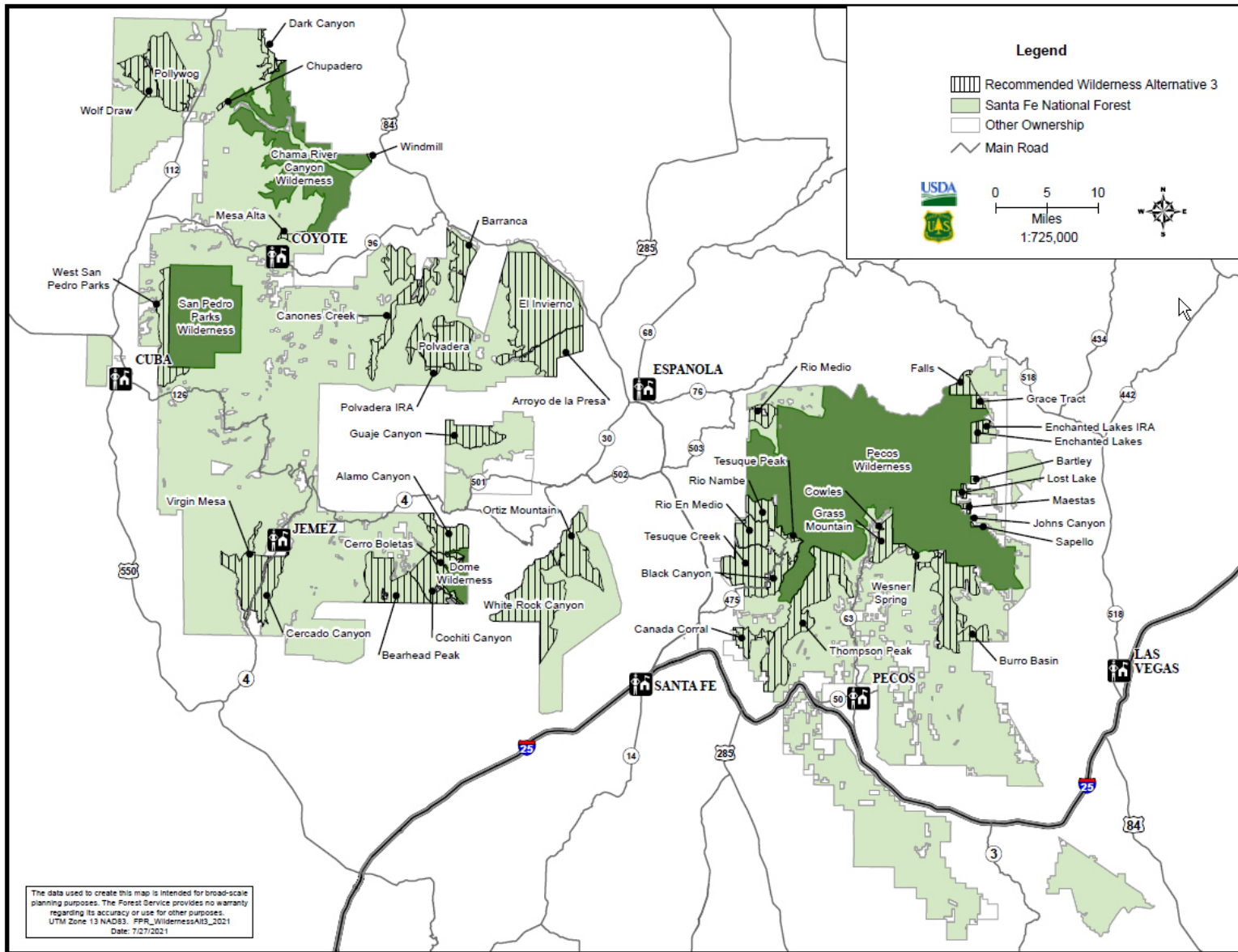


Figure J-12. Recommended wilderness areas in alternative 3

### Co05A, Canone’s Creek Recommended Wilderness Area

This recommended wilderness includes the Canone’s, Pueblo Mesa, and Youngsville Inventoried Roadless Areas and includes the Canone’s National Recreation Trail.

#### Canone’s Creek recommended wilderness area

Factors	Description
1. Acres	12,551.39 acres
2. Summarized description of the recommended boundary	This area is irregularly shaped and narrow and is located south of the village of Canone’s. The entire polygon is within the Canone’s, Pueblo Mesa, and Youngsville Inventoried Roadless Areas. The southern finger encompasses Canone’s Creek and the Canone’s Creek National Recreation Trail. The northwestern part of the polygon includes Cerro Pedernal and extends north to the Santa Fe NF boundary. The northeastern part of the polygon includes the Tsipin Interpretive Site and part of Polvadera Creek. The boundary to the northeast follows the ranger district boundary between Española and Coyote Ranger Districts.
3. Brief description of the general geography, topography, and vegetation	The topography is steep and rugged with dense vegetation. The dominant vegetation type is mixed conifer and Gambel oak with pockets of ponderosa pine in the south and pinyon juniper in the northern portion of the area.
4. Current uses and management	Most of the area is currently being managed with limited development and motorized use because it is composed of three inventoried roadless areas: Canone’s Creek, Youngsville, and Pueblo Mesa. The Canone’s Creek National Recreation Trail is known for its spectacular views of Canone’s canyon walls, runs the length of the polygon, and is already managed for non-motorized uses only. There is intensive use of the area by local rural communities as well as ongoing range management activities. The area is frequented by mountain bikers and backpackers.
5. Description of the wilderness characteristics and the Forest’s ability to protect and manage the area to preserve its wilderness characteristics	<p><b>Natural quality:</b> Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention.</p> <p><b>Undeveloped quality:</b> Improvements in the area are rare or scattered and do not detract from apparent naturalness. Improvements include trick, dirt, and metal tanks for range management; old roads; and Canone’s Creek National Recreation Trail.</p> <p><b>Unconfined and/or primitive recreation:</b> High-quality, challenging primitive recreation opportunities like hiking, fishing, and hunting occur in the area. The designated Canone’s Creek National Recreation Trail runs the length of the polygon.</p> <p><b>Solitude:</b> Opportunities to experience solitude can be found throughout much of the area. Challenge and risk can be experienced in the area.</p> <p><b>Other features of value:</b> Several unique features are identified in the area. Unique or rare wildlife include Mexican spotted owl, northern goshawk, American peregrine falcon, Rio Grande cutthroat trout, Gunnison’s prairie dog, golden eagle, and bald eagle. Cerro Pedernal (a narrow mesa) is considered a unique landscape feature in the area.</p> <p>Cultural and historic features include significant lithic resource procurement area and high site density as well as known location of traditional cultural places significant to tribal communities.</p> <p>Canone’s Creek is identified as an important water resource for its role as high-quality habitat for the Rio Grande cutthroat trout. The Santa Fe NF’s ability to protect and manage these wilderness characteristics is possible as the presence and extent of other uses and management considerations in the area is scattered. Most of the entire area is currently being managed with limited development and motorized use at because of three Inventoried Roadless Areas: Canones Creek, Youngsville, and Pueblo Mesa. There is intensive use of the area by local rural communities as well as ongoing range management activities.</p>

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Factors	Description
6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives	<p>The area was identified as an inventoried roadless areas with low or moderate wilderness characteristics and that is at least 5,000 acres in size</p> <ul style="list-style-type: none"> <li>--All of the area is within the Canone’s, Pueblo Mesa, and Youngsville Inventoried Roadless Areas</li> <li>--Area is 12,551.39 acres</li> <li>--Moderate wilderness characteristics were identified in Evaluation</li> </ul>
7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p><i>Ecological characteristics that provide the basis for suitability:</i></p> <ul style="list-style-type: none"> <li>-- The majority of the area appears natural</li> <li>-- Motorized access would be difficult due to terrain</li> <li>-- The undeveloped quality is high with little infrastructure</li> </ul> <p><i>Social characteristics that provide the basis for suitability:</i></p> <ul style="list-style-type: none"> <li>-- The area contains unique features including scenery and cultural resources</li> <li>-- The area offers outstanding opportunities for solitude</li> <li>-- There is a high amount of primitive and/or unconfined recreation for hunting, horseback riding, hiking, and hunting, as well as travel on the Canone’s National Recreation Trail.</li> </ul>

**Co06B, West San Pedro Parks Recommended Wilderness Area**

This recommended wilderness includes the San Pedro Parks Inventoried Roadless Area and is adjacent to the San Pedro Parks Wilderness.

**West San Pedro Parks recommended wilderness area**

Factors	Description
1. Acres	8,170.89 acres
2. Summarized description of the recommended boundary	This area is narrowly shaped and is located on the western side of the San Pedro Parks Wilderness. The western boundary aligns with the inventoried roadless area and extends southward to the Eureka Mesa road on the southern edge. The lower western boundary runs along the national forest boundary line. The northern part of the polygon comes to a point near the Pelone’s trailhead.
3. Brief description of the general geography, topography, and vegetation	The topography is steep and rugged with dense vegetation. The dominant vegetation type is mixed conifer and Gambel oak with pockets of ponderosa pine and pinyon juniper in the southern portion of the area.
4. Current uses and management	<p>Trails traverse the area: San Jose, Pelone’s, and Continental Divide National Scenic Trail.</p> <p>The dominant recreation opportunity spectrum is semi-primitive non-motorized.</p> <p>Several management areas are found in this polygon, with the majority being E (dispersed recreation/visual/timber) and L (semi-primitive non-motorized recreation).</p> <p>Partially located in an inventoried roadless area.</p> <p>The southern portion of the area is wildland-urban Interface near the communities of Regina and La Jara. There are also mining claims in the southern portion. This area is used for fuelwood collecting. And concerns exist about acequia maintenance, three ditches are present, and the presence of a road leading to county road 11 near the boundary that is used by ranchers. Outfitters/guides have permits for hunting in this area.</p>

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Factors	Description
<p>5. Description of the wilderness characteristics and the Forest’s ability to protect and manage the area to preserve its wilderness characteristics</p>	<p><b>Natural quality:</b> This area’s plant and animal communities are natural appearing. Little evidence of human interventions to ecological processes (e.g., vegetation treatments) is evident largely due to management limitations associated with its status as an inventoried roadless area. Nonnative species are not evident.</p> <p><b>Undeveloped quality:</b> Some minimal developments are within the area including a small fence line associated with range management, a gold mine, ditches, and several closed roads, all concentrated in the southernmost portion of the area. The prevalence of development is overall low throughout the area. It is common to find spots where infrastructure is absent or unseen.</p> <p><b>Unconfined and/or primitive recreation:</b> Few facilities or developments are present that would decrease opportunities for self-reliant recreation, though there are several non-motorized trails and a portion of the Continental Divide National Scenic Trail within the area. Some high-quality opportunities to hike, backpack, and hunt can be found throughout the area. Outfitter/guides have permits in this area.</p> <p><b>Solitude:</b> Opportunities to experience solitude are high throughout this area. The terrain is steep with dense vegetation, providing challenge and risk to potential visitors. The area is located adjacent to designated wilderness, ensuring that sights and sounds of development are lessened near boundaries.</p> <p><b>Other features of value:</b> Water in this area feeds acequias, community-operated watercourses, and other water developments that are considered regionally significant for their role in supplying municipal water to two nearby communities, Regina and La Jara.</p> <p>The Santa Fe NF’s ability to protect and manage these wilderness characteristics is possible because this area is remote and has little development, the presence and extent of other uses and management considerations in the area is scattered and makes management to preserve the area’s wilderness characteristics possible throughout much of the area. The area is also adjacent to a congressionally designated wilderness making extension of those management actions possible in most of this area. Some management challenges exist, however. The southern portion of the area is wildland-urban Interface near the communities of Regina and La Jara. There are also mining claims in the southern portion that, depending on future development of those claims, would make preserving wilderness characteristics in the southern portion of the polygon more challenging. This area is used for fuelwood collecting. And concerns exist about acequia maintenance, three ditches are present, and the presence of a road leading to county road 11 near the boundary that is used by ranchers.</p>
<p>6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives</p>	<p>High wilderness characteristics were identified in the evaluation</p> <p>The area was identified as an inventoried roadless areas with low or moderate wilderness characteristics and that is at least 5,000 acres in size, or is adjacent to existing wilderness</p> <p>--This area is adjacent to the San Pedro Parks Wilderness and is just over 8,170 acres.</p> <p>--Located in an inventoried roadless area</p>

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Factors	Description
7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p><i>Ecological characteristics</i> that provide the basis for suitability:</p> <ul style="list-style-type: none"> <li>-- Regionally important watershed</li> <li>-- The undeveloped quality is high with little infrastructure, especially in the north</li> </ul> <p><i>Social characteristics</i> that provide the basis for suitability:</p> <ul style="list-style-type: none"> <li>-- The area offers outstanding opportunities for solitude, especially in the north; and</li> <li>-- There is a high amount of primitive and/or unconfined recreation for hunting, horseback riding, hiking, and hunting, as well as travel on the Continental Divide National Scenic Trail.</li> </ul>

**Co07, Mesa Alta Recommended Wilderness Area**

This recommended wilderness includes the Mesa Alta Inventoried Roadless Area and is adjacent to the Chama River Canyon Wilderness.

**Mesa Alta recommended wilderness area**

Factors	Description
1. Acres	1,802.13 acres
2. Summarized description of the recommended boundary	This area is narrowly shaped and is located on the south edge of the Chama River Canyon Wilderness. The entire polygon is within the Mesa Alta Inventoried Roadless Area. The northern boundary is on Mesa Alta to the west and follows the Chama River Canyon Wilderness area boundary to the east. The southern boundary is north of a powerline. The western boundary follows National Forest System Road 170, and the eastern boundary stops at the Santa Fe NF boundary.
3. Brief description of the general geography, topography, and vegetation	Dominant plant types include pinyon juniper and sagebrush. Heavy presence of thistle along the northern edge of the polygon on both sides of National Forest System Road 77 and in the areas affected by the Camino fire (2005).
4. Current uses and management	<p>A portion of the area is the Mesa Alta Inventoried Roadless Area adjacent to the Chama River Canyon wilderness area. A powerline runs along the south and west side of the polygon and an associated wildland-urban interface that surrounds the powerline.</p> <p>Range management activities occur throughout the area, including use of motorized and mechanized tools and transporting. The area receives high visitor use during hunting season and during high woodcutting periods. Recreational shooting takes place in the southern end</p> <p>There is a NEPA decision (Mesa Alta) to implement thinning in the area. Local communities use Mesa Alta for resource procurement.</p>

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Factors	Description
5. Description of the wilderness characteristics and the Forest's ability to protect and manage the area to preserve its wilderness characteristics	<p><b>Natural quality:</b> The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species in disturbed areas. The extent to which the area reflects ecological conditions without human intervention is low due to past and current vegetation treatments. Vegetation in the area has been treated off and on for the past 30 years, most recently in the 1990s (thinning). Sage mowing in the south and firewood cutting has left many stumps on the landscape.</p> <p><b>Undeveloped quality:</b> Prevalence of improvements is overall high throughout the area and includes: a non-motorized trail, closed roads, motorized trail, two trick tanks, fence, and pit tanks (tin aprons on tanks).</p> <p><b>Unconfined and/or primitive recreation:</b> There are few primitive recreation opportunities (hiking, hunting, camping, and shooting) and they tend to be of low quality.</p> <p><b>Solitude:</b> Human activities or presence is common and little opportunity of feeling alone can be experienced in the area. Motorized sounds can be heard in the south and west from motorized trail use and in the north where there is a motorized dispersed camping corridor. The area receives high visitor use during hunting season and during high woodcutting periods, but low use otherwise. The non-motorized trails get little use. Recreational shooting takes place in the southern end</p> <p><b>Other features of value:</b> Cultural and historic resources are identified as a unique feature in the area. There are significant cultural resources below Mesa Alta in the Salitral area along Ojo line. Presence of Ojo line is noticeable. Use of Mesa Alta by local communities for resource procurement occurs.</p> <p>The presence and extent of other uses and/or considerations occurs throughout most of the area making it difficult to manage the area to preserve its wilderness characteristics.</p>
6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives	<p>The area was identified as an inventoried roadless areas with low or moderate wilderness characteristics and that is at least 5,000 acres in size, or is adjacent to existing wilderness</p> <ul style="list-style-type: none"> <li>--The area had low wilderness characteristics identified in the evaluation</li> <li>--All of the area is in the Mesa Alta Inventoried Roadless Area and has been managed as an IRA</li> <li>--The area is adjacent to the Chama River Canyon Wilderness and would expand it by 1,802 acres</li> </ul>
7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p><i>Ecological characteristics</i> that provide the basis for suitability:</p> <ul style="list-style-type: none"> <li>-- The naturalness of the area is high because it has been essentially managed similar to the adjacent wilderness area.</li> <li>-- The undeveloped quality is high with little infrastructure.</li> </ul> <p><i>Social characteristics</i> that provide the basis for suitability:</p> <ul style="list-style-type: none"> <li>-- The area offers opportunities for solitude particularly near the adjacent wilderness;</li> <li>-- There are opportunities for primitive and/or unconfined recreation for hunting, horseback riding, hiking, and hunting, especially when combined with the opportunities available in the adjacent wilderness area.</li> </ul>



## Co14, Windmill Recommended Wilderness Area

This recommended wilderness is adjacent to the Chama River Canyon Wilderness.

### Windmill recommended wilderness area

Factors	Description
1. Acres	139.11 acres
2. Summarized description of the recommended boundary	This area is located to the east of the Chama River Canyon Wilderness and north of the Chama Canyon road. It is a small triangular shape in the western half of Section 8, bounded on the north and east by the Carson National Forest.
3. Brief description of the general geography, topography, and vegetation	Dominant plant types include sagebrush, pinyon juniper, and ponderosa pine. Common wildlife and habitat are present as well as elk winter and summer range and American peregrine falcon.
4. Current uses and management	The majority of the area falls under the Semi-Primitive Non-Motorized ROS class, though there is a small portion of Roaded Natural. The area falls under Management Area H (Wilderness.) There is motorized access for maintenance of a windmill within the polygon.
5. Description of the wilderness characteristics and the Forest's ability to protect and manage the area to preserve its wilderness characteristics	<p><b>Natural quality:</b> The composition of plant and animal communities appears natural. Dominant plant types include sagebrush, pinyon juniper, and ponderosa pine. Non-native species are not evident. Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention.</p> <p><b>Undeveloped quality:</b> Infrastructure in the area is rare or scattered and does not detract from apparent naturalness. The only developments to note are a windmill and an old loop road to access it. However, the adjacent Carson NF polygon of W6 is said to have numerous range and wildlife developments such as guzzlers, spring developments, trick tanks, stock tanks, and a corral scattered throughout southern W6.</p> <p><b>Unconfined and/or primitive recreation:</b> There may be limited opportunities to engage in high-quality primitive and unconfined recreation when the area is used in conjunction with the adjacent wilderness as opposed to the adjacent Carson National Forest.</p> <p><b>Solitude:</b> Opportunities for solitude may be greatest closest to the Wilderness and diminish as people get closer to the Carson National Forest where there are more limited opportunities for solitude because of heavy use by local residents. Traffic from nearby FR151 and to the windmill may impact solitude. Traffic from nearby roads, which can be popular to access the Carson National Forest, may impact solitude</p> <p><b>Other features of value:</b> None identified.</p> <p>The Forest's ability to protect and manage these wilderness characteristics is high as the area is adjacent to a congressionally designated wilderness making extension of those management actions possible. While this is a very small polygon, it could be readily managed in conjunction with the adjacent wilderness as the current boundary does not follow topography (rim of the canyon) here. Motorized access for maintenance of a windmill within the polygon would be needed.</p>

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Factors	Description
6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives	<p>High wilderness characteristics were identified in the evaluation</p> <p>The area was identified as an inventoried roadless area or is adjacent to existing wilderness</p> <p>--This area is adjacent to the Chama River Canyon Wilderness and would expand it by 139 acres.</p> <p>--It is bounded by another national forest.</p> <p>--This area falls within the management area H (wilderness) and has been managed under that prescription in the 1987 plan.</p>
7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <i>ecological characteristics</i> that provide the basis for suitability are as follows:                      The naturalness of the area is high because it has been essentially managed similar to the adjacent wilderness area.                      The undeveloped quality of the area is high because it contains only a windmill and a loop road to access it.</p> <p>The <i>social characteristics</i> that provide the basis for suitability are as follows:                      The area offers opportunities for solitude particularly near the adjacent wilderness;                      There are opportunities for primitive and/or unconfined recreation for hunting, horseback riding, hiking and hunting, especially when combined with the opportunities available in the adjacent wilderness area.</p>

### Co21A, Chupadero Recommended Wilderness Area

This recommended wilderness is in the Chama Wilderness Inventoried Roadless Area and is adjacent to the Chama River Canyon Wilderness.

#### Chupadero recommended wilderness area

Factors	Description
1. Acres	247.48 acres
2. Summarized description of the recommended boundary	This area is narrowly shaped and is located on the western side of the Chama River Canyon Wilderness. The southeast boundary follows the Ranger District boundary between the Coyote and Cuba Ranger Districts. The west edge of the polygon follows Forest Road 7C and turns northeast returning to the Chama River Canyon Wilderness boundary.
3. Brief description of the general geography, topography, and vegetation	The topography is hilly, and the dominant vegetation is pinyon Juniper.
4. Current uses and management	<p>The dominant ROS is Semi-Primitive Non-Motorized, and it is in Management Area G (Wildlife/Range/Firewood). Located in an inventoried roadless area.</p> <p>The area is part of the San Juan Land Grant, which allows for local traditional uses within the area. Range permittees have motorized access to range improvements and the allotment for range management.</p> <p>There is a wildland-urban interface in a portion of the area and cherry stem roads.</p>

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Factors	Description
5. Description of the wilderness characteristics and the Forest’s ability to protect and manage the area to preserve its wilderness characteristics	<p><b>Natural quality:</b> The composition of plant and animal communities appears natural. There are some inventoried invasive plant species, but they are not pervasive or easily identifiable on the landscape. Vegetation does not appear natural commonly throughout the eastern lobe of the area. Mastication and evidence of historic logging including presence of stumps can be seen. Vegetation in the western lobe of the area only shows signs of human interventions in isolated or scattered spots</p> <p><b>Undeveloped quality:</b> Prevalence of improvements is overall low throughout the area. Improvements include old roads that are minimally evident on the landscape, earthen wells and a fence used for range management, and a weather station. A small portion of the Chama Wilderness Inventoried Roadless Area is in the in the bottom of the western lobe.</p> <p><b>Unconfined and/or primitive recreation:</b> Primitive recreation opportunities include wildlife hunting, shed hunting, hiking and scenic vista viewing.</p> <p><b>Solitude:</b> Opportunities for solitude exist throughout the area especially away from road 503 where there is dispersed camping corridor. Visitor use is generally very low except for a slight increase in use during the hunting season.</p> <p><b>Other features of value:</b> The area contains unique or outstanding features including historic/cultural features and outstanding viewpoints. There is high site density of cultural resources, but the area is relatively inaccessible except from the top. Some of these features may be eligible for the National Register of Historic Places (NRHP). The upper areas may be used for resource procurement by local rural communities. The view on the east side of the area, along the Chama Wild and Scenic River looking into the adjacent Chama wilderness, is considered a regionally significant vista.</p> <p>The presence and extent of other uses and/or management consideration occurs across most of the area making it difficult to manage the area to preserve its wilderness characteristics. The area is part of the San Juaquin Land Grant which allows for local traditional uses within the area. Range permittees have motorized access to range improvements and the allotment for range management. There is a wildland-urban interface in a portion of the area and cherry stem roads that bring the sights and sounds of civilization into the interior of the area. The area is adjacent to the Chama Wilderness and is very remote, improving slightly the ability to preserve the area’s wilderness characteristics.</p>
6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives	<p>The area was identified as an inventoried roadless areas with low or moderate wilderness characteristics and that is at least 5,000 acres in size, or is adjacent to existing wilderness</p> <p>--Area identified as having low wilderness characteristics in evaluation</p> <p>--This area is adjacent to the Chama River Canyon Wilderness and would expand it by 247 acres.</p> <p>--Located in an inventoried roadless area</p>
7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <i>ecological characteristics</i> that provide the basis for suitability are as follows: The undeveloped quality is high with little infrastructure</p> <p>The <i>social characteristics</i> that provide the basis for suitability are as follows: The area offers opportunities for solitude particularly near the adjacent wilderness; There are opportunities for primitive and/or unconfined recreation for hunting, horseback riding, hiking and hunting, especially when combined with the opportunities available in the adjacent wilderness area.</p>

### Co23B, Dark Canyon Recommended Wilderness Area

This recommended wilderness is adjacent to the Chama River Canyon Wilderness, a BLM WSA and is located within two inventoried roadless areas. It includes a portion of the Rio Chama Wild and Scenic River (wild classification).

**Dark Canyon recommended wilderness area**

Factors	Description
1. Acres	2,217.69 acres
2. Summarized description of the recommended boundary	This is an irregularly shaped narrow polygon, following the boundary of two inventoried roadless areas (Chama WS River and Chama Wilderness Inventoried Roadless Areas). The north and most of the eastern boundary follows the BLM WSA (Rio Chama WSA) boundary and on the south the Chama River Canyon Wilderness forms that boundary. A small area of private land is along the eastern border. To the west, the boundary is the same as the Coyote/Cuba Ranger District boundary, and fingers out to take in Dark and Mine Canyons.
3. Brief description of the general geography, topography, and vegetation	The topography is steep and rugged with dense vegetation. The dominant vegetation type is mixed conifer and Gambel oak with pockets of ponderosa pine and pinyon juniper in the southern portion of the area. Along with many common forest species, rare and sensitive species including those on the Regional Forester sensitive species list are bald eagle, otter, peregrine falcon, Rio Grande chub, Rio Grande sucker and northern goshawk. Three canyons incise the polygon.
4. Current uses and management	The polygon has several management areas, the most acreage being within the H/F (Wilderness and WSR), with portions of H (Wilderness), L (Semi-Primitive Non-Motorized Recreation), and R (Cultural Resources-Wildlife/Timber). The main ROS Class is Semi-Primitive Non-Motorized. The area is also an inventoried roadless area. Part of the area is also the Rio Chama Wild and Scenic River (wild classification) Some traditional uses (e.g., fuel wood gathering) possible by the Jicarilla Apache and Navajo Tribes associated with possible San Juaquin de Chama land grant.

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Factors	Description
5. Description of the wilderness characteristics and the Forest’s ability to protect and manage the area to preserve its wilderness characteristics	<p><b>Natural quality:</b> The composition of plant and animal communities appears natural in most of the area. Dominant overstory plant species include ponderosa pine, mixed conifer, some oak scrub, pinyon juniper, big sagebrush and sage flats.</p> <p><b>Undeveloped quality:</b> No range or other developments exist in the area.</p> <p><b>Unconfined and/or primitive recreation:</b> Some high-quality opportunities to engage in primitive and unconfined recreation exist in the area including: hunting, shed hunting, hiking, rafting and enjoying beautiful vistas.</p> <p><b>Solitude:</b> Human activities are uncommon, making opportunities to feel alone possible in much of the area. The area is remote and adjacent to the Chama wilderness. Although a road crosses the Southern portion of the polygon, it is rarely used and does not impact the solitude of the polygon.</p> <p><b>Other features of value:</b> The area contains unique or outstanding features including historic/cultural features and outstanding viewpoints. There is high site density of cultural resources. Some of these features may be eligible for the National Register of Historic Places (NRHP). Additionally, the view on the east side of the area, along the Chama Wild and Scenic River looking into the adjacent Chama wilderness, is considered a regionally significant vista.</p> <p>This area has few other uses or management considerations making managing to preserve wilderness characteristics possible. Factors that improve manageability include adjacency to a Bureau of Land Management (BLM) wilderness study area, and that the entire polygon is within the Chama Wilderness and Chama WS River Inventoried Roadless Areas. Additionally, use of the area for traditional purposes including those uses associated with the San Juan de Rio land grant (i.e., fuel wood gathering) would need to be considered.</p>
6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives	<p>High wilderness characteristics were identified during evaluation</p> <p>The area was identified as an inventoried roadless area, or is adjacent to existing wilderness</p> <p>--Chama WS River and Chama Wilderness Inventoried Roadless Areas</p> <p>--The area is adjacent to the Chama River Canyon Wilderness</p> <p>--The area is adjacent to a BLM Wilderness Study Area</p>
7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <i>ecological characteristics</i> that provide the basis for suitability are as follows:</p> <p>The majority of the area appears natural, with some evidence of past human uses.</p> <p>The area is mostly undeveloped with little infrastructure.</p> <p>The area contains unique features including scenery and cultural resources</p> <p>The <i>social characteristics</i> that provide the basis for suitability are as follows:</p> <p>The area offers opportunities for solitude; and</p> <p>There are high-quality opportunities for primitive and unconfined recreation</p>

### Cu33, Wolf Draw Recommended Wilderness Area

This recommended wilderness is adjacent to an inventoried roadless area.

#### Wolf Draw recommended wilderness area

Factors	Description
1. Acres	5,438.89 acres
2. Summarized description of the recommended boundary	This roughly circular polygon is bounded by roads: Wolf Draw (312) on the east, Lleguas (313) on the south and west, and Wolf Draw on the north. On the east, it is adjacent to an existing inventoried roadless area (Pollywog).
3. Brief description of the general geography, topography, and vegetation	Dominant plant communities include ponderosa pine, mixed-conifer and some aspen. Along with common forest species, the area has elk and deer summer and winter range and a possible elk calving area in the north. Terrain is steep and rugged and uninterrupted by roads or other infrastructure. Steep canyons and ravines characterize this area.
4. Current uses and management	The management area is R (Cultural Resources, Wildlife-Timber). The dominant ROS Class is Semi-Primitive Non-Motorized. There is private property along the eastern boundary and the area has an oil and gas lease. Some traditional uses possible by the Jicarilla Apache and Navajo tribes associated with possible San Juan de Chama land grant.
5. Description of the wilderness characteristics and the Forest's ability to protect and manage the area to preserve its wilderness characteristics	<p><b>Natural quality:</b> The composition of plant and animal communities appears natural within most of the area with minimal presence of invasive species. There was some thinning in the northern end in the 1990s.</p> <p><b>Undeveloped quality:</b> Prevalence of infrastructure is rare or scattered in this area and does not detract from apparent naturalness. Developments include several old roads that are minimally evident on the landscape. Range developments exist (one tank and one drinker) but are only around the road edge and not in interior of the polygon.</p> <p><b>Unconfined and/or primitive recreation:</b> There are abundant opportunities for engaging in primitive and unconfined recreation and these opportunities tend to be of high-quality. Primitive recreation opportunities include hiking, camping, and hunting (mostly in the Fall). The rugged and steep canyon walls and steep ravines provide opportunities to experience challenge and risk. Some impacts to solitude or primitive and unconfined recreation include some hunting with dogs and sounds of pumps and other motorized activity from adjacent roads. There is also a motorized dispersed camping corridor on the northern boundary-which gets moderate use during hunting season, but low-use the remainder of the year.</p> <p><b>Solitude:</b> Human activities are rare and opportunities to experience solitude are common throughout. There is a motorized dispersed camping corridor along the northern edge (outside polygon) that gets moderate use. Vegetation and terrain provide opportunities to experience solitude and provide a feeling of remoteness from civilization.</p> <p><b>Other features of value:</b> Cultural and historic features are considered a unique feature in this area. Surveys indicate potential high density of sites, and this area is located adjacent to other areas with very high site density. Potential for traditional cultural uses. The presence and extent of other uses and management considerations affects isolated spots and makes management to preserve the area's wilderness characteristics possible throughout the area. There is private property along the eastern boundary (though owner supports wilderness). The area has an oil and gas lease, so future development could occur. Steep and rugged terrain limits motorized access to the area. Additionally, use of the area for traditional purposes including those uses associated with the San Juan de Rio land grant (i.e., fuel wood gathering) would need to be considered.</p>

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Factors	Description
6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives	<p>High wilderness characteristics were identified during evaluation</p> <p>The area was identified as an inventoried roadless area or is adjacent to existing wilderness --Adjacent to Pollywog Inventoried Roadless Area</p>
7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <i>ecological characteristics</i> that provide the basis for suitability are as follows: The majority of the area appears natural, with little evidence of past human uses. The area is mostly undeveloped with little infrastructure, mostly concentrated in one area Motorized access would be difficult due to terrain. The area contains unique features including scenery and cultural resources</p> <p>The <i>social characteristics</i> that provide the basis for suitability are as follows: The area offers outstanding opportunities for solitude; and There are high-quality opportunities for primitive and unconfined recreation</p>

### Cu36B, Pollywog Recommended Wilderness Area

This recommended wilderness is partially within an inventoried roadless area.

#### Pollywog recommended wilderness area

Factors	Description
1. Acres	13,469.01 acres
2. Summarized description of the recommended boundary	This polygon encompasses the entire Pollywog Inventoried Roadless Area but extends the area northward to the Deer Run Road (310). In the southeast, the boundary follows the motorized Mud Springs trail system and private land boundaries. The southern end is the Lleguas road edge. On the east, the boundary runs from the end of Road 310 southward to encompass the inventoried roadless area boundary but straightens that irregular line to end at road 522N that forms the lower northeast boundary. The final northeast edge skirts the private land, which is the boundary there.
3. Brief description of the general geography, topography, and vegetation	Plant dominance types include ponderosa pine, juniper, and mixed-juniper. Terrain is steep and rugged, with ridges and incised canyons.
4. Current uses and management	75 percent is in the inventoried roadless area boundary. The dominant ROS class is Semi-Primitive Non-Motorized. The Management areas are nearly evenly split at L (Semi-Primitive Non-Motorized Recreation) and R (Cultural Resources-Wildlife/Timber).

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Factors	Description
<p>5. Description of the wilderness characteristics and the Forest’s ability to protect and manage the area to preserve its wilderness characteristics</p>	<p><b>Natural quality:</b> The composition of plant and animal communities appears natural. Non-native species are present in disturbed areas but are in low numbers and generally not apparent on the landscape. Plant dominance types include mostly ponderosa pine, pinyon juniper, and scrub oak, with some aspen interspersed throughout. Common forest animals can be found in the area including elk and deer. Less common species include bald eagle, golden eagle, and other large raptors. There is a nest site for American peregrine falcon in the area and suitable raptor habitat throughout the polygon.</p> <p>Approximately 75 percent of the polygon is part of the Pollywog Inventoried Roadless Area. Within the inventoried roadless area, vegetation appears natural. Outside the inventoried roadless area, thinning (1980s), fire (BMG fire on the southern edge of the polygon), and salvage cutting (BMG fire) have altered the appearance of vegetation.</p> <p><b>Undeveloped quality:</b> Prevalence of infrastructure is rare within the inventoried roadless area and overall low elsewhere. Development associated with range management include earthen tanks, troughs, and old roadbeds. Some road beds are beginning to fade (north), while others remain obvious on the landscape (middle).</p> <p><b>Unconfined and/or primitive recreation:</b> There are abundant opportunities for engaging in primitive and unconfined recreation and many of these opportunities are of high quality. Some primitive recreation opportunities include hunting, hiking and camping.</p> <p><b>Solitude:</b> Human activities are rare everywhere but in the southernmost portion of the area. Common or significant feeling of being alone or remote from civilization can be found everywhere except in the south. The area receives minimal visitor use (there are no system trails) and has steep, rugged terrain that limits the use of the area. For those interested in steep and rugged terrain, hiking in the area provides opportunities for challenge and risk. Opportunities for solitude are greatest away from adjacent roads.</p> <p><b>Other features of value:</b> Cultural and historic features are considered a unique feature in this area. The area has high site density and some of these features may be eligible for the National Register of Historic Places.</p> <p>Presence and extent of other uses and management considerations affects isolated spots and makes management to preserve the area’s wilderness characteristics possible throughout the area. Eastside border along the cliff would make management to preserve wilderness characteristics possible. Some management considerations include range permittees need access (typically motorized) to maintain developments including fence and water developments. There is a wildland-urban interface in the southeast portion of polygon and there are private lands adjacent to the area. Some traditional use by Jicarilla Apache and Navajo.</p>
<p>6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives</p>	<ul style="list-style-type: none"> <li>• High wilderness characteristics were identified in evaluation</li> <li>• The area was identified as an inventoried roadless area with low or moderate wilderness characteristics and that is at least 5,000 acres in size, or is adjacent to existing wilderness <ul style="list-style-type: none"> <li>○ The majority of the area is being managed as the Pollywog Inventoried Roadless Area</li> <li>○ Area is just over 13,469 acres</li> </ul> </li> </ul>
<p>7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System</p>	<p>The <i>ecological characteristics</i> that provide the basis for suitability are as follows:  The majority of the area appears natural, with little evidence of past human uses.  The area is mostly undeveloped with little infrastructure  The area contains unique features including scenery and cultural resources</p> <p>The <i>social characteristics</i> that provide the basis for suitability are as follows:  The area offers outstanding opportunities for solitude; and  There are high-quality opportunities for primitive and unconfined recreation  No system trails and steep, rugged terrain limit motorized access</p>



### E39, White Rock Canyon Recommended Wilderness Area

This recommended wilderness is located within two inventoried roadless areas. It is adjacent to Bandelier Wilderness.

#### White Rock Canyon recommended wilderness area

Factors	Description
1. Acres	19,258.96 acres
2. Summarized description of the recommended boundary	This is an irregularly shaped polygon that includes the southwest half of the Arroyo Montosa and the entirety of the Caja Inventoried Roadless Areas. The western boundary begins in the southwest at the Cochiti Reservation and follows the Rio Grande River (and forest boundary) with Bandelier Wilderness to the west to a utility corridor. The eastern boundary extends close to an MVUM road and follows the powerline that cuts across the Caja plateau, ending at the Reservation boundary.
3. Brief description of the general geography, topography, and vegetation	There is a major river corridor on the western side of the area; a canyon (White Rock Canyon); grasslands and arroyos make up this polygon. Plant dominance types include pinyon juniper, sagebrush, open grassland, and ponderosa pine patches along the west. Wildlife species found in the area include pinyon jay, gray vireo, southwestern willow flycatcher, American peregrine falcon, elk, bald eagle, Rio Grande chub and Rio Grande sucker.
4. Current uses and management	Located in two IRAs: Arroyo Montoso and Caja. The management area is Semi-Primitive Remote Recreation. G (Wildlife, Range, Firewood) and L (Semi-Primitive Non-Motorized Recreation) The dominant ROS Class is Semi-Primitive Non-Motorized, with some areas on the eastern edge classified as Semi-Primitive Motorized around MVUM roads.
5. Description of the wilderness characteristics and the Forest's ability to protect and manage the area to preserve its wilderness characteristics	<p><b>Natural quality:</b> The composition of plant and animal communities appears natural. Non-native species are present (Siberian elm along the Rio Grande) but are in low numbers and generally not apparent on the landscape. Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention.</p> <p><b>Undeveloped quality:</b> The presence and appearance of Infrastructure in the area is rare or scattered and does not detract from apparent naturalness. Developments include: a green storage tank, dirt tank, old roads-mostly rehabilitated or recovered but some evident on the landscape, some wood structures associated with range management, and some barbed wire fence. The eastern portion of the polygon contains the majority of the range infrastructure and old roads. A powerline makes up parts of the boundary along the eastern edge.</p> <p><b>Unconfined and/or primitive recreation:</b> High-quality primitive recreation opportunities like hiking, birding, and horseback riding can be found in the area.</p> <p><b>Solitude:</b> Opportunities to experience solitude can be found throughout much of the area though the city of Los Alamos is visible from many view points in the north, which may detract from a feeling of being remote from civilization. The eastern portion of the polygon is close to a road and may also detract from feelings of solitude. In addition to some recreational use, tribal members from the Cochiti use the area as part of a tribal pilgrimage at certain times of the year.</p>

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Factors	Description
5. Description of the wilderness characteristics and the Forest's ability to protect and manage the area to preserve its wilderness characteristics (continued)	<p><b>Other features of value</b>—Several unique features have been identified as regionally or nationally significant within this area including: rare plant or animal communities (Rio Grande sucker and chub, and endangered Southwest willow flycatcher), landscape features (Caja del Rio, White Rock Canyon, and views of the Dome and Frijoles Falls), cultural and historic resources and important watershed features. There is very high site density and modern traditional uses for cultural resources, some of which may be eligible for the National Register of Historic Places. The Caja del Rio has also been identified as an Important Bird Area (IBA) and supports a number of grassland birds whose habitat has been in steep decline throughout the United States. The Rio Grande has been identified as an important wildlife corridor. The adjacent Bandelier National Monument is a contender for an International Dark Skies Park designation.</p> <p>The presence and extent of other uses and management considerations affects isolated spots and makes management to preserve the area's wilderness characteristics possible throughout the area. The area is separated by the Rio Grande from the Bandelier Wilderness and is adjacent to the Pueblo de Cochiti Indian Reservation. There may be some access needs-including motorized access needs from the Cochiti sides. Additionally, some range management may occur with using motorized/mechanized tools and transportation.</p>
6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives	<p>High wilderness characteristics were identified in the evaluation</p> <p>The area was identified as an inventoried roadless areas with low or moderate wilderness characteristics and that is at least 5,000 acres in size, or is adjacent to existing wilderness</p> <p>--Area comprises part of the Arroyo Montosa and all of the Caja Inventoried Roadless Areas</p> <p>--The area is adjacent to the Bandelier Wilderness</p> <p>--Area is nearly 19,259 acres</p>
7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <i>ecological characteristics</i> that provide the basis for suitability are as follows: The majority of the area appears natural, with little evidence of past human uses. The area is mostly undeveloped with little infrastructure. The area contains unique features including cultural resources and rare plant and animal communities</p> <p>The <i>social characteristics</i> that provide the basis for suitability are as follows: The area offers opportunities for solitude through much of the area; and There are high-quality opportunities for primitive and unconfined recreation</p>

## E40A, Black Canyon Recommended Wilderness Area

This recommended wilderness is located within two inventoried roadless areas: Black Canyon and Thompson Peak.

### Black Canyon recommended wilderness area

Factors	Description
1. Acres	4,327.01 acres
2. Summarized description of the recommended boundary	The Santa Fe National Forest Scenic Byway comprises the western boundary of this polygon, with the rest of it generally following the Thompson Peak Inventoried Roadless Area boundary (and the municipal watershed). The eastern boundary is the Pecos Wilderness, the southern boundary is the municipal watershed. Northern boundary is a closed road, Tesuque Peak Road 150.
3. Brief description of the general geography, topography, and vegetation	Plant dominance types include ponderosa pine, pinyon juniper and deciduous mixed-conifer in the lower elevations, and spruce-fir, white pine and aspen in the higher elevations. There are many common forest animal species in the area as well as boreal owls and sensitive shrew species. Topography includes ridges and river corridor.
4. Current uses and management	The main ROS class as Semi-Primitive Non-Motorized. Several management areas are included in this polygon; the vast majority is in D (Recreation, Visual/Timber), with small portions of H/O (SFWS/Wilderness and O: Quality Water Production). There are two system non-motorized trails that access the area
5. Description of the wilderness characteristics and the Forest's ability to protect and manage the area to preserve its wilderness characteristics	<p><b>Natural quality:</b> Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention. However, part of the southern boundary along the Santa Fe Watershed boundary has a wide fireline to protect the watershed.</p> <p><b>Undeveloped quality:</b> The presence and appearance of infrastructure in the area is rare or scattered and does not detract from apparent naturalness. No roads or range developments are in the area, though there are two system non-motorized trails that access the area.</p> <p><b>Unconfined and/or primitive recreation:</b> High-quality primitive recreation opportunities like cross-country hiking, horseback riding, and wildlife and aspen viewing can be experienced in the area.</p> <p><b>Solitude:</b> Opportunities to experience solitude can be found throughout much of the area. On system trails visitors are likely to encounter other visitors but unlikely to see people when away from trails.</p> <p><b>Other features of value:</b> Several unique features have been identified in this area including regionally important view sheds (aspen viewing area); cultural and historic resources; and important watershed features (Santa Fe Watershed in the south and Tesuque creek headwaters in the North).</p> <p>The presence and extent of other uses and management considerations in the area is scattered and makes management to preserve the area's wilderness characteristics possible. The area is an inventoried roadless area, and some wildland-urban interface.</p>
6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives	<p>High wilderness characteristics were identified in evaluation</p> <p>The area was identified as an inventoried roadless area, or is adjacent to existing wilderness</p> <p>--Currently managed as an inventoried roadless area</p> <p>--Adjacent to the Pecos Wilderness</p>

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Factors	Description
7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <i>ecological characteristics</i> that provide the basis for suitability are as follows:                      The majority of the area appears natural, with little evidence of past human uses.                      The area is mostly undeveloped with little infrastructure and no roads, only non-motorized trails                      The area contains unique features including cultural resources, aspen and an important watershed                      Outstanding landscape features exist (aspen, in the north)</p> <p>The <i>social characteristics</i> that provide the basis for suitability are as follows:                      The area offers opportunities for solitude through much of the polygon; and                      There are high-quality opportunities for primitive and unconfined recreation</p>

### E41, Tesuque Peak Recommended Wilderness Area

This recommended wilderness is adjacent to the Pecos Wilderness.

#### Tesuque Peak recommended wilderness area

Factors	Description
1. Acres	2.3 acres
2. Summarized description of the recommended boundary	A very small polygon bordered by the Pecos Wilderness on the east and Tesuque Peak road on the west.
3. Brief description of the general geography, topography, and vegetation	Plant dominance types include spruce fir and aspen in the higher elevations, mixed-conifer and ponderosa pine elsewhere. Common forest animals can be found in the area as well as bighorn sheep in the east.
4. Current uses and management	Management areas is D (Recreation, Visual/Timber) The ROS is split between Semi-Primitive Non-Motorized and Urban. Area has system trails that are popular with mountain bikers.
5. Description of the wilderness characteristics and the Forest’s ability to protect and manage the area to preserve its wilderness characteristics	<p><b>Natural quality:</b> The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species along the Skyline trail a.</p> <p><b>Undeveloped quality:</b> Prevalence of development does not exist within this tiny polygon, however due to its close proximity to the Tesuque Peak radio towers, development is nearby and can be seen from parts of the polygon.</p> <p><b>Unconfined and/or primitive recreation:</b> High-quality primitive recreation opportunities like hiking, hunting, wildlife and scenery viewing, and camping can all be experienced in the area.</p> <p><b>Solitude:</b> Opportunities to experience solitude can be found throughout much of the area, though visitors can see and hear the ski basin and lifts and the Tesuque Peak radio towers from some points within the area. Mountain biking on system trails may also detract from feelings of solitude.</p> <p><b>Other features of value:</b> Cultural and historic resources and high-quality water resources are identified as unique features for the area. While little or no survey has been completed for cultural resources, there is known traditional uses and areas of traditional concern including places and areas for resource procurement and known locations of traditional significance.</p> <p>The presence and extent of other uses and management considerations in the area is scattered and makes management to preserve the area's wilderness characteristics possible throughout much of the area. The area is adjacent to congressionally designated wilderness on the north and east sides, by Pueblo in the west and private land to the south.</p>

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Factors	Description
6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives	<p>High wilderness characteristics were identified in evaluation</p> <p>The area was identified as an inventoried roadless area, or is adjacent to existing wilderness --Adjacent to Pecos Wilderness</p>
7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <i>ecological characteristics</i> that provide the basis for suitability are as follows: The majority of the area appears natural, with little evidence of past human uses. The area is mostly undeveloped with little infrastructure The area contains unique features including cultural resources</p> <p>The <i>social characteristics</i> that provide the basis for suitability are as follows: The area offers opportunities for solitude through much of the polygon especially near the wilderness There are high-quality opportunities for primitive and unconfined recreation, especially near the wilderness</p>

### E42, Tesuque Creek Recommended Wilderness Area

This recommended wilderness is located in an inventoried roadless area.

#### Tesuque Creek recommended wilderness area

Factors	Description
1. Acres	10,958.39 acres
2. Summarized description of the recommended boundary	This area follows the existing inventoried roadless area boundaries (Little Tesuque, Juan de Gabaldon Grant, and Pacheco) starting north and west of the Santa Fe National Scenic Byway. The Pacheco Canyon road (and inventoried roadless area boundary) forms the northern boundary of the polygon.
3. Brief description of the general geography, topography, and vegetation	<p>Plant dominance types include ponderosa pine, mixed-conifer and some aspen in the east and pinyon juniper and grass and forbs in the west.</p> <p>Wildlife species include marmot, elk, deer, turkey, grouse, bear and mountain lion. There is also a Mexican spotted owl protected activity center in the area. The Winsor National Recreation Trail and the Chamisa trails travel through this polygon. Topography is steep and rugged, with Tesuque Creek running through the lower section.</p>
4. Current uses and management	<p>The dominant ROS is Semi-Primitive Non-Motorized. Management areas are D (Recreation, Visual/Timber) and L (Semi-Primitive Non-Motorized Recreation). Located in an inventoried roadless area.</p> <p>The polygon contains the Windsor National Recreation Trail (Trail #254), along with many user-created trails. Mountain bike use is also very popular in the area.</p>

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<p>5. Description of the wilderness characteristics and the Forest’s ability to protect and manage the area to preserve its wilderness characteristics</p>	<p><b>Natural quality:</b> The composition of plant and animal communities appears natural. Non-native species (Siberian elm and spotted knapweed) are present in low numbers but are generally not apparent on the landscape. Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention.</p> <p><b>Undeveloped quality:</b> The presence and appearance of infrastructure varies between the northern and southern portions of the polygon. In the northern half, developments are rare or scattered and do not detract from apparent naturalness. In the Southern half prevalence of improvements is overall high and often concentrated. These developments include: a national recreation trail (Winsor trail), a large network of user created trails, two gravel pits, and minimal presence of old roads in the east.</p> <p><b>Unconfined and/or primitive recreation:</b> High-quality primitive recreation opportunities like hiking, hunting, wildlife and scenery viewing, and camping can all be experienced in the area.</p> <p><b>Solitude:</b> Opportunities for solitude are split between the northern and southern half. In the northern half, human activities are uncommon, making opportunities to feel alone possible in much of the area, because no trails exist, and the area receives very little use. However, in the southern half there is little opportunity of feeling alone and human activities and presence is common along the Winsor National Recreation Trail (Trail # 254) that transects the area receives high use, especially on the weekends as well as along the many user created trails. Mountain bike use is also very popular in the area.</p> <p><b>Other features of value:</b> High-quality water resources. The Tesuque River (has been identified as a unique feature in this area for its cultural and natural resources value to the nearby Pueblo.</p> <p>The presence and extent of other uses and management considerations in the area occur in isolated spots and makes it possible to preserve wilderness characteristics throughout much of the area. In addition, the area is in wildland-urban interface on all the edges, as well as private property adjacent to the area. However, the area is already an inventoried roadless area, which has preserved some wilderness characteristics (roadlessness) of the area.</p>
<p>6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives</p>	<p>High wilderness characteristics were identified in the evaluation</p> <p>The area was identified as an inventoried roadless areas that is at least 5,000 acres in size, or is adjacent to existing wilderness  --Located in Little Tesuque, Juan de Gabaldon Grant, and Pacheco Inventoried Roadless Areas  --Area 10,958 acres</p>
<p>7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System</p>	<p>The <i>ecological characteristics</i> that provide the basis for suitability are as follows:  The majority of the area appears natural, especially in the northern half.  The area is mostly undeveloped with little infrastructure especially in the northern half  The area contains unique features including an important watershed</p> <p>The <i>social characteristics</i> that provide the basis for suitability are as follows:  The area offers opportunities for solitude through much of the polygon; and  There are high-quality opportunities for primitive and unconfined recreation near a population center</p>

### E43, Rio En Medio Recommended Wilderness Area

This recommended wilderness includes a small section of an inventoried roadless area and is located in between two inventoried roadless areas.

#### Rio En Medio recommended wilderness area

Factors	Description
1. Acres	5,048.64 acres
2. Summarized description of the recommended boundary	Northern boundary is a utility corridor separating this polygon from #E45 and encompassing a small section on the northwest corner of the Rancho Viejo Inventoried Roadless Area. The western boundary runs along private land, excluding a small triangular slice of sections 14 and 4 where there is private land that abuts into the area. The Rio Chupadero and the Pacheco Canyon road form the southern boundary. The eastern boundary is formed by the Borrego trail.
3. Brief description of the general geography, topography, and vegetation	Plant dominance types include mixed-conifer, aspen, and ponderosa pine in the west with pinyon juniper and scrub oak in the lower elevations. Common forest species are present including deer, elk and turkey, as well as the Lincolns sparrow (state-listed species of concern) and sensitive water shrews (USFS listed species of concern). Terrain includes creeks and canyons. Small waterfalls can be seen along the trail system along Rio en Medio.
4. Current uses and management	The dominant ROS Class in this polygon is Semi-Primitive Non-Motorized. The Management Areas include D (Recreation, Visual/Timber) and L (Semi-Primitive Non-Motorized Recreation). Only a very small portion of the area in the northwest corner is currently an inventoried roadless area. Non-motorized and motorized trails exist in the area. The motorized trail is open seasonally 04/15-05/15. There is a motorized trail (Trail # 860) that runs into the middle of the area and gets used seasonally (04/15-05/15) for turkey hunting. There is also a non-motorized trail (Rio En Medio Trail) that is used for downhill mountain biking, hiking and horseback riding.
5. Description of the wilderness characteristics and the Forest's ability to protect and manage the area to preserve its wilderness characteristics	<p><b>Natural quality:</b> The composition of plant and animal communities appears natural. Non-native species (Siberian elm) are present along creeks but are in low numbers and generally not apparent on the landscape. Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention, except in the east where logging and thinning were done in the 1980s and some stumps and old logging roads are apparent in this area. There was a prescribed burn in 1995, very little evidence of it remains on the landscape.</p> <p><b>Undeveloped quality:</b> Prevalence of infrastructure is overall low throughout the area but does include an open ATV trail used for turkey hunting during hunting season. Old, closed roads are mostly naturalized.</p> <p><b>Unconfined and/or primitive recreation:</b> High-quality primitive recreation opportunities include hunting, hiking, and skiing can be found in the area.</p> <p><b>Solitude:</b> Human activities are uncommon, making opportunities to feel alone possible in much of the area, however, there is a motorized trail (Trail # 860) that runs into the middle of the area and gets used during the month of April for turkey hunting. There is also a non-motorized trail (Rio En Medio Trail) that is used for downhill mountain biking, hiking and horseback riding.</p> <p><b>Other features of value:</b> Cultural resources in this area are considered unique or rare and some of them may be eligible for the National Register of Historic Places. Traditional area used by Tesuque Pueblo. Acequia and the Rio en Medio rivers are all considered regionally or nationally unique.</p> <p>The presence and extent of other uses and management considerations in the area occur in isolated spots and makes it possible to preserve wilderness characteristics throughout much of the area. A small portion of the area is a wildland-urban interface (western edge).</p>

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6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives	<p>High wilderness characteristics were identified in the evaluation</p> <p>The area was identified as an inventoried roadless areas with low or moderate wilderness characteristics and that is at least 5,000 acres in size,                      --Has a small section within the Rancho Viejo Inventoried Roadless Area                      --Area is 5,048 acres</p>
7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <i>ecological characteristics</i> that provide the basis for suitability are as follows:                      the majority of the area appears natural                      The area is mostly undeveloped with little infrastructure                      The area contains unique features including an important watershed</p> <p>The <i>social characteristics</i> that provide the basis for suitability are as follows:                      The area offers opportunities for solitude through much of the polygon; and                      There are high-quality opportunities for primitive and unconfined recreation</p>

### E44A, Ortiz Mountain Recommended Wilderness Area

This recommended wilderness includes a portion of an inventoried roadless area.

#### Ortiz Mountain recommended wilderness area

Factors	Description
1. Acres	10,157.11 acres
2. Summarized description of the recommended boundary	This is an irregularly shaped polygon that encompasses a portion of the existing Arroyo Montoso Inventoried Roadless Area. It is bounded by the Rio Grande, beginning in the southwest north of where a utility corridor crosses from the Los Alamos National Laboratory in Section 21. The short northern boundary follows the Arroyo Montoso Inventoried Roadless Area boundary starting in Section 3 and the eastern boundary continues to follow the existing inventoried roadless area boundary to the northern quarter of section 12 where it then follows National Forest System Roads 24J and 24M, which forms the boundary to the east and the Caja Del Rio 24 road that forms the southern boundary.
3. Brief description of the general geography, topography, and vegetation	Plant dominance types include pinyon juniper, sagebrush, and open grasslands. Wildlife in the area include many common forest species as well as several protected or listed species including the American peregrine falcon, pinyon jay, Gray vireo, Rio Grande chub and Rio Grande sucker. The area is also a wild burro and wild horse territory. The terrain is steep and features a rift valley.
4. Current uses and management	The dominant ROS class is Semi-Primitive Non-Motorized Management areas include G (Wildlife, Range, Firewood), and L (Semi-Primitive Non-Motorized Recreation). A portion of an inventoried roadless area is included in this polygon. Forest System Road 24N and 24NG, although not a part of the polygon, extends into it as a cherry stem on the west side. The roads are open seasonally August to February. Mountain biking occurs in the area along the roads, with some cross-country biking as well.



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Factors	Description
<p>5. Description of the wilderness characteristics and the Forest’s ability to protect and manage the area to preserve its wilderness characteristics</p>	<p><b>Natural quality:</b> The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species (Siberian elm and salt cedar) around range water developments and along the Rio Grande. Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention.</p> <p><b>Undeveloped quality:</b> The presence and appearance of infrastructure in the area is rare or scattered and does not detract from apparent naturalness. Developments include range fence and water developments (several metal several dirt), some old roads, and two system trails. The further north in the polygon, the more natural and less apparent the roads are-so the southern point is less natural appearing due to more apparent roads, including Forest System Roads that extend into the polygon.</p> <p><b>Unconfined and/or primitive recreation:</b> High-quality primitive recreation opportunities like hiking, backpacking, birding, and horseback riding all occur in the area. Opportunities for challenge and risk are present due to rugged and hilly terrain.</p> <p><b>Solitude:</b> Opportunities to experience solitude can be found throughout much of the area though there is a small camping corridor outside the polygon in the south used by range permittees during round-up that could affect opportunities for solitude at certain times. Other activities that could affect solitude include an annual horse endurance ride and mountain biking.</p> <p><b>Other features of value:</b> Several unique features of regional or national significance have been identified in the area including landscape features: tent rocks, tent rocks canyon, scenic vistas and presence of a large major continental rift valley. The Caja del Rio has also been identified as an Important Bird Area (IBA) and supports a number of grassland birds whose habitat has been in steep decline throughout the United States. The Rio Grande has been identified as an important wildlife corridor. Cultural and historic features: level of survey indicates a moderate to high site density. Significant resources associated with Ancestral Pueblo use along river corridor. Currently used for recreation and some traditional gathering as well as other traditional purposes).</p> <p>High-quality or important water resources: presence of the Rio Grande.</p> <p>The presence and extent of other uses and management considerations affects isolated spots and makes management to preserve the area’s wilderness characteristics possible throughout the area. The northwestern portion of the polygon is an inventoried roadless area (Arroyo Montoso) which supports preservation of some wilderness characteristics. However, some management challenges include motorized/mechanized authorization for range management, possible use of the area for Air National Guard training, special use authorizations for University geology classes, and presence of a wildland Urban Interface due to adjacent powerline. Most of the use is occurring in the south, so management to preserve wilderness characteristics is more possible away from the southern boundary.</p> <p>The area is bordered by the Rio Grande to the north and west and Forest Service to the south and east.</p>
<p>6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives</p>	<p>High wilderness characteristics were identified in the evaluation</p> <p>The area was identified as an inventoried roadless area that is at least 5,000 acres in size  --A portion of the area is located within the Arroyo Montoso Inventoried Roadless Area.  --Area is 10,157 acres</p>

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Factors	Description
7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <i>ecological characteristics</i> that provide the basis for suitability are as follows:                      The majority of the area appears natural                      The area is mostly undeveloped with little infrastructure                      The area contains unique features including an important watershed and cultural resources</p> <p>The <i>social characteristics</i> that provide the basis for suitability are as follows:                      The area offers opportunities for solitude through much of the polygon; and                      There are high-quality opportunities for primitive and unconfined recreation</p>

### E45, Rio Nambé Recommended Wilderness Area

This recommended wilderness is located within an inventoried roadless area and is adjacent to existing wilderness.

#### Rio Nambé recommended wilderness area

Factors	Description
1. Acres	4,888.81 acres
2. Summarized description of the recommended boundary	This recommended wilderness area encompasses the entire Rancho Viejo Inventoried Roadless Area boundary, except for a small section in the southwest corner, where the boundary of the recommended wilderness area is the existing utility corridor. The western boundary is the Nambé Indian Reservation and the east and north is the Pecos Wilderness.
3. Brief description of the general geography, topography, and vegetation	About half of the area has been burned recently. Common forest animals can be found in the area as well as bighorn sheep in the east. Remaining plant dominance types include spruce fir and aspen in the higher elevations, mixed-conifer and ponderosa pine elsewhere.
4. Current uses and management	The dominant ROS class is Primitive. Management areas include D (Recreation, Visual/Timber); and L (Semi-Primitive Non-Motorized Recreation) Rancho Viejo Inventoried Roadless Area in a portion of the area. Several trails traverse this area, including system trails popular with mountain bikers.

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Factors	Description
<p>5. Description of the wilderness characteristics and the Forest’s ability to protect and manage the area to preserve its wilderness characteristics</p>	<p><b>Natural quality:</b> The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species along the Borrego trail and around section 36. Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention.</p> <p><b>Undeveloped quality:</b> Prevalence of infrastructure is overall low throughout the area. Developments include old roads that are in various phases of becoming renaturalized, range fence made of barbed wire and native wood posts, old fireline, and non-motorized trails.</p> <p><b>Unconfined and/or primitive recreation:</b> High-quality primitive recreation opportunities like hiking, camping, fishing, hunting, mushroom collecting, and horseback riding can be experienced in the area.</p> <p><b>Solitude:</b> Opportunities to experience solitude can be found throughout much of the area. Opportunities to experience solitude are higher in the north and away from trails. System trails in the inventoried roadless area are very popular with mountain biking.</p> <p><b>Other features of value:</b> Cultural and historic resources and high-quality water resources are identified as unique features for the area. While little or no survey has been completed for cultural resources, there is known traditional uses and areas of traditional concern including places and areas for resource procurement and known locations of traditional significance on east side of the polygon. The important water resource is Rio Nambe creek which flows into Nambe reservoir. The presence and extent of other uses and management considerations affects isolated spots and makes management to preserve the area’s wilderness characteristics possible throughout the area. The area is adjacent to congressionally designated wilderness on the north and east sides and by Pueblo in the west. This area is managed as an inventoried roadless area (Rancho Viejo). System trails in the inventoried roadless area are very popular with mountain biking.</p>
<p>6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives</p>	<p>High wilderness characteristics were identified in the evaluation</p> <p>The area was identified as an inventoried roadless area, or is adjacent to existing wilderness</p> <p>--Area within the Rancho Viejo Inventoried Roadless Area</p> <p>--Adjacent to the Pecos Wilderness</p>
<p>7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System</p>	<p>The <i>ecological characteristics</i> that provide the basis for suitability are as follows:</p> <p>The majority of the area appears natural</p> <p>The area is mostly undeveloped with little infrastructure</p> <p>The area contains unique features including an important watershed and cultural resources</p> <p>The <i>social characteristics</i> that provide the basis for suitability are as follows:</p> <p>The area offers opportunities for solitude through much of the polygon; and</p> <p>There are high-quality opportunities for primitive and unconfined recreation</p>

## E48, Guaje Canyon Recommended Wilderness Area

This recommended wilderness area is located within an inventoried roadless area.

### Guaje Canyon recommended wilderness area

Factors	Description
1. Acres	6,580.29 acres
2. Summarized description of the recommended boundary	<p>This area is an irregularly shaped polygon. The western boundary follows the Valles Caldera National Preserve (NPS) boundary. The Guaje Ridge trail roughly forms the southern boundary to the east and it follows a gas pipeline in the west. The northern boundary lies south of the Santa Clara Indian Reservation, with the 10,000-foot Caballo Mountain just outside the boundary. The eastern edge of the polygon is an irregular shape and follows the Guaje Canyon Inventoried Roadless Area boundary with the motorized Alamitos Loop trail outside the boundary in the northern part. The eastern boundary also follows the Piedra Canyon rim. The seasonal Guaje connector motorized trail hugs the southern end of the eastern boundary.</p>
3. Brief description of the general geography, topography, and vegetation	<p>Very rugged terrain including canyons and high peaks. Plant dominant types included ponderosa pine and mixed-conifer. Common forest animal species are present in the area as well as the Jemez Mountains salamander (endangered, endemic), American peregrine falcon nesting, a Mexican spotted owl protected activity center, and elk summer and winter range. Wood lily, a Forest Service species of concern, is also found in the area.</p>
4. Current uses and management	<p>The main ROS Class is Semi Primitive Non-Motorized. There are several management areas associated with this polygon: C (Recreation, Visual, Wildlife/Timber); L (Semi-Primitive Non-Motorized Recreation), and Q (Cultural Resources, Dispersed Recreation, Visual) 98 percent in an inventoried roadless area                      Non-motorized trails traverse the polygon latitudinally.</p>
5. Description of the wilderness characteristics and the Forest's ability to protect and manage the area to preserve its wilderness characteristics	<p><b>Natural quality:</b> The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species in areas affected by fire. Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention.</p> <p><b>Undeveloped quality:</b> The presence and appearance of infrastructure in the area is rare or scattered and does not detract from apparent naturalness. Developments include little pieces of pipeline with concrete and other remnants present. Non-motorized system trails and some closed road that is not apparent on the landscape.</p> <p><b>Unconfined and/or primitive recreation:</b> High-quality primitive recreation opportunities like hiking, camping, cross-country travel, and nature viewing can be experienced in the area.</p> <p><b>Solitude:</b> Minimal use and remote and rugged terrain make opportunities to experience solitude possible throughout much of the area.</p> <p><b>Other features of value:</b> The Jemez Mountains salamander is a federally listed endangered species and is endemic to the Jemez mountains making it a regionally or nationally unique feature in the area.                      Tent rocks, a volcanic geologic feature, is also found in the area.</p> <p>The presence and extent of other uses and management considerations affects isolated spots and makes management to preserve the area's wilderness characteristics possible throughout the area. There is no grazing, no motorized trails, no wildland-urban interface and 98 percent of the area is in an inventoried roadless area. The adjacent Pueblo is doing stream stabilizing activities on adjacent land which could affect management in the area. Possible traditional uses by Santa Clara and San Ildefonso may also occur.</p>

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Factors	Description
6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives	<p>High wilderness characteristics identified in evaluation</p> <p>The area was identified as an inventoried roadless area that is at least 5,000 acres in size, or is adjacent to existing wilderness</p> <p>--Presently managed as Guaje Canyon Inventoried Roadless Area</p> <p>--Area is 6,580 acres</p> <p>--Adjacent to the Valles Caldera National Preserve (NPS)</p>
7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <i>ecological characteristics</i> that provide the basis for suitability are as follows:</p> <p>The majority of the area appears natural</p> <p>The area is mostly undeveloped with little infrastructure except for some non-motorized trails</p> <p>The area contains unique features including endemic species and geological features</p> <p>Habitat for an endemic endangered species and a Mexican spotted owl activity center</p> <p>Only non-motorized trails exist.</p> <p>The <i>social characteristics</i> that provide the basis for suitability are as follows:</p> <p>The area offers opportunities for solitude through most of the polygon; and</p> <p>There are high-quality opportunities for primitive and unconfined recreation</p>

## E49B, Rio Medio Recommended Wilderness Area

This recommended wilderness includes the Rio Medio Inventoried Roadless Area and is adjacent to the Pecos Wilderness.

### Rio Medio recommended wilderness area

Factors	Description
1. Acres	2,659.26 acres
2. Summarized description of the recommended boundary	This area is west of the Pecos Wilderness and is entirely within the Rio Medio Inventoried Roadless Area. The Rio Medio is on the northern boundary, and the southern boundary generally follows Canyon Navajo. The Pecos Wilderness is on the eastern boundary, and the west follows the Santa Fe National Forest boundary.
3. Brief description of the general geography, topography, and vegetation	The topography is steep in the drainages but has flatter mesas towards the center. Plant dominance types include pinyon juniper, Gambel oak, ponderosa pine, and mixed-conifer. Much of the east half of the polygon was burned in the Borrego Fire in 2002.
4. Current uses and management	Adjacent land is designated wilderness and Santo Domingo De Cundiyo Land Grant. There is a quarter section of land in the middle of the area that is private land. Approximately 50 percent of the area is an inventoried roadless area and access to the area is difficult due to geographic and political boundaries. There is some historic and ongoing motorized access occurring for range management.
5. Description of the wilderness characteristics and the Forest's ability to protect and manage the area to preserve its wilderness characteristics	<p><b>Natural quality:</b> The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species along roads. Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention, though there is some evidence of historic logging activity (stumps).</p> <p><b>Undeveloped quality:</b> In the north of the polygon presence and appearance of improvements is rare and does not detract from apparent naturalness. In the southern part of the polygon improvements include some old roads and three trick tanks used for range management.</p> <p><b>Unconfined and/or primitive recreation:</b> Some high-quality opportunities to engage in primitive and unconfined recreation exist in the area including: hiking, hunting, fishing, horseback riding, cross-country hiking or orienteering. The area is remote and rugged allowing visitors to experience challenge and risk in the area.</p> <p><b>Solitude:</b> Human activities are rare and access into the area is difficult making it common to experience a feeling of being alone or remote from civilization.</p> <p><b>Other features of value:</b> The Rio Medio is considered a unique feature as a high-quality water resource with regional or national significance.</p> <p>The presence and extent of other uses and management considerations in the area is scattered and makes management to preserve the area's wilderness characteristics possible throughout much of the area.</p>
6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives	<p>The area was identified as an inventoried roadless area with low or moderate wilderness characteristics and that is at least 5,000 acres in size, or is adjacent to existing wilderness</p> <ul style="list-style-type: none"> <li>--Moderate wilderness characteristics identified in evaluation</li> <li>--Area within Rio Medio Inventoried Roadless Area</li> <li>--Area adjacent to the Pecos Wilderness</li> </ul>

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Factors	Description
7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <i>ecological characteristics</i> that provide the basis for suitability are as follows: Regionally important watershed The undeveloped quality is high with little infrastructure</p> <p>The <i>social characteristics</i> that provide the basis for suitability are as follows: The area offers outstanding opportunities for solitude; and There is a high amount of primitive and/or unconfined recreation for hiking and hunting.</p>

### E52B, Arroyo de la Presa Recommended Wilderness Area

This recommended wilderness includes the Arroyo de la Presa Inventoried Roadless Area.

#### Arroyo de la Presa recommended wilderness area

Factors	Description
1. Acres	9,073.40 acres
2. Summarized description of the recommended boundary	This area's northern boundary follows the Rio del Oso. The boundary to the east and south follows the Santa Fe National Forest boundary, and Clara Peak is on the eastern boundary.
3. Brief description of the general geography, topography, and vegetation	The topography is steep and rugged with sparse vegetation. Plant dominance types include pinyon juniper, ponderosa pine, sagebrush, oak and grassy meadows.
4. Current uses and management	Some traditional uses and range management occurs in the area. There is a wildland-urban interface in the northwest of the polygon. ATV use (including unauthorized use) occurs in the area.
5. Description of the wilderness characteristics and the Forest's ability to protect and manage the area to preserve its wilderness characteristics	<p><b>Natural quality:</b> The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species along roads and disturbance areas. Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention.</p> <p><b>Undeveloped quality:</b> Prevalence of improvements is overall low but does include trick tanks, fence, very minimal old roads along polygon edges, a trough, and spring well developments. Water developments are mostly earthen and natural looking.</p> <p><b>Unconfined and/or primitive recreation:</b> High-quality primitive recreation opportunities like hiking, camping and horseback riding can be found in the area.</p> <p><b>Solitude:</b> Opportunities to experience solitude can be found throughout much of the area especially when away from roads. The beautiful expansive views give a feeling of solitude and vastness.</p> <p><b>Other features of value:</b> "Gates of Hell" is an interesting geologic feature, rocks carved by arroyos, picture worthy, hiker destination. Cultural resources are identified as unique features of regional or national significance in the area. There is high site density with intensive use along the Rio del Oso and in the Vallecitos/Lobato Mesa areas. Intensive traditional cultural use for resource procurement and access to areas of traditional cultural importance for both Pueblo and Hispanic communities is also noted for the area.</p> <p>The presence and extent of other uses and management considerations is scattered and makes management to preserve wilderness characteristics possible throughout much of the area.</p>

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Factors	Description
6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives	<p>The area was identified as an inventoried roadless area with low or moderate wilderness characteristics and that is at least 5,000 acres in size, or is adjacent to existing wilderness</p> <p>--Moderate wilderness characteristics identified in evaluation</p> <p>--Area is 9,073 acres and is in the Arroyo de la Presa Inventoried Roadless Area</p> <p>--The area is predominantly in ROS Semi-primitive non-motorized.</p>
7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <i>ecological characteristics</i> that provide the basis for suitability are as follows: Regionally important watershed The undeveloped quality is high with little infrastructure</p> <p>The <i>social characteristics</i> that provide the basis for suitability are as follows: The area offers outstanding opportunities for solitude; and There is a high amount of primitive and/or unconfined recreation for hunting, horseback riding, and hiking</p>

### E53A, Polvadera IRA Recommended Wilderness Area

This recommended wilderness is in inventoried roadless area.

#### Polvadera Inventoried Roadless Area recommended wilderness area

Factors	Description
1. Acres	2,816.76 acres
2. Summarized description of the recommended boundary	This area is in the Polvadera Peak area and includes El Lagunio Palo Quemador, segments of Rechuelos, Ojitos, and Bancos Loop Trails, and a section of Rito de Abiquiu.
3. Brief description of the general geography, topography, and vegetation	The topography is steep and rugged with dense vegetation. Plant dominance types are ponderosa pine in the north, mixed- conifer/deciduous in the central area and spruce-fir in the south with some meadows and scrub oak throughout.
4. Current uses and management	<p>Some other uses and considerations include adjacent land ownership (private land on the east, wildland-urban interface in the north), traditional uses including collection of wood and herbs, water rights and uses, Abiquiu land grant, management of grazing improvements with motorized/mechanized authorization.</p> <p>The area within the inventoried roadless area has fewer other uses and considerations, making management to preserve wilderness characteristics more feasible in that area.</p>



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Factors	Description
5. Description of the wilderness characteristics and the Forest’s ability to protect and manage the area to preserve its wilderness characteristics	<p><b>Natural quality:</b> The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species along roads and other disturbed areas. Much of the area has had a natural under-burn. Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention. Vegetation treatments include salvage cuts in the late 1990’s, though subsequent fires have disguised past activities, leaving a natural looking landscape.</p> <p><b>Undeveloped quality:</b> Prevalence of improvements is overall low throughout the area. Improvements include pit tanks, well developments, trick tanks (some of earthen materials and some of metal), old roads, trails and fence.</p> <p><b>Unconfined and/or primitive recreation:</b> High-quality primitive recreation opportunities like hiking, horseback riding, and hunting can be found in the area.</p> <p><b>Solitude:</b> Opportunities to experience solitude can be found throughout much of the area especially when away from motorized dispersed camping corridors and other roads, trails and range management activities.</p> <p><b>Other features of value:</b> Several unique features are identified for the area including rare plant or animal communities (aboriginal Rio Grande cutthroat trout); unique landscape feature (Polvadera Peak); and important historic or cultural resources.</p> <p>The presence and extent of other uses and management considerations in the area is scattered and makes management to preserve the area’s wilderness characteristics possible throughout much of the area.</p>
6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives	<p>The area was identified as an inventoried roadless area with low or moderate wilderness characteristics and that is at least 5,000 acres in size, or is adjacent to existing wilderness</p> <p>--Moderate wilderness characteristics identified in evaluation</p> <p>--Area is in the Polvadera Inventoried Roadless Area</p>
7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <i>ecological characteristics</i> that provide the basis for suitability are as follows: The undeveloped quality is high with little infrastructure</p> <p>The <i>social characteristics</i> that provide the basis for suitability are as follows: The area offers outstanding opportunities for solitude; and There is a high amount of primitive and/or unconfined recreation for hunting, horseback riding, and hiking</p>

**E53B, Polvadera Recommended Wilderness Area**

This recommended wilderness area is located within three inventoried roadless areas: Polvadera, Polvadera Peak, and El Lagunita

**Polvadera recommended wilderness area**

Factors	Description
1. Acres	12,966.11 acres
2. Summarized description of the recommended boundary	This recommended wilderness area boundary is nearly the same as the existing Polvadera Peak Inventoried Roadless Area and El Lagunita Inventoried Roadless Area boundaries, except in the southern end, where it follows a fence line just outside the polygon. In section 22, it excludes a portion of the existing inventoried roadless area to avoid range infrastructure before returning to the inventoried roadless area boundary. In the north and west, some small sections of the existing inventoried roadless area boundary are excluded.

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Factors	Description
3. Brief description of the general geography, topography, and vegetation	The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species along roads and other disturbed areas. Much of the area has had a natural underburn. Plant dominance types are ponderosa pine in the north, mixed- conifer/deciduous in the central area and spruce-fir in the south with some meadows and scrub oak throughout. Wildlife in the area include Mexican spotted owl, American peregrine falcon, elk winter and summer range, Rio Grande cutthroat trout, boreal owls (species of conservation concern), and Northern leopard frog. The area includes 11,000-foot Polvadera Peak, along with several other high peaks, canyons, and creeks. The area is remote and scenic.
4. Current uses and management	The dominant ROS is Semi-Primitive Non-Motorized. The Management Areas include E (Dispersed Recreation, Visual/Timber), G (Wildlife, Range, Fuelwood) and L (Semi-Primitive Non-Motorized Recreation). The entire area is an inventoried roadless area. Some other uses and management considerations include adjacent land ownership (private land on the east), Wildland-urban interface in the north, and traditional uses (e.g., collection of wood and herbs, water rights and uses, Abiquiu land grant, and management of grazing improvements with motorized/mechanized authorization).
5. Description of the wilderness characteristics and the Forest’s ability to protect and manage the area to preserve its wilderness characteristics	<b>Natural quality:</b> Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention. Vegetation treatments include salvage cuts in the late 1990s, though subsequent fires have disguised past activities, leaving a natural looking landscape. <b>Undeveloped quality:</b> Prevalence of infrastructure is overall low throughout the area, which is primarily a few non-motorized trails. <b>Unconfined and/or primitive recreation:</b> High-quality primitive recreation opportunities like hiking, horseback riding, and hunting can be found in the area, with few restrictions or other uses limit unconfined recreation. <b>Solitude:</b> Opportunities to experience solitude can be found throughout much of the area especially when away from motorized dispersed camping corridors and other roads, trails and range management activities. This entire area is an inventoried roadless area, and opportunities for solitude are high. <b>Other features of value:</b> Several unique features are identified for the area including rare plant or animal communities (aboriginal Rio Grande cutthroat trout); unique landscape feature (Polvadera Peak); and important historic or cultural resources. The presence and extent of other uses and management considerations in the area occurs in isolated spots and makes management to preserve the wilderness characteristics throughout the area possible. The entire area is within the inventoried roadless area and has few other uses and considerations. Some other uses and management considerations include adjacent land ownership (private land on the east), wildland-urban interface in the north, and traditional uses (e.g., collection of wood and herbs, water rights and uses, Abiquiu land grant, and management of grazing improvements with motorized/mechanized authorization).
6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives	High wilderness characteristics were identified in the evaluation  The area was identified as an inventoried roadless area that is at least 5,000 acres in size --The area is located within the Polvadera, Polvadera Peak, and El Lagunita Inventoried Roadless Areas --Area is 12,966 acres

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Factors	Description
7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <i>ecological characteristics</i> that provide the basis for suitability are as follows:                      The majority of the area appears natural                      The area is mostly undeveloped with little infrastructure except for some non-motorized trails                      The area contains unique features including an important watershed and cultural resources                      Habitat for aboriginal trout                      Unique scenery and landscape</p> <p>The <i>social characteristics</i> that provide the basis for suitability are as follows:                      The area offers opportunities for solitude through most of the polygon; and                      There are high-quality opportunities for primitive and unconfined recreation</p>

### E54B, El Invierno Recommended Wilderness Area

This recommended wilderness is in the El Invierno Inventoried Roadless Area.

#### El Invierno recommended wilderness area

Factors	Description
1. Acres	34,050.99 acres
2. Summarized description of the recommended boundary	This area is located north of the Rio del Oso which makes up the southern boundary. The west and north boundary generally follow US Highway 84 and the east boundary follows the SFNF boundary to Lobato Mesa and then runs south to San Lorenzo.
3. Brief description of the general geography, topography, and vegetation	The topography is steep and rugged with sparse vegetation. Plant dominance types include pinyon juniper, ponderosa pine, sagebrush, oak, and grassy meadows.
4. Current uses and management	Some traditional uses and range management occurs in the area. There is a wildland-urban interface in the northwest of the polygon. ATV use (including unauthorized use) occurs in the area.
5. Description of the wilderness characteristics and the Forest's ability to protect and manage the area to preserve its wilderness characteristics	<p><b>Natural quality:</b> The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species along roads and disturbance areas. Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention.</p> <p><b>Undeveloped quality:</b> Prevalence of improvements is overall low but does include trick tanks, fence, very minimal old roads along polygon edges, a trough, and spring well developments. Water developments are mostly earthen and natural looking.</p> <p><b>Unconfined and/or primitive recreation:</b> High-quality primitive recreation opportunities like hiking, camping and horseback riding can be found in the area.</p> <p><b>Solitude:</b> Opportunities to experience solitude can be found throughout much of the area especially when away from roads. The beautiful expansive views give a feeling of solitude and vastness.</p> <p><b>Other features of value:</b> Window Rock is an interesting geologic feature. Cultural resources are identified as unique features of regional or national significance in the area. There is high site density with intensive use along the Rio del Oso and in the Vallecitos/Lobato Mesa areas. Intensive traditional cultural use for resource procurement and access to areas of traditional cultural importance for both Pueblo and Hispanic communities is also noted for the area.</p> <p>The presence and extent of other uses and management considerations is scattered and makes management to preserve wilderness characteristics possible throughout much of the area.</p>

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Factors	Description
6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives	The area was identified as an inventoried roadless area with low or moderate wilderness characteristics and that is at least 5,000 acres in size, or is adjacent to existing wilderness --Moderate wilderness characteristics identified in evaluation --Located in El Invierno Inventoried Roadless Area and is nearly 34,051 acres in size --This area is a large block of semi-primitive non-motorized area that is difficult to access with vehicles.
7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	The <i>ecological characteristics</i> that provide the basis for suitability are as follows: The undeveloped quality is high with little infrastructure  The <i>social characteristics</i> that provide the basis for suitability are as follows: The area offers outstanding opportunities for solitude; and There is a high amount of primitive and/or unconfined recreation for hunting, horseback riding, and hiking.

### E55, Barranca Recommended Wilderness Area

This recommended wilderness is in the Oso Vallecitos and the Arroyo de los Frijoles Inventoried Roadless Areas.

#### Barranca recommended wilderness area

Factors	Description
1. Acres	6,213.34 acres
2. Summarized description of the recommended boundary	This eastern boundary of this area follows the Santa Fe NF boundary west of Forest Road 31 that follows Abiquiu Creek and goes northwest to the Rio Chama and from here follows the Santa Fe NF boundary south and continues south to Cerro Pelon.
3. Brief description of the general geography, topography, and vegetation	The topography is hilly with generally sparse to moderately dense vegetation. Plant dominance types are mostly pinyon juniper with some sagebrush and ponderosa pine.
4. Current uses and management	Approximately 75 percent of the area is in an inventoried roadless area where current management direction already limits use and development. Some management challenges exist including: Private land and cherry stem roads on the eastern edge, private, BLM and tribal land adjacent to the area, motorized/mechanized range management activities, traditional uses associated with the Abiquiu land grant, and adjacent road use along the entire western edge.
5. Description of the wilderness characteristics and the Forest’s ability to protect and manage the area to preserve its wilderness characteristics	<b>Natural quality:</b> The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species along roads. Vegetation does not appear natural in isolated or scattered spots due to past forest management activities including chaining that occurred in the 1960s and is still evident on the landscape. <b>Undeveloped quality:</b> Prevalence of improvements is overall low but does include water developments, trick tanks, fence, old roads, a trough and fence. <b>Unconfined and/or primitive recreation:</b> Some high-quality opportunities to engage in primitive and unconfined recreation exist including hiking, camping, and hunting. The steep rugged nature of the area and few trails (the Barranca trail is indiscernible) allow opportunities for visitors to feel a part of nature and experience challenge and risk. <b>Solitude:</b> Few trails, rugged terrain, and minimal use make opportunities to feel alone possible in much of the area.

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Factors	Description
	<p><b>Other features of value:</b> Cultural resources are identified as unique features of regional or national significance in the area. Moderate site density associated with lithic resource procurement as well as modern traditional resource procurements use for traditional purposes occurs in the area.</p> <p>The presence and extent of other uses and management considerations is scattered and makes management to preserve wilderness characteristics possible throughout much of the area.</p>
6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives	<p>The area was identified as an inventoried roadless area with low or moderate wilderness characteristics and that is at least 5,000 acres in size, or is adjacent to existing wilderness</p> <p>--Moderate wilderness characteristics identified in evaluation</p> <p>--Located in Oso Vallecitos and the Arroyo de los Frijoles Inventoried Roadless Areas and is 6,213 acres</p> <p>--This area is in a Semi-primitive Non-motorized area and with much of it difficult to access with vehicles.</p>
7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <i>ecological characteristics</i> that provide the basis for suitability are as follows: The undeveloped quality is high with little infrastructure, especially in the north</p> <p>The <i>social characteristics</i> that provide the basis for suitability are as follows: The area offers outstanding opportunities for solitude, especially in the interior; and There is a high amount of primitive and/or unconfined recreation for hunting, horseback riding, and hiking.</p>

### J58, Cerra Boletas Recommended Wilderness Area

This recommended wilderness area is adjacent to the Dome Wilderness and includes an inventoried roadless area.

#### Cerra Boletas recommended wilderness area

Factors	Description
1. Acres	3,071.72 acres
2. Summarized description of the recommended boundary	The recommended wilderness area is nearly entirely in the southern half of Alamo Canyon Inventoried Roadless Area and is bounded by the Dome Lookout Road (142) on the north, Dome Lookout Road (289) on the west and south, the St. Peters Dome trail and the Dome Wilderness on the east.
3. Brief description of the general geography, topography, and vegetation	Plant dominance types are mainly scrub oak with pockets of ponderosa pine in some of the canyons. Wildlife species include bighorn sheep, mountain lion, deer, turkey, bear, rattlesnake, American peregrine falcon, two Mexican spotted owl protected activity centers, and elk winter and summer range. The area is remote and rugged.
4. Current uses and management	The dominant ROS Class is Semi-Primitive Non-Motorized, with Semi-Primitive Motorized also represented at a high level because of the roads mentioned above The Management Areas are C (Recreation, Visual, Wildlife/Timber); H (Wilderness) and R (Cultural Resources, Wildlife/Timber). Adjacent to the Dome Wilderness, this polygon is also nearly entirely located in an inventoried roadless area. There is a trailhead and non-motorized trail on the east edge of the polygon that goes to Dome Wilderness. The area may also be popular with mountain bikers.

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Factors	Description
<p>5. Description of the wilderness characteristics and the Forest’s ability to protect and manage the area to preserve its wilderness characteristics</p>	<p><b>Natural quality:</b> The composition of plant and animal communities appears natural. Non-native species (Siberian elm, musk thistle, and cheat grass) are present along roads and in fire affected areas but are generally in low numbers. Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention. Vegetation treatments include tree planting (2011) but high mortality rate and thinning in 1992, but do not detract from apparent naturalness.</p> <p><b>Undeveloped quality:</b> Prevalence of infrastructure is overall low throughout the area but does include a trick tank, road beds still apparent on the landscape, and a spring well development.</p> <p><b>Unconfined and/or primitive recreation:</b> High-quality primitive recreation opportunities like backpacking, hunting and camping occur in the area. Terrain is remote and rugged, providing ample opportunities for challenge and risk.</p> <p><b>Solitude:</b> Human activities are rare and opportunities to experience solitude are common throughout. There is a trailhead and non-motorized trail on the east edge of the polygon that goes to Dome Wilderness. The trail receives 5 to 10 encounters per day, less on weekdays, more during hunting season and weekends.</p> <p><b>Other features of value:</b> Several features are identified as unique or rare in the polygon including: rare plant or animal communities due to presence of the Mexican spotted owl and American peregrine falcon; outstanding viewpoints for the view from Forest Road 289; cultural resources due to high site density; and high-quality water resources for tributaries that flow into the Rio Grande.</p> <p>The presence and extent of other uses and management considerations affects isolated spots and makes management to preserve the area’s wilderness characteristics possible throughout the area. The area is adjacent to Dome wilderness on one side and surrounded by roads on two sides.</p>
<p>6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives</p>	<p>High wilderness characteristics identified</p> <p>The area was identified as an inventoried roadless area with low or moderate wilderness characteristics and that is at least 5,000 acres in size, or is adjacent to existing wilderness</p> <p>--Area is nearly entirely in the southern half of Alamo Canyon Inventoried Roadless Area</p> <p>--Adjacent to the Dome Wilderness</p>
<p>7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System</p>	<p>The <i>ecological characteristics</i> that provide the basis for suitability are as follows:  The majority of the area appears natural  The area is mostly undeveloped with little infrastructure except for some non-motorized trails  The area contains unique features including an important watershed and cultural resources  Unique scenery and landscapes</p> <p>The <i>social characteristics</i> that provide the basis for suitability are as follows:  The area offers opportunities for solitude through most of the polygon; and  There are high-quality opportunities for primitive and unconfined recreation</p>

## J59, Cercado Canyon Recommended Wilderness Area

This recommended wilderness area is partially located in the Jemez National Recreation Area.

### Cercado Canyon recommended wilderness area

Factors	Description
1. Acres	5,921.10 acres
2. Summarized description of the recommended boundary	This recommended wilderness area is long and narrow. On the east, it is bounded by the Cat Mesa road (135) and Highway 4 (Jemez Mountain National Scenic Byway) on the west. The northern boundary is the Forest Service boundary near Jemez Springs. The southern boundary follows the existing Forest Service boundary through sections 21, 27, 34, and 36.
3. Brief description of the general geography, topography, and vegetation	Plant dominance types are mostly pinyon juniper, ponderosa pine, and a small amount of Big sagebrush. Common wildlife species are present as well as elk winter and summer range, and American peregrine falcon. The terrain is steep, scenic, and rugged.
4. Current uses and management	The dominant ROS is Semi-Primitive Non-Motorized. There are several Management Areas in this polygon, including C (Recreation, Visual, Wildlife/Timber); R (Cultural Resources-Wildlife/Timber); S (Cultural Resources, Wildlife, Range, Firewood) and X (Jemez NRA). Guidance from the Jemez NRA plan apply to approximately 3,397 acres in this polygon. There is occasional ATV use for movement of cattle, adjacent recreation sites, some private land in the south and some traditional uses in the area.
5. Description of the wilderness characteristics and the Forest’s ability to protect and manage the area to preserve its wilderness characteristics	<p><b>Natural quality:</b> The composition of plant and animal communities appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention. Non-native species are present in disturbed areas but are in low numbers and generally not apparent on the landscape.</p> <p><b>Undeveloped quality:</b> The presence and appearance of infrastructure in the area is rare or scattered (pit tank, and a few old roads on the eastern edge) and does not detract from apparent naturalness.</p> <p><b>Unconfined and/or primitive recreation:</b> Some high-quality opportunities to engage in primitive and unconfined recreation exist in the area including: walking, hiking, exploring, and birding. The terrain is steep and rugged and provides ample opportunity to experience challenge and risk.</p> <p><b>Solitude:</b> Human activities or presence is common and little opportunity of feeling alone can be experienced in the area largely due to sights and sounds from the nearby highway (HWY 4). There is also ATV use by range permittees to manage range developments which may affect naturalness when encountered.</p> <p><b>Other features of value:</b> Cultural resources (some eligible for the National Register of Historical Places) and outstanding view sheds (canyon walls) are identified as unique features of regional or national importance in the area.</p> <p>The presence and extent of other uses and management considerations affects isolated spots and makes management to preserve the area’s wilderness characteristics possible throughout the area. Some concerns include highway 4 that runs adjacent to the area, occasional ATV use for movement of cattle, adjacent recreation sites, some private land in the south and some traditional uses in the area.</p>

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Factors	Description
6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives	High wilderness characteristics identified
7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <i>ecological characteristics</i> that provide the basis for suitability are as follows:                      The majority of the area appears natural                      The area is mostly undeveloped with little infrastructure except for some non-motorized trails                      The area contains unique features (cultural resources)</p> <p>The <i>social characteristics</i> that provide the basis for suitability are as follows:                      Opportunities for solitude exist away from roads                      There are high-quality opportunities for primitive and unconfined recreation</p>

### J62, Alamo Canyon Recommended Wilderness Area

This recommended wilderness is located in an inventoried roadless area and is adjacent to NPS Wilderness and Dome Wilderness.

#### Alamo Canyon recommended wilderness area

Factors	Description
1. Acres	6,988.32 acres
2. Summarized description of the recommended boundary	The north and east boundary are the Bandelier National Monument Wilderness, except for the straight portion of the northern boundary which borders the Valles Caldera Preserve .The northwest boundary begins at the junction of 289 and 36 and follows the southern boundary of the National Monument wilderness to the Dome Wilderness. Forest Road 289 forms the western boundary. Dome Wilderness and Forest Road 142 form the southern boundary. The majority of this polygon is the existing Alamo Canyon Inventoried Roadless Area boundary except the western edge which expands the recommended wilderness to Forest Road 289.
3. Brief description of the general geography, topography, and vegetation	Plant dominance types are New Mexico locust on the dry spots, aspen clone's in deeper soils, a few patches of ponderosa pine, and some grassy areas. The area was heavily affected by fire multiple times. Common forest wildlife are present (bear, coyotes, turkeys, elk, deer) as well as bighorn sheep, 3 Mexican spotted owl protected activity centers, elk winter and summer range, 2 American peregrine falcon areas, Jemez Mountains salamander critical habitat, and Rio Grande cutthroat trout are present in Capulin Creek to the south of the polygon. The area has deep canyons, including Alamo Canyon, mesas and ridges with scenic vistas.
4. Current uses and management	The dominant ROS class is Semi-Primitive Non-Motorized. Management area is R (Cultural Resources—Wildlife/Timber) Located in Alamo Canyon Inventoried Roadless Area Adjacent to the Bandelier Wilderness and Dome Wilderness. Some hunting camps are set up off forest road 289 and these usually have ATVs and motorcycles. There are two non-motorized trails, and one trailhead with a parking area near the Bandelier Wilderness



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Factors	Description
<p>5. Description of the wilderness characteristics and the Forest’s ability to protect and manage the area to preserve its wilderness characteristics</p>	<p><b>Natural quality:</b> The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species dispersed along roads and fire affected areas. Vegetation does not appear natural in isolated or scattered spots due to current and past uses including 1988 stand improvement cuts, tree planting in the north and along the south edge in the early 1980s, which included contouring of the landscape, and some thinning. Stumps are present but often hidden by locust.</p> <p><b>Undeveloped quality:</b> The presence and appearance of infrastructure in the area is rare or scattered and does not detract from apparent naturalness. Much of the area is in an inventoried roadless area. Some old, closed roads exist and are noticeable and drivable by a variety of vehicles, but many are overgrown and impassable. There is a cinderblock and concrete foundation structure that was once an old Civilian Conservation Camp, stock ponds, spring developments, small range fence on obsidian ridge, and two non-motorized trails.</p> <p><b>Unconfined and/or primitive recreation:</b> Some high-quality primitive and unconfined recreation opportunities exist in the area including: hiking, rock climbing, hunting and camping and rock hounding</p> <p><b>Solitude:</b> Human activities are rare and opportunities to experience solitude are common throughout. There are two non-motorized trails, and one trailhead with a parking area near the Bandelier Wilderness that may influence opportunities for solitude. Some hunting camps are set up off of forest road 289 and these usually have ATVs and motorcycles.</p> <p><b>Other features of value:</b> Several unique features are identified for the area including unique or rare wildlife communities (3 Mexican spotted owl protected activity centers, 2 American peregrine falcon areas, Jemez Mountain salamander critical habitat, bighorn sheep); outstanding landscape views (Capulin Canyon); and cultural and historic resources (high site density and some eligible for the National Register of Historic Places).</p> <p>The presence and extent of other uses and management considerations affects isolated spots and makes management to preserve the area’s wilderness characteristics possible throughout. The area is adjacent to the Bandelier Wilderness and Dome Wilderness, has no wildland-urban interface and part of the area is already an inventoried roadless area. There are some considerations and uses still exist that may affect managing to preserve wilderness characteristics including some traditional uses and fuelwood gathering, fence maintenance, and potentially motorized access for trail and fence maintenance.</p>
<p>6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives</p>	<p>High wilderness characteristics identified</p> <p>The area was identified as an inventoried roadless area with low or moderate wilderness characteristics and that is at least 5,000 acres in size, or is adjacent to existing wilderness</p> <p>--Located in Alamo Canyon Inventoried Roadless Area</p> <p>--Adjacent to the Bandelier Wilderness and Dome Wilderness.</p>
<p>7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System</p>	<p>The <i>ecological characteristics</i> that provide the basis for suitability are as follows:</p> <p>The majority of the area appears natural</p> <p>The area is mostly undeveloped with little infrastructure</p> <p>Rare wildlife communities</p> <p>High density of cultural resources</p> <p>Critical wildlife habitat</p> <p>The <i>social characteristics</i> that provide the basis for suitability are as follows:</p> <p>Opportunities for solitude exist</p> <p>There are high-quality opportunities for primitive and unconfined recreation</p>

## J63B, Bearhead Peak Recommended Wilderness Area

This recommended wilderness is located within three inventoried roadless area boundaries.

### Bearhead Peak recommended wilderness area

Factors	Description
1. Acres	12,140.86 acres
2. Summarized description of the recommended boundary	This recommended wilderness is in the Bearhead Peak Inventoried Roadless Area, Peralta Ridge Inventoried Roadless Area and Cerro La Jara Inventoried Roadless Area boundaries. There are two deviations from these boundaries: in the northern end, the boundary drops in a straight line through the middle of section 27 and 26, with the private land in that section forming the northern edge. The eastern boundary runs straight through the middle of section 35 and then diagonally through section 2, avoiding private land parcels. The rest of the polygon follows inventoried roadless area boundaries, bounded by Horn Mesa to the east, private land and Jemez Indian Reservation and Cochiti Indian Reservation to the south.
3. Brief description of the general geography, topography, and vegetation	Much of the area has been burned by wildfire, so remaining plant dominance types include scrub oak, aspen, and locust with mixed conifer in unburned areas. Wildlife in the area include 1 Mexican spotted owl protected activity center and critical habitat, elk summer and winter range, elk calving, Rio Grande cutthroat trout (recreational/aboriginal population stream); mountain sheep, American pika, snowshoe hare, Gunnison's prairie dog, lynx and American peregrine falcon. Steep and rugged terrain, including canyons and 8,000- and 9,000-foot peaks.
4. Current uses and management	The dominant ROS Class is Primitive. There are four management areas associated with this polygon: L (Semi-Primitive Non-Motorized Recreation), N (Threatened and Endangered Species Habitat), P (Cultural Resources-Timber/Wildlife) and R (Cultural Resources-Wildlife/Timber) Part of three IRAs The polygon is surrounded by Santa Fe National Forest, Cochiti and Jemez Pueblos, and some private land (in the north). The area is used for traditional purposes by adjacent Jemez and Cochiti Pueblos. The area is a part of the Bearhead Peak, Cerro a Jara, and Peralta Ridge Inventoried Roadless Areas that are already managed to limit use and development.
5. Description of the wilderness characteristics and the Forest's ability to protect and manage the area to preserve its wilderness characteristics	<b>Natural quality:</b> The composition of plant and animal communities appears natural. Non-native species are present in disturbed areas but are in low numbers and generally not apparent on the landscape. Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention. <b>Undeveloped quality:</b> The presence and appearance of infrastructure in the area is rare or scattered and does not detract from apparent naturalness. Developments include a non-motorized trail (most gone due to post fire flooding), old abandoned mines in the northeast area. <b>Unconfined and/or primitive recreation:</b> High-quality opportunities to engage in primitive or unconfined recreation (hiking, hunting) occurs in the area. <b>Solitude:</b> Human activities are rare and opportunities to experience solitude are common throughout due to the remote rugged nature of the area. Trails are mostly washed out or burned over and the area is not accessible by motorized vehicle. <b>Other features of value</b> Several unique features are identified for the area including unique or rare wildlife (1 MSO PAC, and MSO critical habitat, elk summer and winter range, elk calving area, Rio Grande cutthroat trout recreational/aboriginal population stream; mountain sheep, American pika, snowshoe hare, Gunnison's prairie dog, lynx and American peregrine falcon are all in the area.

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	The presence and extent of other uses and management considerations affects isolated spots and makes management to preserve the area’s wilderness characteristics possible. The polygon is surrounded by Santa Fe National Forest, Cochiti and Jemez Pueblos, and some private land (in the north). The area is steep, rugged and generally inaccessible. The area is utilized for traditional purposes by adjacent Jemez and Cochiti Pueblos. The area is a part of the Bearhead Peak, Cerro a Jara, and Peralta Ridge Inventoried Roadless Areas that are already managed to limit use and development.
6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives	High wilderness characteristics identified  The area was identified as an inventoried roadless area with low or moderate wilderness characteristics and that is at least 5,000 acres in size, or is adjacent to existing wilderness --Area is located in the Bearhead Peak Inventoried Roadless Area, Peralta Ridge Inventoried Roadless Area and Cerro La Jara Inventoried Roadless Area
7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	The <i>ecological characteristics</i> that provide the basis for suitability are as follows: The majority of the area appears natural The area is mostly undeveloped with little infrastructure The area contains unique features including wildlife and cultural resources Rare wildlife communities  The <i>social characteristics</i> that provide the basis for suitability are as follows: Solitude is present due to steep and rugged terrain and lack of motorized access There are high-quality opportunities for primitive and unconfined recreation

**J63C, Cochiti Canyon Recommended Wilderness Area**

This recommended wilderness is located between two inventoried roadless areas

**Cochiti Canyon recommended wilderness area**

Factors	Description
1. Acres	6,068.53 acres
2. Summarized description of the recommended boundary	This recommended wilderness lies in between the Bearhead Peak Inventoried Roadless Area and the Alamo Canyon Inventoried Roadless Area. The west boundary follows the Bearhead Peak Inventoried Roadless Area boundary and the east boundary follows FR 289. To the south, Cochiti Pueblo forms the southern boundary. The northern boundary generally runs southwest-northeast from the Bearhead Peak Inventoried Roadless Area northeast corner to the St. Peter’s Dome Road.
3. Brief description of the general geography, topography, and vegetation	The area was most recently burned in the Las Conchas fire (2011), so remaining plant dominance types include scrub oak, aspen, locust and mixed-conifer and ponderosa pine in unburned areas. Some wood lily is recorded in the area. Wildlife in the area include 3 Mexican spotted owl protected activity centers and critical habitat, American peregrine falcon, elk winter and summer range, bighorn sheep, and wood lily. There is also a small amount of Jemez Mountains salamander critical habitat on the edge. The area has two large mesas and two canyons, and perennial streams.

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Factors	Description
4. Current uses and management	<p>Semi Primitive Non-Motorized is the dominant ROS Class. Management areas included are C (Recreation—Visuals, Wildlife/Timber), L (Semi-Primitive Non-Motorized Recreation); N (Endangered Species Habitat) and R (Cultural Resources-Wildlife/Timber). Some considerations include; private land inholding, traditional uses by Cochiti including access (currently on foot), an ongoing lawsuit to rebuild a road in the area, range allotment management, and some concerns around the southern boundary for Forest Service law enforcement to access the area.</p>
5. Description of the wilderness characteristics and the Forest’s ability to protect and manage the area to preserve its wilderness characteristics	<p><b>Natural quality:</b> The composition of plant and animal communities appears natural. Non-native species (Siberian elm and musk thistle) are present in disturbed areas but are in low numbers and generally not apparent on the landscape. Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention. Some vegetation thinning (2004) and tree planting (2013) has taken place, but very little evidence is apparent on the landscape.</p> <p><b>Undeveloped quality:</b> The presence and appearance of infrastructure in the area is rare or scattered and does not detract from apparent naturalness. Developments include a corral at the south end of polygon, several old closed roads in the north that are still apparent, and the non-motorized trail (Medio Dia Trail).</p> <p><b>Unconfined and/or primitive recreation:</b> High-quality primitive recreation opportunities like hunting, hiking and camping can all be found in the area.</p> <p><b>Solitude:</b> Human activities are rare and opportunities to experience solitude are common throughout. The area is remote, rugged and difficult to access, so opportunities for solitude are high.</p> <p><b>Other features of value:</b> Several unique features are identified for the area including unique or rare wildlife (3 Mexican spotted owl protected activity centers and critical habitat, American peregrine falcon and bighorn sheep). There is also a small amount of Jemez Mountains salamander critical habitat on the edge.</p> <p>Outstanding landscape features/views include Horn mesa, Cochiti canyon, and the outstanding view from road 289 (regionally important).</p> <p>Cultural resources in this area are considered unique or rare and some of them may be eligible for the National Register of Historic Places. Of particular note is the heavy use of Horn mesa by Cochiti people.</p> <p>High-quality water resources were identified due to several canyons role in carrying water to the Rio Grande.</p> <p>The presence and extent of other uses and management considerations affects isolated spots and makes management to preserve the area’s wilderness characteristics possible throughout the area. Some considerations include; private land inholding, traditional uses by Cochiti including access (currently on foot), an ongoing lawsuit to rebuild a road in the area, range allotment management, and some concerns around the southern boundary for USFS law enforcement to access the area.</p>
6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives	<p>High wilderness characteristics identified</p>

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7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <i>ecological characteristics</i> that provide the basis for suitability are as follows:                      The majority of the area appears natural                      The area is mostly undeveloped with little infrastructure                      The area contains unique features including wildlife and cultural resources                      Rare wildlife communities and endangered species habitat                      High density of cultural and water resources                      Views</p> <p>The <i>social characteristics</i> that provide the basis for suitability are as follows:                      Solitude is present due to steep and rugged terrain and lack of motorized access                      There are high-quality opportunities for primitive and unconfined recreation</p>

### J64B, Virgin Mesa Recommended Wilderness Area

This recommended wilderness is located within an inventoried roadless area and partially located with the Jemez National Recreation Area.

#### Virgin Mesa recommended wilderness area

Factors	Description
1. Acres	9,491.17 acres
2. Summarized description of the recommended boundary	This is an irregularly shaped polygon with a narrow northern finger, encompassing the Virgin Canyon Inventoried Roadless Area and expanding the boundaries. The Jemez Mountain National Scenic Byway forms the eastern boundary. The south end comes to a point using the inventoried roadless area boundary. The Inventoried Roadless Area boundary is also the western boundary of the polygon, bounded roughly by NM 485 (with a ¼ mile buffer for the eligible WSR: Jemez) and the Lake Fork Canyon road. The Holiday road (#608) forms a portion of the northern boundary, and then a finger takes in the Virgin Canyon. The northern boundary continues across the mid-section of sections 28 and 27 before reaching Highway 4, which forms the eastern boundary.
3. Brief description of the general geography, topography, and vegetation	Plant dominance types include pinyon juniper, Big sagebrush, ponderosa pine and deciduous shrub. Wildlife includes Mexican spotted owl protected activity center, Mexican spotted owl critical habitat, American peregrine falcon, northern leopard frog, New Mexican meadow jumping mouse, and an elk calving area. The area is composed of canyons and mesas with scenic views.
4. Current uses and management	The dominant ROS class is Semi-Primitive Non-Motorized. Management Areas include C (Recreation, Visual, Wildlife/Timber); N (Threatened and Endangered Species Habitat); R (Cultural Resources-Wildlife/Timber) and X (Jemez NRA) Located partially within the Jemez NRA (3,213 acres) and partially within the Virgin Canyon Inventoried Roadless Area Unauthorized motorized use occurs in the area. Range permittees are in the area frequently
5. Description of the wilderness characteristics and the Forest’s ability to protect and manage the area to preserve its wilderness characteristics	<b>Natural quality:</b> The composition of plant and animal communities appears natural. Non-native species are present in some areas but are in low numbers and generally not apparent on the landscape (except in riparian areas where salt cedar is present).Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention. <b>Undeveloped quality:</b> Prevalence of infrastructure is overall low throughout the area but does include several developments including user created roads and old logging roads. It is common to find spots where developments are absent or unseen.

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Factors	Description
	<p><b>Unconfined and/or primitive recreation:</b> Some high-quality opportunities to engage in primitive and unconfined recreation exist in the area including hunting and hiking and are especially high-quality when in the canyons.</p> <p><b>Solitude:</b> Human activities are uncommon, making opportunities to feel alone possible in much of the area. It is remote and rugged and generally difficult to access, but motorized use on the western edge and HWY 4 on the eastern edge may affect opportunities for solitude when near those areas. Range permittees are in the area frequently, but mostly stay out of the canyons.</p> <p><b>Other features of value:</b> Unique features identified in the area include Rio Grande chub and Rio Grande sucker, Mexican spotted owl, New Mexico meadow jumping mouse, American peregrine falcon geologic features including outstanding springs and viewpoints, Guadalupe mesa, and views from the canyon rim; high density of cultural and historic resources, some of which may be eligible for listing; and several free flowing high-quality water resources.</p> <p>The presence and extent of other uses and management considerations affects isolated spots and makes management to preserve the area’s wilderness characteristics possible. The area is part of an inventoried roadless area and is bordered on two sides by cliff.</p>
6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives	<p>High wilderness characteristics identified</p> <p>The area was identified as an inventoried roadless area with low or moderate wilderness characteristics and that is at least 5,000 acres in size, or is adjacent to existing wilderness --The area is partially located within the Virgin Canyon inventoried roadless area</p>
7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <i>ecological characteristics</i> that provide the basis for suitability are as follows: The majority of the area appears natural The area is mostly undeveloped with little infrastructure The area contains unique features including geologic features and threatened and endangered species habitat. Rare wildlife communities High density of cultural and water resources Unique features including geologic features and viewpoints</p> <p>The <i>social characteristics</i> that provide the basis for suitability are as follows: Solitude is present due to steep and rugged terrain and lack of motorized access There are high-quality opportunities for primitive and unconfined recreation</p>

**P79B, Burro Basin Recommended Wilderness Area**

This recommended wilderness is in the Gallinas, Bear Mountain, and Valle de Toro Inventoried Roadless Areas and is adjacent to the Pecos Wilderness.

**Burro Basin recommended wilderness area**

Factors	Description
1. Acres	16,401.75 acres
2. Summarized description of the recommended boundary	This area is irregularly shaped and follows the Pecos Wilderness boundary to the north, and to the east skirts the edges of private land inholdings and continues south around Burro Basin Trailhead and to Tecolote Creek. From here it goes west across Blue Canyon to Valle Escondido and continues north to Elk Mountain and Mount Barker. Portions of the Skyline Trail are in this area.

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Factors	Description
3. Brief description of the general geography, topography, and vegetation	The topography is steep and rugged with dense vegetation. Plant dominance communities include mixed conifer/deciduous, aspen, spruce-fir in higher elevations, and high elevation grasses and forbs.
4. Current uses and management	Some other considerations and uses include: established wildland-urban interface in a portion of the area, historic and established motorized use in inventoried roadless area, legal motorized/mechanized use by range permittees for range management, access and use issues related to adjacent private land, and the long, narrow shape of polygon. The area includes the Sky line trail and Nanaka trail. Approximately 10 percent of the area has a signed decision for the Galiinas watershed restoration project with heavy machinery and chainsaw use to protect watershed health downstream. The area is adjacent to the Pecos wilderness.
5. Description of the wilderness characteristics and the Forest’s ability to protect and manage the area to preserve its wilderness characteristics	<b>Natural quality:</b> The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species in disturbed areas. Vegetation does not appear natural in isolated or scattered spots due to thinning, piling and burning in the area (Nanaka 2015 and Terrell Ranch Thin 2010). Dozer line, stumps and piles are still evident on the landscape. <b>Undeveloped quality:</b> Prevalence of improvements is overall low throughout the area. Improvements include the Sky line trail and Nanaka trail, several range improvements including 6 to 7 miles of fence, water development and an old corral. <b>Unconfined and/or primitive recreation:</b> High-quality primitive recreation opportunities like hunting, backpacking, hiking and horseback riding can be found in the area. The terrain is rugged and challenging. <b>Solitude:</b> Human activities are uncommon, making opportunities to feel alone possible in much of the area. Opportunities for solitude are lower during hunting season. <b>Other features of value:</b> Important watershed resources have also been identified as a unique feature in this polygon due to the presence of the Gallinas drainage and Pecos watershed which are considered regionally or nationally important due to their value as habitat for the Rio Grande cutthroat trout and as a part of the municipal water supply for Las Vegas. The rare wood lily ( <i>Lilium philadelphicum</i> ) is present in one location.  The presence and extent of other uses and/or considerations (e.g., shape or configuration) occurs throughout most of the area making it difficult to manage the area to preserve its wilderness characteristics.
6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives	The area was identified as an inventoried roadless area with low or moderate wilderness characteristics and that is at least 5,000 acres in size, or is adjacent to existing wilderness --Adjacent to the Pecos Wilderness --Located in the Gallinas, Bear Mountain, and Valle de Toro Inventoried Roadless Areas
7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	The <i>ecological characteristics</i> that provide the basis for suitability are as follows: Regionally important watershed The undeveloped quality is high with little infrastructure.  The <i>social characteristics</i> that provide the basis for suitability are as follows: The area offers outstanding opportunities for solitude; and There is a high amount of primitive and/or unconfined recreation for hunting, horseback riding, and hiking

## P81, Sapello Recommended Wilderness Area

This recommended wilderness is adjacent to the Pecos Wilderness.

### Sapello recommended wilderness area

Factors	Description
1. Acres	155.26 acres
2. Summarized description of the recommended boundary	Small polygon located adjacent to the Pecos Wilderness and bounded roughly on the north and east by private lands and the Sapello River and by the wilderness on the south and west. A road that bisects the area from the wilderness.
3. Brief description of the general geography, topography, and vegetation	Plant dominance types include ponderosa pine, mixed-conifer deciduous, some deciduous shrub (oak) and areas with grassy forbs mix present. The area is steep and rugged. Common forest species are in the area as well as some elk summer and winter range and Mexican spotted owl critical habitat on eastern edge, and Gunnison’s mariposa lily is found in the area (a USFS sensitive species)
4. Current uses and management	The ROS class is Semi-Primitive Motorized. Management Area is B (Wildlife/Timber) Wood cutting is popular in the area.
5. Description of the wilderness characteristics and the Forest’s ability to protect and manage the area to preserve its wilderness characteristics	<p><b>Natural quality:</b> The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species in disturbed areas.</p> <p><b>Undeveloped quality:</b> Prevalence of infrastructure is overall low throughout the area.</p> <p><b>Unconfined and/or primitive recreation--</b> Primitive recreation opportunities include cross-country hiking, though quality of opportunities is generally low, but does increase when closer to the wilderness area.</p> <p><b>Solitude</b> Human activities are uncommon, making opportunities to feel alone possible in much of the area. However, a county road is obvious from most areas in the polygon and noise from adjacent private land detracts from a feeling of being alone and remote from civilization. Wood cutting is popular in the area as well. Opportunities for solitude increase when adjacent to wilderness. There are no trails in the area and the terrain is steep, rugged and heavily forested.</p> <p><b>Other features of value:</b> None identified.</p> <p>The presence and extent of other uses and management consideration in the area is overall low in this polygon, which is close to the designated wilderness. Some considerations include private land adjacent to the area.</p>
6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives	<p>High wilderness characteristics identified</p> <p>The area was identified as an inventoried roadless area with low or moderate wilderness characteristics and that is at least 5,000 acres in size, or is adjacent to existing wilderness                      --The area is adjacent to the Pecos Wilderness</p>
7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <i>ecological characteristics</i> that provide the basis for suitability are as follows:                      The majority of the area appears natural                      The area is mostly undeveloped with little infrastructure.</p> <p>The <i>social characteristics</i> that provide the basis for suitability are as follows:                      Solitude is present due to adjacent wilderness                      There are high-quality opportunities for primitive and unconfined recreation</p>



## P82, Johns Canyon Recommended Wilderness Area

This recommended wilderness is adjacent to the Pecos Wilderness.

### Johns Canyon recommended wilderness area

Factors	Description
1. Acres	14.14 acres
2. Summarized description of the recommended boundary	Very small rectangular polygon bounded on three sides by private land and the Pecos Wilderness on the west. A road that bisects the area from the wilderness
3. Brief description of the general geography, topography, and vegetation	Plant dominance types include ponderosa pine, mixed-conifer deciduous, some deciduous shrub (oak) and areas with grassy forbs mix present. The area is steep and rugged. Common forest species are in the area as well as some elk summer and winter range and Mexican spotted owl critical habitat on eastern edge.
4. Current uses and management	The ROS class is Semi-Primitive Non-Motorized. Management Areas include B (Wildlife/Timber) and H (Wilderness). Wood cutting is popular in the area, and the area is used by traditional communities.
5. Description of the wilderness characteristics and the Forest's ability to protect and manage the area to preserve its wilderness characteristics	<p><b>Natural quality:</b> The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species in disturbed areas.</p> <p><b>Undeveloped quality:</b> Prevalence of infrastructure is overall low throughout the area.</p> <p><b>Unconfined and/or primitive recreation:</b> Primitive recreation opportunities include cross-country hiking, though quality of opportunities is generally low, but does increase when closer to the wilderness area.</p> <p><b>Solitude:</b> Human activities are uncommon, making opportunities to feel alone possible in much of the area. However, a county road is obvious from most areas in the polygon and noise from adjacent private land detracts from a feeling of being alone and remote from civilization. Wood cutting is popular in the area as well. Opportunities for solitude increase when adjacent to wilderness. There are no trails in the area and the terrain is steep, rugged and heavily forested.</p> <p><b>Other features of value:</b> None identified.</p> <p>The presence and extent of other uses and management consideration in the area is overall low in this polygon, which is close to the designated wilderness. Some considerations include use of the area for traditional uses (claim Santa Gertrudis lo de Mora Land Grant), private land adjacent to the area,</p>
6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives	<p>High wilderness characteristics identified</p> <p>The area was identified as an inventoried roadless area with low or moderate wilderness characteristics and that is at least 5,000 acres in size, or is adjacent to existing wilderness                      --The area is adjacent to the Pecos Wilderness</p>
7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <i>ecological characteristics</i> that provide the basis for suitability are as follows:                      The majority of the area appears natural                      The area is mostly undeveloped with little infrastructure</p> <p>The <i>social characteristics</i> that provide the basis for suitability are as follows:                      Solitude is present due to adjacent wilderness                      There are high-quality opportunities for primitive and unconfined recreation</p>

### P84A, Cowles and Wesner Spring Recommended Wilderness Area

This recommended wilderness is in the Wesner Spring and Willow Creek Inventoried Roadless Areas and is adjacent to the Pecos Wilderness.

#### Cowles and Wesner Spring recommended wilderness area

Factors	Description
1. Acres	300.75 acres
2. Summarized description of the recommended boundary	This area is north of Wesner Spring adjacent to the Pecos Wilderness
3. Brief description of the general geography, topography, and vegetation	The topography is steep and rugged with dense vegetation. Plant dominance types include mixed-conifer, ponderosa pine, scrub oak and some aspen.
4. Current uses and management	Other uses and considerations include, cherry stem roads in the south, motorized access for range improvements including use of heavy equipment, established fuel wood gathering area, adjacent private property in the east, several high use areas around the southern and western border. There is an OHV camping area, and there is UTV/ATV use on the road at the southern end of the polygon.
5. Description of the wilderness characteristics and the Forest’s ability to protect and manage the area to preserve its wilderness characteristics	<p><b>Natural quality:</b> The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species along the roads. Vegetation does not appear natural in isolated or scattered spots due to concentration of vegetation treatments in the south west. Most recent thinning has occurred near the southern boundary in the late 1980’s and early 1990s, leaving stumps and other signs of disturbance.</p> <p><b>Undeveloped quality:</b> Prevalence of improvements is overall low throughout the area. Improvements include tanks, fences, troughs, pump jacks, water developments, iron gate, an OHV camping area. Several old roads are evident on the landscape.</p> <p><b>Unconfined and/or primitive recreation:</b> Some high-quality opportunities to engage in primitive and unconfined recreation exist in the area including hiking, hunting and horseback riding. Within the inventoried roadless area, opportunities for primitive recreation tend to be higher quality as fewer activities and signs of civilization are present.</p> <p><b>Solitude:</b> Human activities are uncommon, making opportunities to feel alone possible in much of the area especially when away from roads and trails. There are several motorized dispersed camping corridors on the south side of the area that reduce opportunities to experience solitude (motorized sights and sounds). Two non-motorized system trails are within the area. There are several power lines and a weather station along the area edges that can be seen from within the polygon.</p> <p><b>Other features of value:</b> There are no known regionally or nationally unique or outstanding qualities or features present in this area.</p> <p>P84a is the non-Inventoried Roadless Area portion of polygon 84. In this portion of the area the presence and extent of other uses and/or considerations (e.g., shape or configuration) occurs throughout most of the area making it difficult to manage the area to preserve its wilderness characteristics.</p>
6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives	<ul style="list-style-type: none"> <li>• The area was identified as an inventoried roadless area with low or moderate wilderness characteristics and that is at least 5,000 acres in size, or is adjacent to existing wilderness                         <ul style="list-style-type: none"> <li>--The area is adjacent to the Pecos Wilderness</li> <li>--The area is within the Wesner Spring and Willow Creek Inventoried Roadless Areas</li> </ul> </li> </ul>

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Factors	Description
7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <i>ecological characteristics</i> that provide the basis for suitability are as follows: The undeveloped quality is high with little infrastructure</p> <p>The <i>social characteristics</i> that provide the basis for suitability are as follows: The area offers outstanding opportunities for solitude; and There is a high amount of primitive and/or unconfined recreation for hunting, horseback riding, and hiking</p>

### P84B, Grass Mountain Recommended Wilderness Area

This recommended wilderness includes portions of two inventoried roadless areas and is adjacent to the Pecos Wilderness.

#### Grass Mountain recommended wilderness area

Factors	Description
1. Acres	4,652.05 acres
2. Summarized description of the recommended boundary	Irregularly shaped polygon mostly following the Grass Mountain and Willow Creek Inventoried Roadless Area boundaries. In the south, Willow Creek forms most of the boundary, which skirts a private land block in section 15 and curves southward into section 20 to the Pecos Wilderness boundary. This wilderness boundary forms the eastern boundary of the polygon. In the north, the Valle Medio Trail where it comes out of the wilderness is near the northern boundary, and the western boundary is the same as the inventoried roadless area boundaries with the exception of a slice of section 2 that is excluded and to skirt private land. A small portion of the area is also part of the Pecos Wild and Scenic River corridor (recreational classification)
3. Brief description of the general geography, topography, and vegetation	The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species along the roads. Plant dominance types include mixed-conifer, ponderosa pine, scrub oak and some aspen. The area has an elk calving area and elk summer and winter range. Northern goshawk is present in the area. Grass Mountain, a nearly 10,000-foot peak, river corridors, and several trails traverse through this polygon.
4. Current uses and management	The dominant ROS class is Semi-Primitive Non-Motorized. Management Areas include D (Recreation, Visual/Timber) and H (Wilderness). The polygon is entirely located within two IRAs and is adjacent to the Pecos Wilderness. There is a popular mountain biking trail that runs through the middle of the polygon and an old mining area near the eastern boundary.
5. Description of the wilderness characteristics and the Forest’s ability to protect and manage the area to preserve its wilderness characteristics	<p><b>Natural quality:</b> Non-native species are evident in isolated spots or low numbers scattered throughout.</p> <p><b>Undeveloped quality:</b> Prevalence of infrastructure is overall low throughout the area There are two spring well developments in the south and a short segment of fence in the north.</p> <p><b>Unconfined and/or primitive recreation:</b> Some high-quality opportunities to engage in primitive and unconfined recreation exist in the area including: hiking, hunting and horseback riding. Within the inventoried roadless area, opportunities for primitive recreation tend to be higher quality as fewer activities and signs of civilization are present.</p> <p><b>Solitude:</b> Human activities are uncommon, making opportunities to feel alone possible in much of the area especially when away from trails.</p> <p><b>Other features of value:</b> There are no known regionally or nationally unique or outstanding qualities or features present in this area.</p> <p>P84b is the inventoried roadless area portion of polygon 84. It has few other uses and considerations, making it possible to manage the area to preserve wilderness characteristics.</p>

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Factors	Description
6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives	<p>High wilderness characteristics identified</p> <p>The area was identified as an inventoried roadless area with low or moderate wilderness characteristics and that is at least 5,000 acres in size, or is adjacent to existing wilderness</p> <p>--The area is adjacent to the Pecos Wilderness</p> <p>--The area is within the Grass Mountain and Willow Creek Inventoried Roadless Areas</p>
7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <i>ecological characteristics</i> that provide the basis for suitability are as follows:</p> <p>The majority of the area appears natural</p> <p>The area is mostly undeveloped with little infrastructure</p> <p>The <i>social characteristics</i> that provide the basis for suitability are as follows:</p> <p>Solitude is present due to adjacent wilderness</p> <p>There are high-quality opportunities for primitive and unconfined recreation</p>

### P85B, Thompson Peak Recommended Wilderness Area

This recommended wilderness is located within an inventoried roadless area and is adjacent to the Pecos Wilderness

#### Thompson Peak recommended wilderness area

Factors	Description
1. Acres	21,849.36 acres
2. Summarized description of the recommended boundary	This irregularly shaped polygon is entirely within the east and southern portions of the Thompson Peak Inventoried Roadless Area and the Holy Ghost Inventoried Roadless Area. The northern and northwest boundary is the Pecos Wilderness boundary. At the terminus of the Holy Ghost road (122), the eastern boundary is the existing inventoried roadless area boundary along the Holy Ghost Inventoried Roadless Area western side. The southern boundary is the same as the Thompson Peak Inventoried Roadless Area boundary. On the west, the boundary of the polygon differs, following the USFS district boundary line instead. The municipal watershed forms the rest of the western boundary. Small portions of the boundary abut private land in the southeastern and northwestern portions of the polygon.
3. Brief description of the general geography, topography, and vegetation	Plant dominance types include mixed conifer, ponderosa pine, pinyon juniper in lower elevation, and some aspen. Common forest animal species are present. There is a Mexican spotted owl protected activity center in the area and Mexican spotted owl critical habitat is located in this polygon. American peregrine falcon are present and. Rio Grande cutthroat trout in several creeks. Thompson Peak, a 10,554-foot mountain, is located in the south of this polygon.
4. Current uses and management	The dominant ROS class is Semi-Primitive Non-Motorized. Management areas include D (Recreation, Visual/Timber); E (Dispersed Recreation, Visual/Timber); H (Wilderness); H/O (SFWS/Wilderness); L (Semi-Primitive Non-Motorized Recreation) and O (Quality Water Production). Area is entirely within an inventoried roadless area. A mountain biking trail runs through the middle of the polygon.

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Factors	Description
<p>5. Description of the wilderness characteristics and the Forest’s ability to protect and manage the area to preserve its wilderness characteristics</p>	<p><b>Natural quality:</b> The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species in disturbed areas.</p> <p><b>Undeveloped quality:</b> Prevalence of infrastructure is overall low throughout the area and includes one system trail in the south central portion of the polygon, several closed roads in the northeast and south that are still evident on the landscape. There are no range developments. There is a lookout tower with metal flashing just outside the polygon that is visible from some locations within the polygon.</p> <p><b>Unconfined and/or primitive recreation:</b> High-quality primitive recreation opportunities like hiking, hunting, and backpacking can also be experienced in the area. The terrain and lack of amenities provides a high level of challenge or risk for visitors.</p> <p><b>Solitude:</b> Proximity to recreation sites and busy roads, including I25 and State Road 63, may impact feelings of solitude and remoteness. Opportunities to experience solitude can be found throughout much of the area, especially when away from roads and motorized sounds. Human activities overall are generally rare and a feeling of being alone or remote from civilization is possible, however, when on ridges, visitors can see signs of civilization.</p> <p><b>Other features of value:</b> Several unique features are identified for this area including rare plant or animal communities, cultural and historic resources, and high-quality water resources. Of note, there are three reaches with pure cutthroat trout (RFSS) present and Mexican spotted owl and American peregrine falcon nest in the area.</p> <p>There has been a low level of survey for historic and cultural resources, but significant historic resources along the margin of the area and high use along margins by historic and modern communities make significance likely. Pecos watershed is considered regionally or nationally important due to its value as habitat for the pure Rio Grande cutthroat trout and as a part of the municipal water supply for Las Vegas.</p> <p>Presence and extent of other uses and management considerations affects isolated spots and makes management to preserve the area’s wilderness characteristics possible throughout the area. The entire area is an inventoried roadless area with view other uses or considerations, though there are small areas of adjacent private land. There is a proposed exploratory drilling project on an old mining site on the eastern boundary of the polygon. No range developments are in the area.</p>
<p>6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives</p>	<p>High wilderness characteristics identified</p> <p>The area was identified as an inventoried roadless area with low or moderate wilderness characteristics and that is at least 5,000 acres in size, or is adjacent to existing wilderness</p> <p>--The area is within Thompson Peak Inventoried Roadless Areas</p> <p>--The area is Adjacent to the Pecos Wilderness</p>
<p>7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System</p>	<p>The <i>ecological characteristics</i> that provide the basis for suitability are as follows:</p> <p>The majority of the area appears natural</p> <p>The area is mostly undeveloped with little infrastructure</p> <p>Nationally important watershed and habitat</p> <p>The <i>social characteristics</i> that provide the basis for suitability are as follows:</p> <p>Solitude is present due to lack of roads</p> <p>There are high-quality opportunities for primitive and unconfined recreation</p>

### P85D, Cañada Corral Recommended Wilderness Area

This recommended wilderness is in the Thompson Peak Inventoried Roadless Area.

#### Cañada Corral recommended wilderness area

Factors	Description
1. Acres	3,068.39 acres
2. Summarized description of the recommended boundary	This area’s northern boundary follows the Santa Fe Watershed boundary east to Apache Canyon, follows the Canyon south for about one mile and goes west across Arroyo Hondo then south crossing over Sierra Pelada then west to the Santa Fe National Forest, which it follows north to Atalaya Mountain.
3. Brief description of the general geography, topography, and vegetation	The topography is steep and rugged with moderately dense vegetation. Plant dominance types include ponderosa pine and mixed-conifer to the east, and pinyon juniper to the west.
4. Current uses and management	This polygon is near a large urban population, is adjacent to private property, and has some wildland-urban interface in the south. There is a network of trails all along Atalaya mountain as well as user-created trails from mountain bike use.
5. Description of the wilderness characteristics and the Forest’s ability to protect and manage the area to preserve its wilderness characteristics	<p><b>Natural quality:</b> The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species (Siberian elm, knapweed, Dalmatian toadflax) along roads. Vegetation does not appear natural in isolated or scattered spots due the presence of a fuel break (2000s) with some stumps visible in the affected area.</p> <p><b>Undeveloped quality:</b> Prevalence of improvements is overall low but includes a network of trails all along Atalaya mountain as well as user created trails from mountain bike use.</p> <p><b>Unconfined and/or primitive recreation:</b> There are some opportunities for high-quality primitive recreation opportunities include, hiking, hunting, camping, and wildlife viewing.</p> <p><b>Solitude:</b> There is little opportunities to feel alone in much of this polygon as human activities and presence is common and signs of civilization are pervasive. The polygon is near a large urban population resulting in views of the city from most of the polygon as well as heavy use (e.g., hiking, mountain biking, by St. John's College) throughout the Atalaya trail system.</p> <p><b>Other features of value:</b> Cultural resources are identified as unique features of regional or national significance in the area. Low level of survey has been completed but significant historic resources along the margin of the area and high use along margins by historic and modern communities.</p> <p>The presence and extent of other uses and management considerations in the area is scattered and makes management to preserve the area’s wilderness characteristics possible in much of the area. However, some management challenges exist.</p>
6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives	<p>The area was identified as an inventoried roadless area with low or moderate wilderness characteristics and that is at least 5,000 acres in size, or is adjacent to existing wilderness</p> <p>--The area is within the Thompson Peak Inventoried Roadless Area</p>
7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <i>ecological characteristics</i> that provide the basis for suitability are as follows:                      Regionally important watershed                      The undeveloped quality is high with little infrastructure</p> <p>The <i>social characteristics</i> that provide the basis for suitability are as follows:                      The area offers outstanding opportunities for solitude; and                      There is a high amount of primitive and/or unconfined recreation for hunting, horseback riding, and hiking</p>

### P86A, Lost Lake Recommended Wilderness Area

This recommended wilderness area is located within an inventoried roadless area and is adjacent to the Pecos Wilderness.

#### Lost Lake recommended wilderness area

Factors	Description
1. Acres	1,122 acres
2. Summarized description of the recommended boundary	This irregularly shaped polygon encompasses the north part of the Lost Lake Inventoried Roadless Area and all of the Sparks Inventoried Roadless Area with an expanded eastern boundary. From the existing inventoried roadless area boundary in the north, the polygon is bounded by private land on the east and Road 391E. Private land and Road 391 form the rest of the eastern and the southern boundary. The western boundary is the Pecos Wilderness.
3. Brief description of the general geography, topography, and vegetation	Plant dominance types include mixed conifer, aspen, some ponderosa pine in the east, and a small amount of spruce-fir near the wilderness in the higher elevations. There are no mapped invasive plants, but weeds exist along roads and other disturbed areas. <i>Delphinium sapellonis</i> (Sapello Canyon larkspur) is on the New Mexico rare plant list and is found in the area. Common forest animal species are present as well as Northern goshawk. Mexican spotted owl critical habitat, elk winter and summer range are identified for this area. This polygon contains a lake (Lost Lake).
4. Current uses and management	The dominant ROS class is Semi-Primitive Non-Motorized. Management areas include B (Wildlife/Timber) and H (wilderness). Area includes an entire inventoried roadless area and is adjacent to the Pecos Wilderness. There is a non-motorized trail.
5. Description of the wilderness characteristics and the Forest’s ability to protect and manage the area to preserve its wilderness characteristics	<p><b>Natural quality:</b> The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species in disturbed areas. Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention. Apparent naturalness is also affected by the presence and appearance of infrastructure in the area.</p> <p><b>Undeveloped quality:</b> Infrastructure in the area is rare or scattered and does not detract from apparent naturalness. Developments include a non-motorized trail, and evidence of a few old roads in the east. There is also evidence of old mines on the eastern edge of the polygon.</p> <p><b>Unconfined and/or primitive recreation:</b> There are abundant opportunities to engage in high-quality primitive and unconfined recreation. Some primitive recreation opportunities include horseback riding, fishing, backpacking, hiking and hunting. Opportunity to experience challenge and risk possible, especially closer to the wilderness area.</p> <p><b>Solitude:</b> Human activities are uncommon, making opportunities to feel alone possible in much of the area, especially when away from private property or houses. When in proximity to private land, sounds of dogs barking, woodcutting and other motorized uses are present. Opportunities for solitude increase closer to the wilderness area and away from roads and private lands.</p> <p><b>Other features of value:</b> There are no known regionally or nationally unique or outstanding qualities or features present in this area.</p> <p>Presence and extent of other uses and management considerations affects isolated spots and makes management to preserve the area’s wilderness characteristics possible throughout the area. Adjacency to wilderness supports management to preserve wilderness characteristics. Difficult where adjacent to private land and roads.</p>

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6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives	<p>High wilderness characteristics identified</p> <p>The area was identified as an inventoried roadless area with low or moderate wilderness characteristics and that is at least 5,000 acres in size, or is adjacent to existing wilderness</p> <p>--The area is adjacent to the Pecos Wilderness</p> <p>--The area encompasses part of the Lost Lake and all of the Sparks Inventoried Roadless Areas</p>
7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <i>ecological characteristics</i> that provide the basis for suitability are as follows: The majority of the area appears natural The area is mostly undeveloped with little infrastructure</p> <p>The <i>social characteristics</i> that provide the basis for suitability are as follows: Solitude is present due to lack of roads There are high-quality opportunities for primitive and unconfined recreation</p>

**P86B, Maestas Recommended Wilderness Area**

This recommended wilderness is in the Maestas Inventoried Roadless Area and is adjacent to the Pecos Wilderness.

**Maestas recommended wilderness area**

Factors	Description
1. Acres	465.28 acres
2. Summarized description of the recommended boundary	This area borders the Pecos Wilderness on the west and the east and southern boundary border private land. Part of Daily Creek goes through this area.
3. Brief description of the general geography, topography, and vegetation	The topography is steep and rugged with dense vegetation. Plant dominance types include mixed conifer, aspen, some ponderosa pine in the east, and a small amount of spruce-fir near the wilderness in the higher elevations.
4. Current uses and management	Traditional uses associated with the Santa Gertrudis de lo de Mora land grant are recognized in the area. Adjacency to wilderness supports management to preserve wilderness characteristics Private property between this polygon and Pecos Wilderness can only be accessed through this polygon.



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Factors	Description
5. Description of the wilderness characteristics and the Forest’s ability to protect and manage the area to preserve its wilderness characteristics	<p><b>Natural quality:</b> The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species in disturbed areas. There are no mapped invasive plants, but weeds exist along roads and other disturbed areas. Vegetation does not appear natural in isolated or scattered spots due to current and past uses including some thinning that has left some stumps in the area.</p> <p><b>Undeveloped quality:</b> Improvements in the area are rare or scattered and do not detract from apparent naturalness. Improvements are limited to an old road near the drainage in the southern part of the polygon.</p> <p><b>Unconfined and/or primitive recreation:</b> There are abundant opportunities to engage in high-quality primitive and unconfined recreation. Some primitive recreation opportunities include: Horseback riding, fishing, backpacking, hiking and hunting. Opportunity to experience challenge and risk possible, especially closer to the wilderness area.</p> <p><b>Solitude:</b> Human activities are uncommon, making opportunities to feel alone possible in much of the area, especially when away from private property or houses. When in proximity to private land, sounds of dogs barking, wood cutting, and other motorized uses are present. Opportunities for solitude increase closer to the wilderness area and away from roads and private lands.</p> <p><b>Other features of value:</b> <i>Delphinium sapellonis</i> (Sapello canyon larkspur) is on the New Mexico rare plant list and is found in the area. There are no known regionally or nationally unique or outstanding qualities or features present in this area.</p> <p>Presence and extent of other uses and management considerations is scattered making management to preserve the area’s wilderness characteristics possible throughout much of the area.</p>
6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives	<p>The area was identified as an inventoried roadless area with low or moderate wilderness characteristics and that is at least 5,000 acres in size, or is adjacent to existing wilderness</p> <p>--The area is adjacent to the Pecos Wilderness</p> <p>--The area is in the Maestas Inventoried Roadless Area</p>
7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <i>ecological characteristics</i> that provide the basis for suitability are as follows: The undeveloped quality is high with little infrastructure</p> <p>The <i>social characteristics</i> that provide the basis for suitability are as follows: The area offers outstanding opportunities for solitude</p>

### P87, Bartley Recommended Wilderness Area

This recommended wilderness is adjacent to the Pecos Wilderness.

#### Bartley recommended wilderness area

Factors	Description
1. Acres	236.33 acres
2. Summarized description of the recommended boundary	A rectangular polygon that encompasses the remaining USFS land south of Rito San Jose, north of road 391E and private lands, and immediately east of the Pecos Wilderness in section 8.

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<b>Factors</b>	<b>Description</b>
3. Brief description of the general geography, topography, and vegetation	Plant dominance types include mixed conifer, aspen, some ponderosa pine in the east, and a small amount of spruce-fir near the wilderness in the higher elevations. There are no mapped invasive plants, but weeds exist along roads and other disturbed areas. <i>Delphinium sapellonis</i> (Sapello Canyon larkspur) is on the New Mexico rare plant list and is found in the area. Common forest animal species are present as well as Northern goshawk. Mexican spotted owl critical habitat, elk winter and summer range are identified for this area.
4. Current uses and management	The dominant ROS class is Semi-Primitive Non-Motorized. Management areas is B (Wildlife/Timber) Adjacent to the Pecos Wilderness.
5. Description of the wilderness characteristics and the Forest’s ability to protect and manage the area to preserve its wilderness characteristics	<p><b>Natural quality:</b> The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species in disturbed areas. Vegetation appears natural and appears to reflect ecological conditions that would normally be associated with the area without human intervention.</p> <p><b>Undeveloped quality:</b> The only infrastructure in the area is a fence on the edge of the forest boundary.</p> <p><b>Unconfined and/or primitive recreation--</b> There are abundant opportunities to engage in high-quality primitive and unconfined recreation. Some primitive recreation opportunities include: Horseback riding, fishing, backpacking, hiking and hunting. Opportunity to experience challenge and risk possible, especially closer to the wilderness area.</p> <p><b>Solitude:</b> Human activities are uncommon, making opportunities to feel alone possible in much of the area, especially when away from private property or houses. When in proximity to private land, sounds of dogs barking, wood cutting and other motorized uses are present. Opportunities for solitude increase closer to the wilderness area and away from roads and private lands.</p> <p><b>Other features of value:</b> There are no known regionally or nationally unique or outstanding qualities or features present in this area.</p> <p>Presence and extent of other uses and management considerations affects isolated spots and makes management to preserve the area’s wilderness characteristics possible throughout the area. Traditional uses associated with the Santa Gertrudis de lo de Mora land grant are recognized in the area. Adjacency to wilderness supports management to preserve wilderness characteristics, however, management challenges may exist in areas adjacent to private land and roads.</p>
6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives	<p>High wilderness characteristics identified</p> <p>The area was identified as an inventoried roadless area with low or moderate wilderness characteristics and that is at least 5,000 acres in size, or is adjacent to existing wilderness</p> <p>--The area is adjacent to the Pecos Wilderness</p>
7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <i>ecological characteristics</i> that provide the basis for suitability are as follows: The majority of the area appears natural The area is mostly undeveloped with little infrastructure.</p> <p>The <i>social characteristics</i> that provide the basis for suitability are as follows: Solitude is present due to lack of roads and adjacency to wilderness There are high-quality opportunities for primitive and unconfined recreation</p>

### P88A, Enchanted Lakes Recommended Wilderness Area

This recommended wilderness is located within an inventoried roadless area and is adjacent to the Pecos Wilderness.

#### Enchanted Lakes recommended wilderness area

Factors	Description
1. Acres	925.12 acres
2. Summarized description of the recommended boundary	The polygon’s eastern boundary is the eastern section 17 and 20 lines running through the existing Enchanted Lakes Inventoried Roadless Area in section 17 and continuing out of the inventoried roadless area to the south. The southern boundary is the private land to the south of section 20 and the western boundary is the Pecos Wilderness. The northern boundary is the Pecos Wilderness boundary below Pecos Peak, ending at the eastern edge of Section 17.
3. Brief description of the general geography, topography, and vegetation	Plant dominance types include mixed- conifer deciduous, spruce fir, mixed grass/forb meadows, ponderosa pine, scrub oak, and sparsely vegetated rocky areas. Many common forest animal species are within the area. Rio Grande cutthroat trout also present. The topography is steep and high elevation lakes are present.
4. Current uses and management	The dominant ROS class is Primitive. Management areas is B (Wildlife/Timber); L (Semi-Primitive Non-Motorized Recreation) Adjacent to the Pecos Wilderness and includes portions of an inventoried roadless area.
5. Description of the wilderness characteristics and the Forest’s ability to protect and manage the area to preserve its wilderness characteristics	<p><b>Natural quality:</b> The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species in disturbed areas. Vegetation does not appear natural in isolated or scattered spots due to current and past uses including Christmas tree harvest, firewood cutting, and evidence of past fire and fire suppression activities.</p> <p><b>Undeveloped quality:</b> Prevalence of infrastructure is overall low throughout the area. There are no roads in this polygon except the end of National Forest System Road 635AF. Developments include some roads evident on the landscape, system and user created trails in the southern area. No fence or other range development present in the area.</p> <p><b>Unconfined and/or primitive recreation:</b> There are abundant opportunities to engage in high-quality primitive and unconfined recreation. Some primitive recreation opportunities include hiking, hunting, fishing, wildflower viewing, horseback riding and nature viewing. The west half of the area has high-quality primitive recreation but diminishes as a visitor goes east. The area is steep and rugged with elevations over 10,000 feet, providing opportunity for risk and challenge.</p> <p><b>Solitude:</b> Human activities are uncommon, making opportunities to feel alone possible in much of the area, especially in the west, less so in the eastern portion of the area.</p> <p><b>Other features of value:</b> Several unique features are identified for this area including rare plant or animal communities (Rio Grande cutthroat), iconic landscape features (high mountain lakes), and high-quality water resources (due to habitat for Rio Grande cutthroat and dependence of agriculture on water resources).</p> <p>Presence and extent of other uses and management considerations affects isolated spots and makes management to preserve the area’s wilderness characteristics possible throughout the area. The area is adjacent to designated wilderness and could be managed to preserve wilderness characteristics. The shape of the area is not dissected with narrow areas or cherry stem roads that make management difficult. There is an inventoried roadless area in place in the north half that also supports preservation wilderness characteristics. Further, rugged and steep terrain allows for natural barriers to motorized access.</p>

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Factors	Description
6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives	<p>High wilderness characteristics identified</p> <p>The area was identified as an inventoried roadless area with low or moderate wilderness characteristics and that is at least 5,000 acres in size, or is adjacent to existing wilderness</p> <p>--The area is adjacent to the Pecos Wilderness</p> <p>--The area is within the Enchanted Lakes Inventoried Roadless Area</p>
7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <i>ecological characteristics</i> that provide the basis for suitability are as follows:                      The majority of the area appears natural                      The area is mostly undeveloped with little infrastructure                      Outstanding landscape features (high elevation lakes)</p> <p>The <i>social characteristics</i> that provide the basis for suitability are as follows:                      Solitude is present due to lack of roads and difficult access                      There are high-quality opportunities for primitive and unconfined recreation</p>

**P88B, Enchanted Lakes IRA Recommended Wilderness Area**

This recommended wilderness includes the Enchanted Lakes Inventoried Roadless

**Enchanted Lakes IRA recommended wilderness area**

Factors	Description
1. Acres	802.51 acres
2. Summarized description of the recommended boundary	This area is just south of Pyramid Peak and includes most of Section 16 east of Pacheco and Enchanted Lakes. It contains portions of Sections 16, 15, and 9, along with a small part of Section 10.
3. Brief description of the general geography, topography, and vegetation	The topography is steep and rugged with dense vegetation. Plant dominance types include mixed- conifer deciduous, spruce fir, mixed grass/forb meadows, ponderosa pine, scrub oak, and sparsely vegetated rocky areas.
4. Current uses and management	Other considerations include, adjacent private land, private land inholding, cherry stem roads, popular fuelwood gathering area, use of the area for traditional uses, and established ATV use. The northern boundary, near Pyramid Peak, is adjacent to the Pecos Wilderness.

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Factors	Description
5. Description of the wilderness characteristics and the Forest’s ability to protect and manage the area to preserve its wilderness characteristics	<p><b>Natural quality:</b> The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species in disturbed areas. Vegetation does not appear natural in isolated or scattered spots due to current and past uses including Christmas tree harvest, firewood cutting, and evidence of past fire and fire suppression activities.</p> <p><b>Undeveloped quality:</b> Prevalence of improvements is overall low throughout the area. Improvements include some roads evident on the landscape, system and user created trails in the southern area. No fence or other range improvements present in the area.</p> <p><b>Unconfined and/or primitive recreation:</b> Some primitive recreation opportunities include hiking, hunting, fishing, wildflower viewing, horseback riding and nature viewing. The polygon has diminished opportunity for high-quality primitive recreation as compared to the polygon to the west (P88a). The area is steep and rugged with elevations over 10,000 feet, providing opportunity for risk and challenge.</p> <p><b>Solitude:</b> Human activities are uncommon, making opportunities to feel alone possible in much of the area, especially in the west, less so in the eastern portion of the area.</p> <p>There are abundant opportunities to engage in high-quality primitive and unconfined recreation.</p> <p><b>Other features of value:</b> Several unique features are identified for this area including rare plant or animal communities (Rio Grande Cutthroat), iconic landscape features (high mountain lakes), and high-quality water resources (due to habitat for Rio Grande cutthroat and dependence of agriculture on water resources).</p> <p>The presence and extent of other uses and/or considerations (e.g. shape or configuration) occurs throughout most of the area making it difficult to manage the area to preserve its wilderness characteristics.</p>
6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives	<p>The area was identified as an inventoried roadless area with low or moderate wilderness characteristics and that is at least 5,000 acres in size, or is adjacent to existing wilderness</p> <p>--The area is within the Enchanted Lakes Inventoried Roadless Area</p> <p>--The area is adjacent to the Pecos Wilderness</p>
7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <i>ecological characteristics</i> that provide the basis for suitability are as follows: The undeveloped quality is high with little infrastructure, especially in the north</p> <p>The <i>social characteristics</i> that provide the basis for suitability are as follows: The area offers outstanding opportunities for solitude; and There is a high amount of primitive and/or unconfined recreation for hunting, horseback riding, hiking.</p>

### P89A, Falls Recommended Wilderness Area

This recommended wilderness is in the Falls Inventoried Roadless Area and is adjacent to the Pecos Wilderness.

#### Falls recommended wilderness area

Factors	Description
1. Acres	2,471.27 acres
2. Summarized description of the recommended boundary	The south and west boundary follows the Pecos Wilderness boundary east of North Fork Lake, then it goes northeast following the Santa Fe National Forest and Carson National Forest boundary to East Fork Trailhead and from here goes south the Middle Fork Trail.

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Factors	Description
3. Brief description of the general geography, topography, and vegetation	The topography is steep and rugged with dense vegetation. Higher elevations are comprised of spruce- fir, aspen in the middle elevations, and ponderosa pine in the lower elevations of the east slopes. Open meadows and oak scrub are present to a lesser degree throughout.
4. Current uses and management	The area is an inventoried Roadless Area and adjacent to designated wilderness, making management to preserve the area wilderness characteristics possible Traditional uses associated with the Santa Gertrudis de lo de Mora land grant may occur in the area as well as some range management activities.
5. Description of the wilderness characteristics and the Forest's ability to protect and manage the area to preserve its wilderness characteristics	<p><b>Natural quality:</b> The composition of plant and animal communities appears natural within most of the area with some noticeable presence of invasive species in disturbed areas. Vegetation appears natural with minimal evidence of past human interventions on ecological processes.</p> <p><b>Undeveloped quality:</b> Prevalence of improvements is overall low throughout the area but includes range fence, trails, and minimal roads.</p> <p><b>Unconfined and/or primitive recreation:</b> There are abundant opportunities to engage in high-quality primitive and unconfined recreation. Some primitive recreation opportunities include hunting, hiking backpacking and horseback riding.</p> <p><b>Solitude:</b> Human activities are uncommon, making opportunities to feel alone possible in much of the area. There is some trail use by equestrians and hikers especially along the eastern boundary, but solitude possible when away from trails.</p> <p><b>Other features of value:</b> Cultural and historic resources are considered unique features in this area. There has been a moderate amount of survey which indicates a strong presence of Jicarilla Apache use in the area both historically and during the modern period. This is concurred by consultation with tribe. Walker flats falls is considered a regional significant unique landscape feature in the area. High-quality water resources are identified in this area as a unique feature due to the presence of high-quality habitat for the Rio Grande cutthroat trout.</p> <p>The presence and extent of other uses and management considerations in the area is scattered and makes management to preserve the area's wilderness characteristics possible throughout much of the area.</p>
6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives	The area was identified as an inventoried roadless area with low or moderate wilderness characteristics and that is at least 5,000 acres in size, or is adjacent to existing wilderness --The area is adjacent to the Pecos Wilderness --The area is in the Falls Inventoried Roadless Area
7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	The <i>ecological characteristics</i> that provide the basis for suitability are as follows: The undeveloped quality is high with little infrastructure  The <i>social characteristics</i> that provide the basis for suitability are as follows: The area offers outstanding opportunities for solitude; and There is a high amount of primitive and/or unconfined recreation for horseback riding, hiking and hunting.

### P89C, Grace Tract Recommended Wilderness Area

This recommended wilderness is located within an inventoried roadless area and is adjacent to the Pecos Wilderness.

#### Grace Tract recommended wilderness area

Factors	Description
1. Acres	944.99 acres
2. Summarized description of the recommended boundary	This polygon follows the Grace Tract Inventoried Roadless Area boundary. The south and west boundaries are the Pecos Wilderness; the north boundary is the southern boundary of the Falls Inventoried Roadless Area. The eastern boundary is the existing inventoried roadless area boundary and cuts diagonally through section 4.
3. Brief description of the general geography, topography, and vegetation	Higher elevations are comprised of spruce- fir, aspen in the middle elevations, and ponderosa pine in the lower elevations of the east slopes. Open meadows and oak scrub are present to a lesser degree throughout. Common forest species can be found in the area as well as peregrine falcon (Regional Forester sensitive species) in the southwest. The area has an elk calving area and elk summer and winter range. Steep topography and unique landscape including a waterfall.
4. Current uses and management	The dominant ROS class is Semi-Primitive Non-Motorized Management area is L (Semi-Primitive Non-Motorized Recreation) Adjacent to the Pecos Wilderness and includes an inventoried roadless area. There has been a moderate amount of survey which indicates a strong presence of Jicarilla Apache use in the area both historically and during the modern period. This is concurred by consultation with the tribe.
5. Description of the wilderness characteristics and the Forest’s ability to protect and manage the area to preserve its wilderness characteristics	<p><b>Natural quality:</b> The composition of plant and animal communities appears natural with little evidence of non-native species. Vegetation appears natural with minimal evidence of past human interventions on ecological processes.</p> <p><b>Undeveloped quality:</b> Prevalence of infrastructure is rare or scattered in the area.</p> <p><b>Unconfined and/or primitive recreation:</b> There are abundant opportunities to engage in high-quality primitive and unconfined recreation. Some primitive recreation opportunities include hunting, hiking backpacking and horseback riding.</p> <p><b>Solitude:</b> There is a common or significant feeling of being alone and finding solitude in much of the area.</p> <p><b>Other features of value:</b> Cultural and historic resources are considered unique features in this area. There has been a moderate amount of survey which indicates a strong presence of Jicarilla Apache use in the area both historically and during the modern period. This is concurred by consultation with the tribe. Middle Fork Rio de la Casa Falls is considered a regional significant unique landscape feature in the area. High-quality water resources are identified in this area as a unique feature due to the presence of high-quality habitat for the Rio Grande cutthroat trout.</p> <p>The presence and extent of other uses and management considerations in the area occurs in isolated spots and makes management to preserve the area's wilderness characteristics possible throughout much of the area. The area is an inventoried Roadless Area and adjacent to designated wilderness, making management to preserve the area wilderness characteristics possible.</p>

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Appendix J. Documentation of Wilderness Recommendation Process*

<b>Factors</b>	<b>Description</b>
6. Brief summary of the factors considered, and the process used in evaluating the area and developing the alternatives	<p>High wilderness characteristics identified</p> <p>The area was identified as an inventoried roadless area with low or moderate wilderness characteristics and that is at least 5,000 acres in size, or is adjacent to existing wilderness</p> <p>--The area is within the Grace Tract IRA --The area is adjacent to the Pecos Wilderness</p>
7. Brief summary of the ecological and social characteristics that would provide the basis for suitability for inclusion in the National Wilderness Preservation System	<p>The <i>ecological characteristics</i> that provide the basis for suitability are as follows: The majority of the area appears natural The area is mostly undeveloped with little infrastructure Outstanding landscape features (high-elevation lakes)</p> <p>The <i>social characteristics</i> that provide the basis for suitability are as follows: Solitude is present due to lack of roads and adjacency to wilderness There are high-quality opportunities for primitive and unconfined recreation</p>



## **Alternative 4**

This alternative does not recommend any additional wilderness areas (Figure J-13). Instead, 68 acres are recommended for removal from the San Pedro Parks Wilderness to allow for better management of the San Gregorio Reservoir. The San Gregorio Reservoir is a spot that is important to locals for recreational fishing. Unfortunately, the reservoir is too shallow for fish to survive the winter and therefore needs to be stocked by New Mexico Game and Fish for the recreational fishing to continue. This stocking is most realistic with motorized means. In addition, the reservoir infrastructure is beginning to degrade and upgrading it would be challenging in a Wilderness. Although the wilderness inventory displays many areas and acres that possess wilderness characteristics, this alternative emphasizes activities (restoration, Forest access, non-primitive-including motorized, recreation opportunities, and vegetation management) that would utilize mechanical treatments creating a greater availability of forest products. Recommending additional wilderness would not support alternative 4's human uses emphasis or public input requesting no new wilderness areas that also contributed to the theme of this alternative.

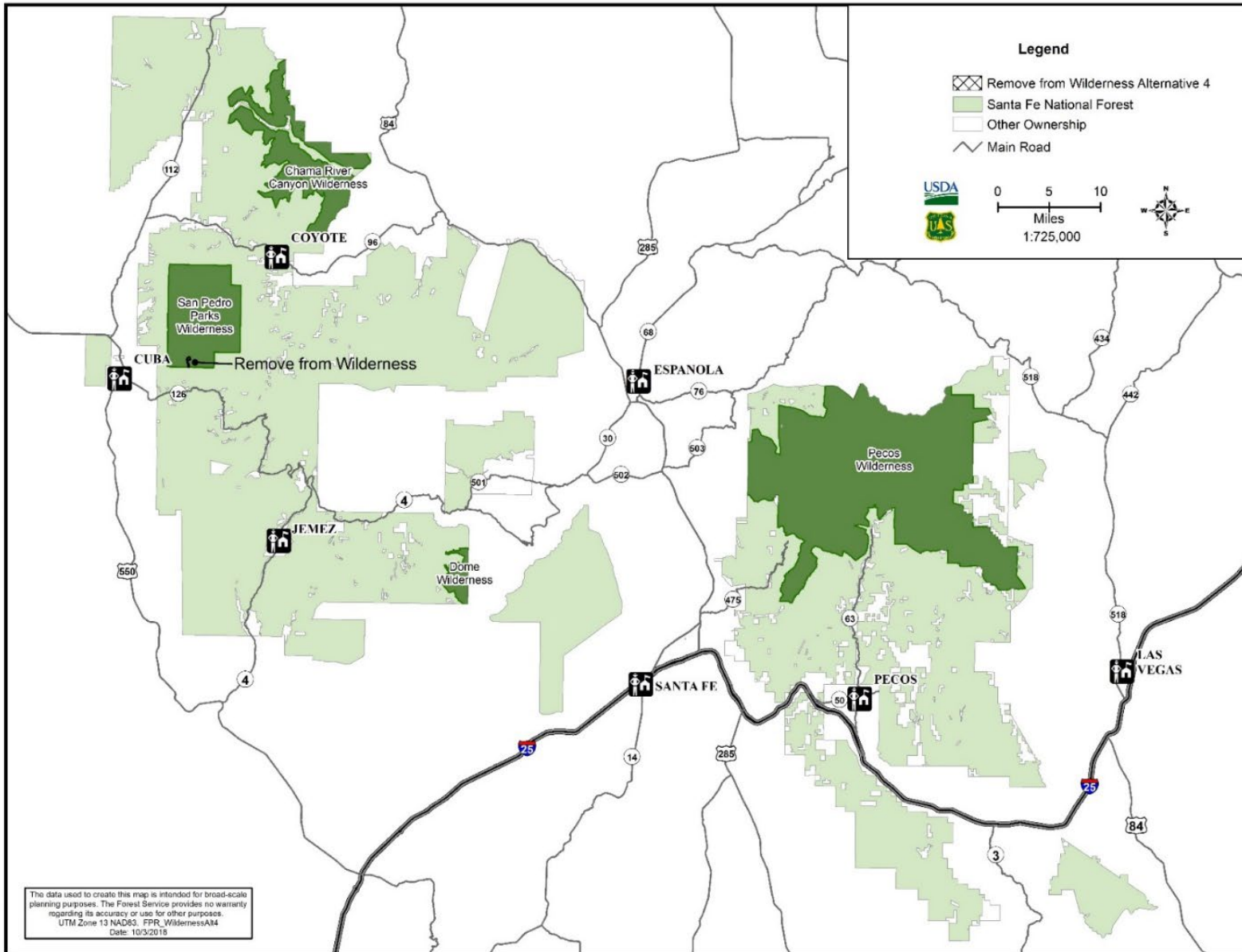


Figure J-13. Recommended wilderness areas in alternative 4

## Areas not Recommended in any Alternative

Areas with no overall wilderness characteristics or areas with low or moderate wilderness characteristics that were not part of an existing inventoried roadless area were not included in any alternative because they did not fit with any alternative themes. These areas include:

1. Polygons not recommended due to having “NO” wilderness characteristics:
  - a. Coyote Ranger District: Co03- 6,469.33 acres (ac.), Co05B – 16,569.92 ac., Co06A - 9,790.33 ac., Co08 – 1,469.66 ac., Co09 – 172.34 ac., Co10 – 4,051.85 ac., Co11 – 3,806.18 ac., Co12 – 5,570.69 ac., Co13 – 43.77 ac., Co15 – 55.32 ac., Co17 – 259.11 ac., Co20 – 135.84 ac., Co21B – 10,451.08 ac., and Co22- 253.83 ac.
  - b. Cuba Ranger District: Cu24 – 5,891.55 ac., Cu25 – 5,768.40 ac., Cu26 – 5,000.96 ac., Cu27 – 13,677.95 ac., Cu29 – 7,660.12 ac., Cu30 – 7,047.90 ac., and Cu32 – 6,887.55 ac.
  - c. Española Ranger District: E38 – 11,548.98 ac., E40B – 4,156.82 ac., E44B – 2,282.85 ac., E47 – 9,175.30 ac., E49A – 4,618.96 ac., E51 – 5,559.52 ac., E52A – 1,961.26 ac., and E54A – 6,621.45 ac.
  - d. Jemez Ranger District: J61 – 14,772.79 ac., J63A – 18,784.64 ac., J64A – 14,459.27 ac., J65 – 6,038.06 ac., J66 – 7,018.67 ac., and J67 – 7,215.13 ac.
  - e. Pecos/Las Vegas Ranger District: P70 – 16,647.31 ac., P79A – 18,942.82 ac., P79C – 9,638.84 ac., P79D – 22,988.51 ac., P85A – 4,585.51 ac., P85C – 29,022.43 ac., P85E – 4,577.09 ac., and P89B – 5,657.60 ac.
2. Polygons not recommended due to having “Low” wilderness characteristics **and** for not being included in an existing inventoried roadless area:
  - a. Coyote Ranger District: Co01 – 6,052.72 ac., Co02 (6,720.47 ac.), Co04 – 12,597.06 ac., Co06C – 8,170.89 ac., Co16 – 49.09 ac., Co18 – 17,299.26 ac., Co19 – 67.14 ac., and Co23A – 2,807.32 ac.
  - b. Cuba Ranger District: Cu31 – 10,555.79 ac., Cu34 – 6,288.43 ac., and Cu36A – 12,840.34 ac.
  - c. Española Ranger District: E46 – 5,717.81 ac.
  - d. Jemez Ranger District: J56 – 15,768.12 ac., J57 – 15,398.75 ac.
  - e. Pecos/Las Vegas Ranger District: P69 – 5,229.41 ac., P71 – 6,344.63 ac., P72 – 10,187.82 ac., P75 – 1,698.74 ac., P76 – 101.61 ac., P77 – 5,329.60 ac., P78 – 3,573.24 ac., P79E – 11,147.48 ac., P80 – 1,004.90 ac., and P83 – 1,731.57 ac.
3. Polygons not recommended due to having “Moderate” wilderness characteristics **and** for not being included in an existing inventoried roadless area:
  - a. Coyote Ranger District: none
  - b. Cuba Ranger District: Cu28 – 10,100.67 ac., Cu35 – 7,422.54 ac.
  - c. Española Ranger District: E37 – 6,786.19 ac., E50 – 8,534.51 ac.
  - d. Jemez Ranger District: J60 – 8,675.36 ac.
  - e. Pecos/Las Vegas Ranger District: P68 – 5,681.58 ac., P73 – 6,896.10 ac., P74 – 11,109.52 ac.

## Step 4: Recommendation

Based on the analysis in the environmental impact statement and public input received, the Forest Supervisor of the Santa Fe NF will make a decision on specific areas to recommend for inclusion in the National Wilderness Preservation System. This decision will be included in the final decision document for the plan as a preliminary administrative recommendation. Plan components will provide direction for managing areas recommended for wilderness designation. These areas must be managed to protect and maintain the ecological and social characteristics that provide the basis for wilderness recommendation.

# Appendix K. Documentation of Eligible Wild and Scenic Rivers Evaluation Process

## Wild and Scenic Rivers Act Background

The National Wild and Scenic Rivers System (National System) was enacted by Congress in 1968 (Public Law 90-542) to preserve the free-flowing condition of certain selected rivers with outstandingly remarkable values (ORV) for the enjoyment of present and future generations. Rivers may be designated by Congress or, if certain requirements are met, the Secretaries of the Interior or Agriculture, as appropriate. Once designated under the National Wild and Scenic Rivers Act (WSRA)<sup>3</sup>, rivers receive special management direction that ensures the maintenance of the free-flowing nature and the outstanding natural, cultural, and recreational values of the river segment. Under the WSRA Section 2(b), river segments are required to be classified as wild, scenic, or recreational.

The WSRA Section 5(d)(1) requires that Federal agencies identify and evaluate additional potential rivers for inclusion as Wild and Scenic Rivers during land management planning. Wild and scenic river eligibility is being conducted as part of forest plan revision, consistent with the 2012 planning rule final directives, FSH 1909.12 Chapter 82.2, which state:

Unless a systematic inventory of study rivers has been completed and eligible rivers identified, the Interdisciplinary Team shall develop and conduct a comprehensive inventory and evaluation to determine which rivers are eligible for inclusion in the National System... The rivers to be studied for eligibility include all rivers named on a standard U.S. Geological Survey 7.5 minute USGS quadrangle map.

To meet this requirement, the Santa Fe National Forest (Santa Fe NF) conducted a systematic evaluation of all river segments to determine if they are eligible for designation under the WSRA. There are currently three Wild and Scenic Rivers on the Santa Fe NF: The Rio Chama, East Fork Jemez River, and Pecos River.

## Free-Flowing Determination

The overarching intent of the WSRA is to preserve free-flowing rivers in their natural condition. To be eligible, a river must be free-flowing as defined in the WSRA Section 16(b):

“Free flowing” as applied to any river or section of a river means existing or flowing in a natural condition without impoundment, diversion, straightening, riprapping, or other modification of the waterway. The existence, however, of low dams, diversion works, or other minor structures at the time any river is proposed for inclusion in the [National System] shall not automatically bar its consideration for such inclusion.

For this evaluation, any damming, diversion, channelization, or other confinement or rerouting of the channel was considered in the context of the river system as a whole. To be considered free-flowing, a river needed to maintain its natural stream functions, including a natural flood regime, natural sinuosity and channel shifting, natural bank erosion, and natural bed load and debris movement. There is no requirement for a minimum flow or temporal or spatial continuity of flow.

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<sup>3</sup> 16 U.S. Code Chapter 28

## Outstandingly Remarkable Value Determination

According to the WSRA, for a river to be eligible the river and its adjacent land area must have one or more ORV in the following categories: scenic, recreational, geologic, fish, wildlife, historic, cultural, or other similar value.

To be identified as outstandingly remarkable, a river-related value must be a unique, rare, or exemplary feature that is significant when compared with similar values from other rivers at a regional or national scale. Unique, rare, or exemplary features are those that are conspicuous examples of these values, among the best representatives of these features, within a region or the nation.

While the spectrum of resources that may be considered is broad, all features considered should be directly river-related [and] should meet at least one of the following criteria:

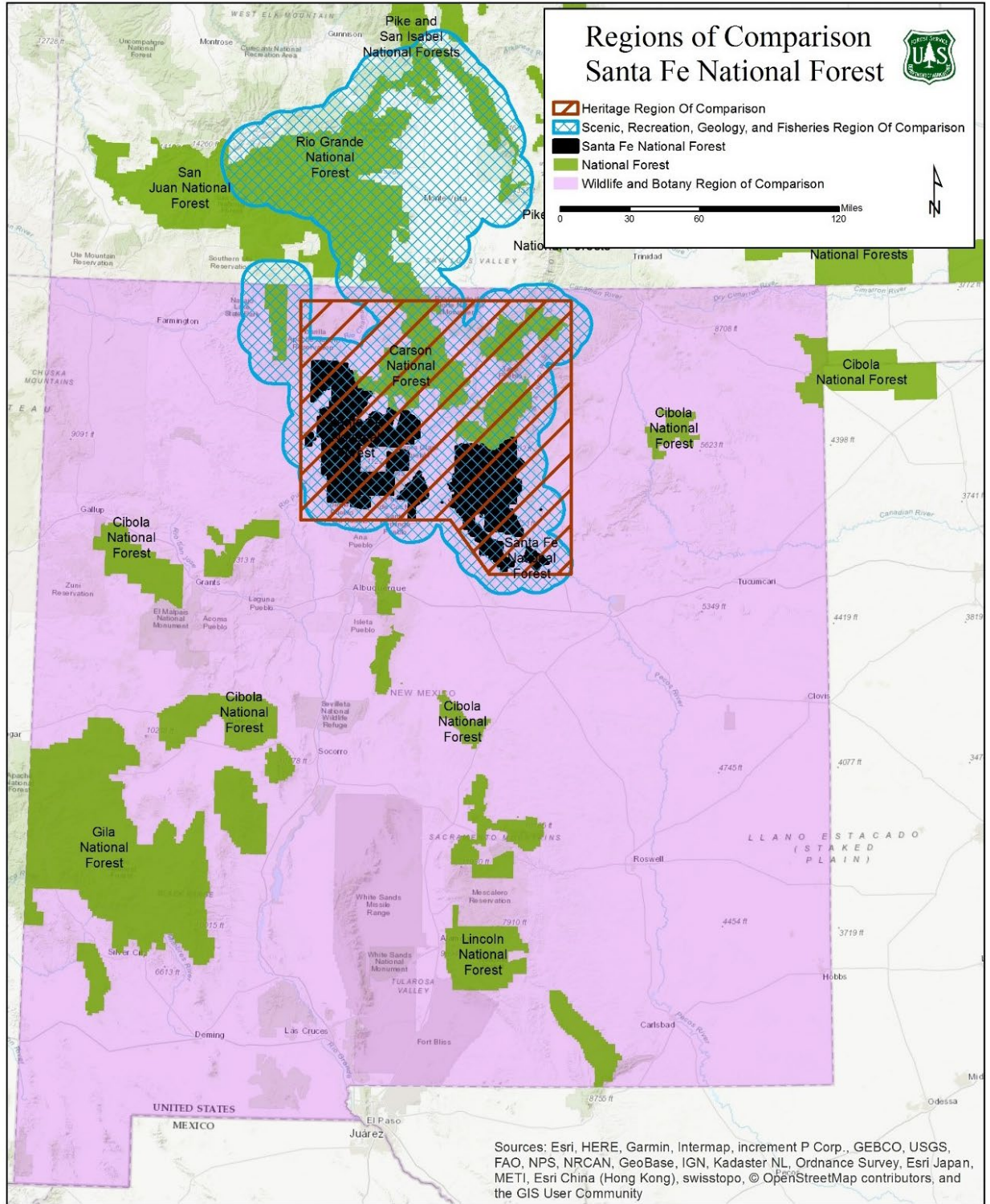
1. Be located in the river or its corridor,
2. Contribute substantially to the functioning of the river ecosystem, or
3. Be river dependent and owe their location and existence to the presence of the river. (FSH 1909.12, sec. 82.73)

The determination that a river area does or does not contain one or more ORVs is a professional judgement on the part of the Responsible Official, as informed by the Interdisciplinary Team, best available scientific information, and public participation (FSH 1909.12, sec. 82.73).

Because a feature is rare or unique does not alone make it outstandingly remarkable. It must also be conspicuously dissimilar from the class of feature to which it belongs. That is, just being an example of a type of feature that is remarkable is insufficient, the feature must be an outstandingly remarkable example of the type. For example, river-based recreation opportunities are rare in the arid southwest. To be outstandingly remarkable, the recreational opportunity must be an unusual exemplar among arid rivers. Every archeological site is inherently unique and irreplaceable. To be outstandingly remarkable, an archeological site must be of a quality or extent such that it is among the best examples of a historical resource.

## Regions of Comparison

ORVs must be judged in comparison with the characteristics of other similar regional rivers. To do this, a region of comparison is identified for each resource that define the area where rivers with similar characteristics to those being analyzed are found regionally. Regions of Comparison may vary for different categories of ORVs and thus, multiple regions of comparison may be used to evaluate a single river (Figure K-1). The appropriate region of comparison is determined by the Interdisciplinary Team (IDT) with input from the public and ultimately approved by the Responsible Official. The Santa Fe NF defined three regions of comparison, depending on ORV category.



T:\FS\NFS\SantaFe\Project\SO\ForestPlanRevision\GIS\WSRiver\MXD\AreaOfComparison\_Overview\_8x11\_20170224.mxd SO GIS HLH 7/20/2018

Figure K-1. Santa Fe NF regions of comparison for each outstandingly remarkable value



## Wildlife and Botany- State of New Mexico

The region of comparison for wildlife and botany is the boundary for the state of New Mexico. In arid areas of the Southwest, in which New Mexico is included, water is extremely important to all wildlife and vegetation. Due to the limited amounts of available water on the Santa Fe NF, rivers and streams will almost always attract a high concentration and diversity of wildlife, therefore, it is difficult to say one riverine section is more outstanding than another. A characteristic of a truly remarkable area for plants and animals would be a place that harbors a high concentration of at-risk species. These are animals that may be federally threatened or endangered or their persistence may be of a concern on the forest (Species of Conservation Concern, SCC). During the planning process, the Santa Fe NF developed an assessment identifying at-risk species in our forest. This list was derived using information from non-government organizations, Tribes, and other State and Federal agencies. Outside of Tribes, the basis for their at-risk species list is typically animals found within the state of New Mexico, therefore, the most appropriate region of comparison would be the state boundary for New Mexico. A river section known to contain or provide water for a high diversity of at-risk animals found in New Mexico would be truly remarkable. Common species such as elk, rabbits, and sagebrush would not be considered remarkable.

## History and Pre-History- Northern Rio Grande

Archaeologists have conducted extensive research throughout the American Southwest for the past century. Archaeology is the study of the past lifeways of prehistoric and historic peoples by conducting field surveys, excavations, ethnographies, and linguistic studies. Through these various studies, archaeologists have identified and classified cultures with similar traits. Our region of comparison is based on cultures with these similar traits.

The region of comparison is identified as portions of the Middle and Northern Rio Grande which encompasses several distinct localities: Española Basin, Pajarito Plateau, Rio Chama Valley, Gallina, Rio Jemez Valley, Pecos Valley/Front Range, and Taos-Cimarron (excerpted from Crown et al. 1996 and Levine, Scheick et al. 2006). The archaeological record of the Rio Grande consists of prehistoric and historic cultural resources representing human occupation and use over the past 10,000 years.

## Scenery, Recreation, Fisheries, and Geology- Tri Forest Region

The proposed region of comparison is identified as an area representing the Tri-Forest Region of the Santa Fe, Carson, and Rio Grande National Forests based on the following rationale:

- **Scenery-** Lands within this region of comparison have similar landscape elements of landform, vegetation, water, color, and related factors allowing for a meaningful comparative analysis for the scenery ORV.
- **Recreation-** Recreational uses of rivers and their corridor are similar within the tri-forest area. These recreational uses primarily include hiking, nature study, fishing, picnicking, wildlife viewing, hunting, rafting or kayaking, and camping. The similarity of recreational uses in rivers throughout the region of comparison is due to similarities across the region in landscape setting, flow regimes, stream sizes, biological characteristics, and general range of vegetation types of rivers and their corridors.
- **Geology-** the Tri-Forest Region of comparison is well suited for determining geologic ORVs as it includes a large portion of both the Colorado Plateau and Southern Rocky Mountain physiographic provinces. These provinces are good comparisons because they contain most of the Santa Fe NF.
- **Fisheries-** the Santa Fe NF resides just below the headwaters of the Rio Grande basin. Although an enormous and diverse basin, species composition and aquatic characteristics are most similar to the stretches in the upper reaches of the river system. High elevation, cold-water fisheries are more common in these stretches than further downstream.

## **Criteria for Outstandingly Remarkable Values**

Identifying the criteria that would make a resource “outstandingly remarkable” helps determine whether a stream segment has any ORVs. Forest Service directives establish a baseline set of criteria as minimum thresholds to establish ORVs (FSH 1909.12 Chapter 82.73a). In February 2017, the IDT reviewed the baseline eligibility criteria from the directives and adjusted some of them to (a) further clarify the criteria and (b) make the criteria more specific and applicable to the Santa Fe NF and the specific regions of comparison (Table K-1). Most of the criteria are very similar to the planning directives, while the criteria for recreation had more substantial modifications.



**Table K-1. Outstandingly remarkable value criteria by resource category**

<b>Resource</b>	<b>FSH 1909.12 &amp; Inter-Agency Wild and Scenic River Council recommendations for Eligibility Evaluation Criteria</b>	<b>Santa Fe Wild and Scenic River Eligibility Evaluation Criteria</b>
<b>Scenic</b>	The landscape elements of landform, vegetation, water, color, and related factors result in notable or exemplary visual features and/or attractions. When analyzing scenic values, additional factors such as seasonal variations in vegetation, scale of cultural modifications, and the length of time negative intrusions are viewed, may be considered. Scenery and visual attractions may be highly diverse over the majority of the river or river segment.	The landscape elements of landform, vegetation, water, color, and related factors result in notable or exemplary visual features and attractions, that provide river users with scenery that is spectacular or not common to other rivers in the region. Consider the following: When analyzing scenic values, additional factors such as seasonal variations in vegetation, scale of cultural modifications, and the length of time negative intrusions are viewed, may be considered. Scenery and visual attractions may be highly diverse over the majority of the river or river segment.
<b>Recreation</b>	Recreational opportunities are, or have the potential to be, popular enough to attract visitors from throughout or beyond the region of comparison or are unique or rare within the region. River-related opportunities include, but are not limited to, sightseeing, interpretation, wildlife observation, camping, photography, hiking, fishing, hunting, and boating. The river may provide settings for national or regional usage or competitive events.	Unique, rare, or exemplary recreation features in the tri-forest region of comparison are found in the river corridor. These features include the following opportunities: fishing for Rio Grande cutthroat trout (a native trout species); for solitude and experiencing unaltered aquatic and riparian habitats; wildlife viewing (e.g. birding) or to visit areas of high biodiversity; to view unique scenery such as dramatic waterfalls or cliffs; for rafting or kayaking (even if on only a seasonal basis).
<b>Geologic</b>	The river, or the area within the river corridor, contains one or more examples of a geologic feature, process, or phenomenon that is unique or rare within the region of comparison. The feature(s) may be in an unusually active stage of development, represent a “textbook” example, and/or represent a unique or rare combination of geologic features (erosional, volcanic, glacial, or other geologic structures).	The river, or the area within the river corridor, contains one or more examples of a geologic feature, process, or phenomenon that is unique or rare within the region of comparison. The feature(s) may be in an unusually active stage of development, represent a “textbook” example, or represent a unique or rare combination of geologic features (erosional, volcanic, glacial, or other geologic structures).
<b>Fishery</b>	Fish values may be judged on the relative merits of either fish populations or habitat, or a combination of these river-related conditions.	Fish values may be judged on the relative merits of either fish populations or habitat, or a combination of these river-related conditions.
	Populations. The river is nationally or regionally an important producer of resident and/or anadromous fish species. Diversity of fish species or the presence of wild stocks and/or Federal or state-listed or candidate threatened, endangered, or species of conservation concern are of particular significance.	Populations. The river is nationally or regionally an important producer of Rio Grande cutthroat trout. The population has pure genetics (<10 percent altered), no non-native fish species present, and a full barrier separating that section from downstream areas with non-native hybridizing fish species is present.

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<b>Resource</b>	<b>FSH 1909.12 &amp; Inter-Agency Wild and Scenic River Council recommendations for Eligibility Evaluation Criteria</b>	<b>Santa Fe Wild and Scenic River Eligibility Evaluation Criteria</b>
<b>Fishery</b> (continued)	Habitat. The river provides uniquely diverse or high-quality habitat for fish species indigenous to the region of comparison. Exemplary habitat for wild stocks and/or Federal or state-listed or candidate threatened, endangered, or species of conservation concern is of particular significance.	Habitat. The river provides uniquely diverse or high-quality habitat for fish species indigenous to the region of comparison. Exemplary habitat for Rio Grande Cutthroat Trout.
<b>Wildlife</b>	Wildlife values may be judged on the relative merits of either terrestrial or aquatic wildlife populations or habitat, or a combination of these conditions.	Wildlife values may be judged on the relative merits of either terrestrial or aquatic wildlife populations or habitat, or a combination of these conditions.
	Habitat. The river, or area within the river corridor, provides uniquely diverse or high-quality habitat for wildlife of national or regional significance, and/or may provide unique habitat or a critical link in habitat conditions for Federal or state-listed or candidate threatened, endangered species, or species of conservation concern. Contiguous habitat conditions are such that the biological needs of the species are met.	Habitat- The river or river corridor provides uniquely diverse or uniquely high-quality habitat for wildlife of national or regional significance (e.g. Federal or state-listed or candidate threatened or endangered species or species of conservation concern), particularly where such habitats meet the year-round or important seasonal biological needs of the species
	Populations. The river, or area within the river corridor, contains nationally or regionally important populations of indigenous wildlife species. Of particular significance are species diversity, species considered to be unique, and/or populations of Federal or state-listed or candidate threatened or endangered species, or species of conservation concern.	Populations. The river or river corridor contains nationally or regionally important populations as defined by a high diversity (richness or evenness) Consider the following species: At risk riparian dependent species Other indigenous wildlife species, particularly Federal or state-listed or candidate threatened or endangered species or species of conservation concern.
<b>Cultural</b>	The river, or area within the river corridor, contains important evidence of occupation or use by humans. Sites may have national or regional importance for interpreting history or prehistory.	The river, or area within the river corridor, contains important evidence of historic or pre-historic occupation or use by humans. Sites may have regional or national importance for interpreting history or prehistory and meet the criteria for listing on the National Register of Historic Places. Traditional cultural uses within or adjacent to a river corridor may be identified as places and characteristics important to the cultural identity of a community.
	History. Site(s) or feature(s) associated with a significant event, an important person, or a cultural activity of the past that was rare or one-of-a-kind in the region. A historic site or feature, in most cases, is 50 years old or older.	History. Site(s) or feature(s) are associated with a significant event, an important person, or a cultural activity of the past that is now rare or unique in the region. A historic site or feature, in most cases, is 50 years old or older dating after AD 1539.

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<b>Resource</b>	<b>FSH 1909.12 &amp; Inter-Agency Wild and Scenic River Council recommendations for Eligibility Evaluation Criteria</b>	<b>Santa Fe Wild and Scenic River Eligibility Evaluation Criteria</b>
<b>Cultural</b> (continued)	Pre-history. Sites may have unique or rare characteristics or exemplary human-interest value; represent an area where a culture or cultural period was first identified and described; may have been used concurrently by two or more cultural groups, or may have been used for rare sacred purposes.	Prehistory. Site(s) or feature(s) associated with prehistoric human use or occupation may have unique or rare characteristics or exemplary anthropological value such as evidence of prehistoric human practices and modes of living dating prior to contact with European cultures (AD 1539).
		Traditional Cultural Use. Places and characteristics of traditional uses may be defined as areas with certain physical or biological attributes, geographic features, or non-place-based characteristics such as solitude and associated with traditional communities that have a history of use longer than 50 years.
<b>Botanical</b>		The river or river corridor contains nationally or regionally important botanical populations as defined by a high diversity (richness or evenness). Consider the following species: At risk riparian dependent species Other indigenous botanical species, particularly Federal or state-listed or candidate threatened or endangered species or species of conservation concern.

## Classification of Eligible Rivers

Similar to designated WSR, eligible WSR must be assigned a preliminary classification of either wild, scenic, or recreational (Table K-2) (FSH 1909.12 sec 87.73). The preliminary classification of eligible rivers is based on the condition of the river and existing level of development in the river and surrounding area at the time of study.

Rivers with wild or scenic classifications are free of impoundments. Roads are absent in wild river corridors, rare in scenic river corridors, and acceptable in recreational river corridors. Wild rivers have a primitive character. Scenic rivers are undeveloped. Recreational rivers may have some development. Water quality in wild rivers must be high, but may be poor under the other two classifications.

The intent of the act, to protect a river's free-flowing condition and protect and enhance the river's ORVs, applies equally to all wild and scenic rivers regardless of classification. Management of an eligible river must maintain the river's classification as evaluated, unless a suitability study recommends management at a less restrictive classification. Otherwise, all eligible rivers are managed with the same intent, regardless of classification.

## Public Engagement

Preliminary regions of comparison and draft criteria were presented for public input as part of a series of five public meetings held in March 2017. These documents were also made available online.

About 8 different letters were received related to Wild and Scenic Rivers. From these, 17 different comments were determined. Four comments were specific to the criteria of free-flow and ORV, including the region of comparison. Of the remaining, 5 commented on the general process for determining river eligibility, 3 were concerned with how WSR would be managed in the forest plan and another 5 had other concerns or comments. The final version of these products only changed with regards to the criteria for ORV for fish populations, which was refined to be specifically about Rio Grande Cutthroat trout and consistent with the Carson's criteria for fish populations to assess values related these native fish on a broader landscape-scale. Summarized comments and responses are included below.

### **Criteria (free-flow or ORV, including Region of Comparison)**

Region of comparison should include southern Colorado for wildlife and botany and pre-history. (1 letter)

*Response: The criteria for wildlife and botanical ORVs looked at: "Other indigenous species, particularly Federal or State listed or candidate threatened or endangered species or species of conservation concern." We chose the state of New Mexico, so we would only be looking at plant and animal species known to this area. There was concern with going beyond the New Mexico borders when it comes to species listed on other state lists that may be on the far periphery of their range.*

*Maybe the Northern Middle Rio Grande (misnamed on the Region of Comparison justification). These localities are the specific archeological groups on our Forest. No point in comparing sites here to sites there as they very different. The cultural group lines do not extend into Southern Colorado.*

Barriers to protect native fishes should not disqualify a river from eligibility. (1 letter)

*Response: Determinations of free-flow, including the effect of existing barriers to protect native fish, were made on an individual river basis in accordance with the WSRA as described earlier in this document under “free-flowing determination.”*

Criteria are still subjective and should be further refined. (1 letter)

*Response: Criteria for fish populations were further refined to make them more specific, and align with the criteria for fish populations used by the Carson NF.*

The W&S eligibility criteria should also include reference to 1) important wetlands that rely on or are otherwise related to potential W & S stream segments and streams relevant to maintaining and enhancing key wetlands (including those highlighted through U.S.F.S Watershed Condition Classification, and those areas highlighted in "Wetland Jewels"), 2) streams on which habitat restoration projects and structures may be appropriate, and 3) stream segments that could benefit from reductions to recreation pressure. (1 letter)

*Response: FSH 1909.12 Chapter 82.7, “Criteria for Eligible Rivers” specifies that:*

*To be eligible for inclusion, a river segment must be free-flowing and, in combination with its adjacent land area, possess one or more outstandingly remarkable values.*

*The categories for ORVs of “scenic, recreational, fish and wildlife, historic, cultural, or other similar values” are specified in the WSRA. We believe that most of the values associated with wetlands related to potentially eligible WSR segments are considered with these other resource areas. Neither the WSRA or FSH 1909.12 Chapter 80 allow for habitat restoration, structures, or reducing recreation pressure as either separate criteria or part of the free-flowing qualities or ORV criteria.*

### **General Evaluation Process**

It was proposed that we should complete robust and comprehensive eligibility analysis for potential WSR and affirm previous findings of eligibility. The analysis should include a) all streams currently included in the Nationwide rivers inventory, b) tributaries relevant to already designates WSR, c) streams relevant to maintaining and enhancing key wetlands (wetland jewels), d) all other streams that meet the basic criteria. One specific stream was proposed as eligible. (1 letter)

*Response: For this process, the interdisciplinary team performed a comprehensive inventory and evaluation to determine which rivers were eligible for inclusion in the National System. NO previous inventory of eligible rivers was carried forward. The directives specify that we must look at all named streams which will include all of the streams listed above.*

Concerns about how eligible wild and scenic river designations and existing multiple uses may impact each other; acequias, additional fences, infrastructure, and access were mentioned specifically. (4 separate letters)

*Response: Management of eligible Wild and Scenic Rivers is dictated by direction in the draft forest plan and the need to preserve their free-flowing and ORV characteristics. However, existing*

*uses such as acequias, infrastructure, and access can impact a river's free-flow, the presence of ORVs, or the river classification, and were considered in this process.*

### **Management**

Several commenters included management recommendations for wild and scenic rivers including activities that minimize riparian damage (motor vehicles, recreation); restore rivers to a more natural state for wildlife and fish, hydrologic process, vegetation, and upland water developments; and activities not appropriate for various river classifications. (3 letters)

*Response: Management of eligible Wild and Scenic Rivers is dictated by direction in the draft forest plan and the need to preserve their free-flowing and ORV characteristics. Therefore, these comments were carried over for consideration in the draft forest plan.*

### **Others**

Who is the “Inter-agency WSR Council” and how do they impact WSR determinations? (1 letter)

*Response: The inter-agency WSR Council is a coordination and policy making body that strives to create consistency in the management of WSR across Federal agencies. They have no direct effect on WSR determinations, though my have indirect influence the creation of white papers and other guidance.*

Will the process include suitability or just eligibility? (1 letter)

*Response: A suitability study for eligible rivers is not planned to occur as part of this current process, and will not be completed concurrent with the revision of the forest plan.*

A few comments asked for specific types of products for better public engagement, such as labeling existing Wild and Scenic Rivers on maps, allowing for more public review, and making mapping data available. (3 letters)

*Response: We have incorporated many of these comments since March 2017.*

## Eligibility Evaluation Process

The process commenced by identifying all named streams from USGS 7.5 minute quad maps that fell within the Santa Fe NF's administrative boundary. No previous eligibility study was used, all rivers that qualified were evaluated. A total of 243 streams met that criteria and were studied for eligibility. The Interdisciplinary Team evaluated all for free-flowing characteristics and ORVs between the spring and fall of 2017 (Attachment A). Twelve streams were determined to be free flowing and possess at least one ORV, thereby qualifying as eligible WSR (Table K-2, Figure K-2-west and Figure K-2-east).

## Interim Management of Eligible Rivers

Eligible WSR and their corridors are managed to maintain their free-flowing nature and ORVs through guidance in the forest plan and until such time as they are determined to be suitable, designated under the WSRA, or released from consideration. Plan direction for managing eligible WSR can be found in the Forest Plan under Chapter 3, Management Areas, Eligible Wild and Scenic Rivers. Additional guidance including interim protection measures for eligible or suitable rivers can be found in FSH 1909.12, sec 84.3.

## Evaluating Suitability of Eligible Rivers

Following a determination of eligibility, a river must also be found suitable prior to being recommended to Congress as potential additions to the National System. A suitability study provides the basis for determining which eligible rivers or river segments should be recommended to Congress as potential additions to the National System. Any eligible river may be studied for its suitability for inclusion in the National System at any time. If a proposed project has the potential to adversely affect the free-flow or ORV of any river that has been determined here to be eligible, the Responsible Official should study the suitability of that river for inclusion in the National System before approving the project. If the river is found suitable, then the proposed project must maintain free-flow and protect ORV. If the river is found to not be suitable, it is also no longer eligible. Suitability studies address questions found in FSH 1909.12 Chapter 83.2. A suitability study for eligible rivers is not planned to occur as part of this current process and will not be completed concurrent with the revision of the forest plan.

¶

**Table K-2. Eligible wild, scenic and recreational rivers**

<b>District Name</b>	<b>Stream Name</b>	<b>Watershed Name</b>	<b>Class</b>	<b>Outstandingly Remarkable Values (see Table K-1 for a description of each value)</b>	<b>Miles</b>	<b>Reach Description</b>
Coyote	Cañone's Creek	Abiquiu Reservoir	Wild	Recreation, Scenery, Prehistory, Botanical, Fish	9.98	From the headwaters to the junction with Chihuaheños Creek
Jemez	Rio Guadalupe	Rio Guadalupe	Scenic	Scenery, Prehistory, Recreation	13.22	The entire stream from the Jemez River to the Rio Cebolla and Rio de las Vacas junction
Española	Rio del Oso	Rio Ojo Caliente-Rio Chama	Recreational	History, Prehistory	10.21	From the Forest boundary west to the junction with Gallina Creek
Cuba	Rito Anastacio East	Rio Guadalupe	Wild	Scenery, Botanical, Fish	2.08	The entire stream from its junction with the Rio Puerco
Cuba	Rio Puerco	Arroyo San Jose-Rio Puerco	Wild	Scenery, Botanical, Fish	8.33	From the headwaters to the Forest boundary
Jemez	Jemez River	Upper Jemez River	Recreational	Prehistory	4.34	From the East Fork Jemez River and San Antonio River confluence to the town of Jemez Springs
Pecos-Las Vegas	Pecos River	Tecolote Creek - Pecos River	Scenic	History	6.75	The section along the south boundary of the Anton Chico detached Forest unit
Cuba	Rio de las Vacas	Rio Guadalupe	Wild	Scenery, Botanical, Fish	7.20	From the headwaters to the San Pedro Park Wilderness boundary
Española	Rio Molino	Santa Cruz River	Wild	Fish	4.45	The entire stream from its junction with the Rio Medio
Pecos-Las Vegas	Rio Valdez	Cow Creek-Pecos River	Wild	Fish	2.25	From above the fish barrier at E 451360.2 N3976982.7 to the headwaters
Pecos-Las Vegas	Beaver Creek	Headwaters Gallinas River	Wild	Fish, Scenery	3.05	From the Pecos Wilderness boundary to the junction with Hollinger Canyon
Pecos-Las Vegas	Bear Creek	Cow Creek-Pecos River	Wild	Fish	2.36	From the fish barrier at E 447802.4 N3962733.2 to the headwaters.



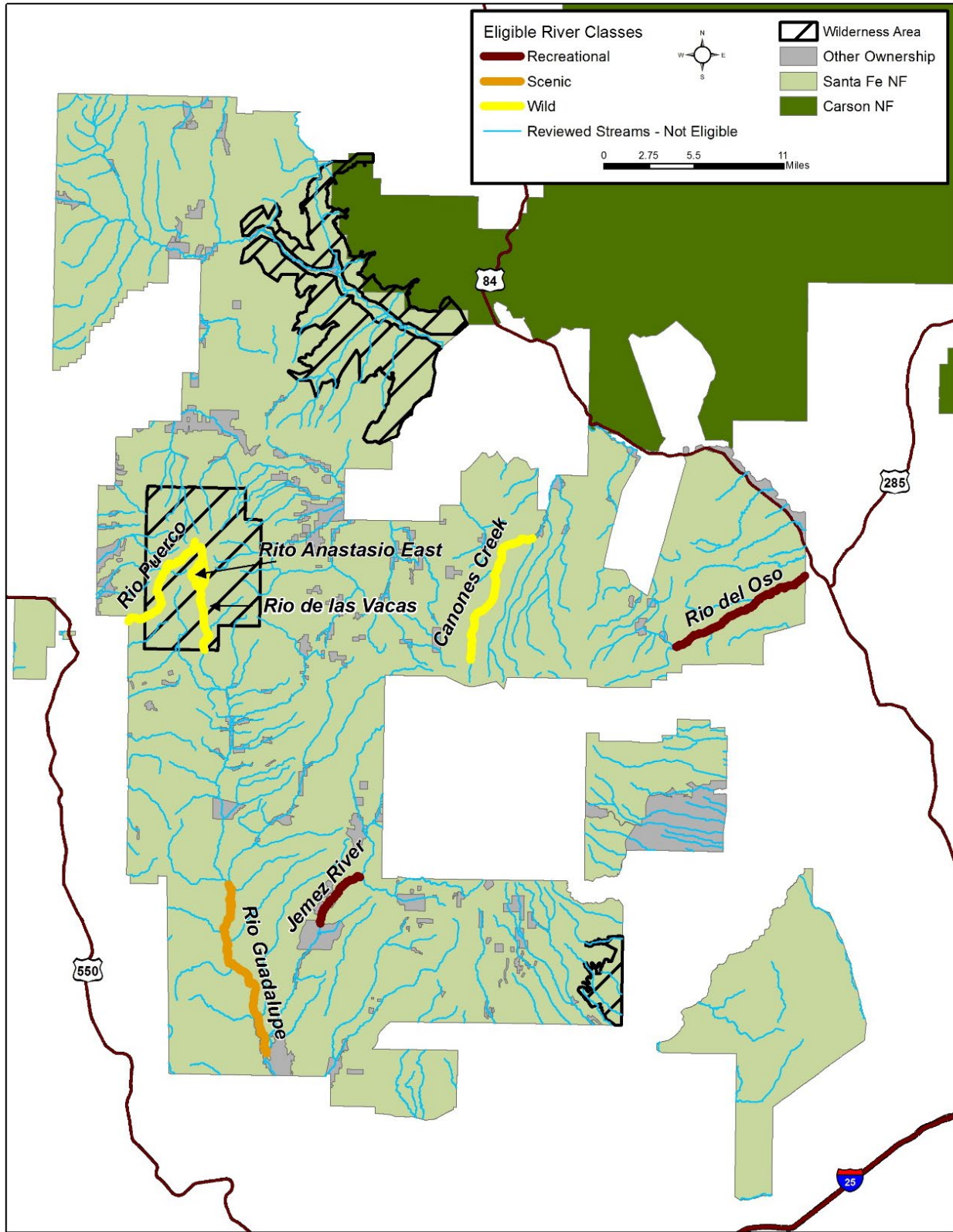


Figure K-2-west. Eligible wild and scenic rivers for the western half of the Santa Fe NF, from Cuba to Española. For legend see Figure K-2-east.

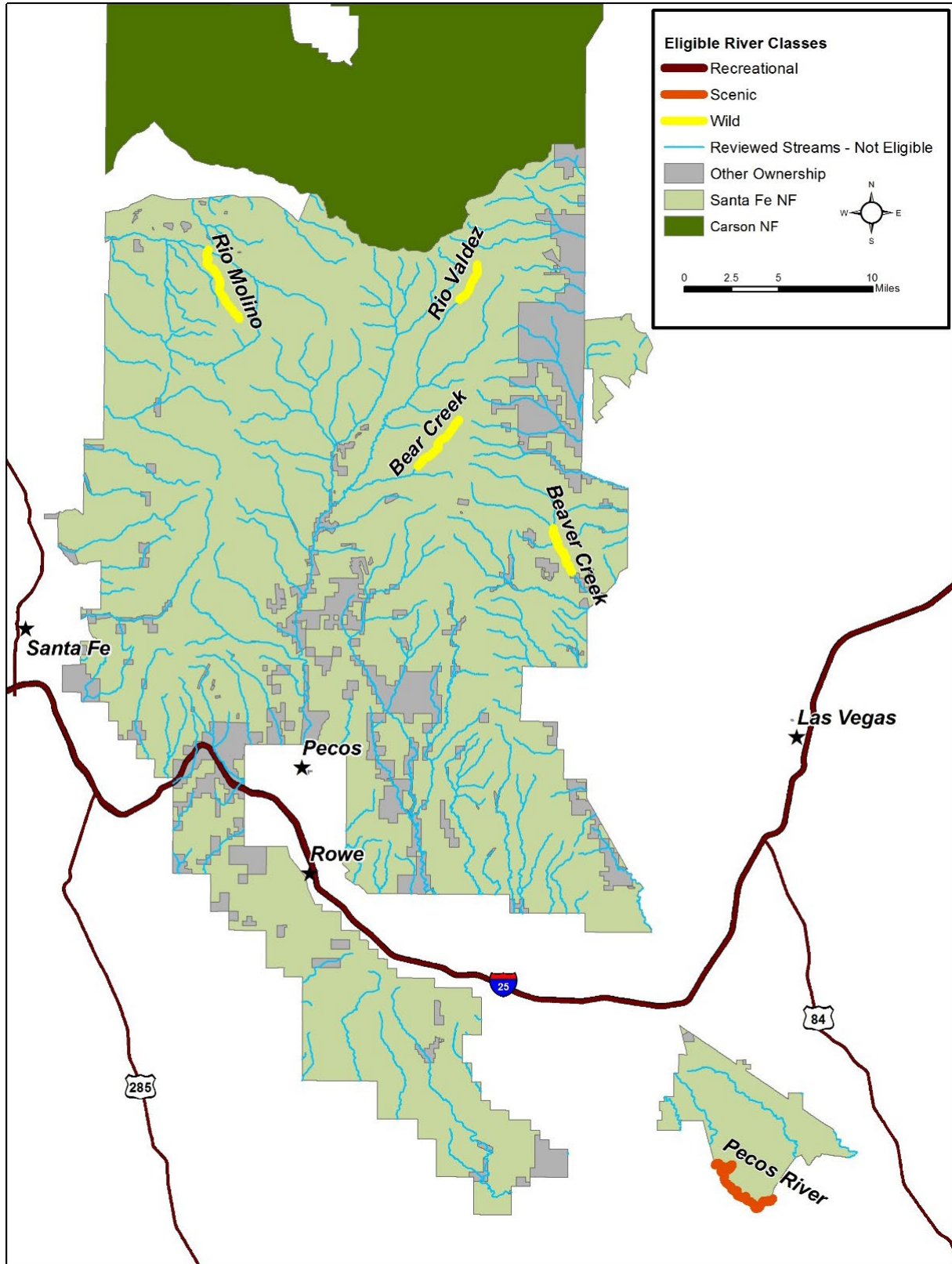


Figure K-2-east. Eligible wild and scenic rivers for the eastern half of the Santa Fe NF, from Española to Las Vegas

## References for Appendix K

- Anschuetz, K.F. and C.L. Scheick. 2006. Precolumbian Archaeology of the Geographic Subdivisions. In C. L. Scheick (Ed.), *A Study of Pre-Columbian and Historic Uses of the Santa Fe National Forest: Competition and Alliance in the Northern Rio Grande* (Chapter 5), 18.
- Crown, P.L. et al. (1996). Pueblo Cultures in Transition: The Northern Rio Grande. In M. A. Adler (Ed.), *The Prehistoric Pueblo World, A.D. 1150-1350* (Chapter 13). Tucson, Arizona: University of Arizona Press.
- IWSRCC (Interagency Wild and Scenic Rivers Coordinating Council). 1998. An Introduction to Wild and Scenic Rivers. Technical Report. [www.rivers.gov/documents/wsr-primer.pdf](http://www.rivers.gov/documents/wsr-primer.pdf)
- IWSRCC (Interagency Wild and Scenic Rivers Coordinating Council). 2017. A Compendium of Questions and Answers Relating to Wild and Scenic Rivers. Technical Report. <https://www.rivers.gov/documents/q-a.pdf>
- USDA FS (United States Department of Agriculture – Forest Service). 2012. Forest Service handbook (FSH) 1909.12 – Land management planning handbook: Chapter 80 –Wild and Scenic Rivers. Washington, D.C.: USDA Forest Service.
- U.S. Congress. 1968. Wild and Scenic Rivers Act (Public Law 90-542).
- Sierra Club North Star Chapter v. Pena*, 1 F. Supp. 2d 971 (D. Minn. 1998).  
[law.justia.com/cases/federal/district-courts/FSupp2/1/971/2569732/](http://law.justia.com/cases/federal/district-courts/FSupp2/1/971/2569732/)

## Attachment A: Reviewed Streams

**Table K-3. All 243 rivers evaluated for eligibility and documentation as per FSY 1909.12, Chapter 80, section 82.9.**

The 12 eligible rivers are denoted with an asterisk (\*) and all other rivers were determined to be ineligible because they were either not free-flowing or lacking ORVs. For eligible rivers, the “Potential ORV Discussion Notes” column indicates the basis for the determination of eligibility. For ineligible rivers, this column documents discussions of potential ORVs or free-flow characteristics. The free-flow and ORV columns denote whether each river had those criteria. Since potential ORVs were determined prior to free flow for most rivers, “n/d” (not determined) indicates that free-flow was not discussed (because there was no ORV).

District	Named Streams with Blue Labels from USGS Topo Quads	Miles	Potential ORV Discussion Notes	Free Flowing	Presence of ORVs Yes/No	Regional or National Significance R/N
Coyote	Canada de la Mora	0.04	Heritage: No ORVs. Wildlife: No ORVs Fish: No ORVs. 92 goshawk citing.	n/d	No	
Coyote	Hart Canyon	0.97	No potential ORVs.	n/d	No	
Coyote	Chavez Canyon	2.18	No potential ORVs.	n/d	No	
Coyote	Canoncito de las Lleguas	0.35	No potential ORVs.	n/d	No	
Coyote	Cecilia Canyon	5.12	No potential ORVs.	n/d	No	
Coyote	Canada de la Tableta	0.89	No potential ORVs.	n/d	No	
Coyote	Dove Creek	2.64	San Pedro Parks. ONRW. On the north side of San Pedro parks the streams are steeper and more typical of the area with less wetlands.	n/d	No	
Coyote	Canada de la Cueva	6.95	No potential ORVs.	n/d	No	
Coyote	Polvadera Creek	3.48	No potential ORVs.	n/d	No	
Coyote	Canada Tusas	1.38	No potential ORVs.	n/d	No	
Coyote	Canon de la Alameda	2.29	No potential ORVs.	n/d	No	
Coyote	Canada de las Fuertes	8.63	Scenic-rock outcrops, Chama Canyon rock outcrops, views of outcrops typically more than 1/4 mile. Scenic, but not ORV. Wildlife: Gunnison's prairie dog.	n/d	No	
Coyote	Canada Camino	4.33	Heritage: No ORVs. Wildlife: Gunnison's prairie dog. Fish: No ORVs. System trail-low use.	n/d	No	
Coyote	Barranqueños Creek	2.22	MSO PAC Little leaf buttercup.	n/d	No	
Coyote	Arroyo Carreras	3.22	No potential ORVs.	n/d	No	
Coyote	Canada del Portero	6.03	No potential ORVs.	n/d	No	
Coyote	Canon de las Vegitas	2.70	No potential ORVs.	n/d	No	

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District	Named Streams with Blue Labels from USGS Topo Quads	Miles	Potential ORV Discussion Notes	Free Flowing	Presence of ORVs Yes/No	Regional or National Significance R/N
Coyote	Chihuahueros Creek	9.19	Cutthroat trout, recreation population, not ORV.	n/d	No	
Coyote	Canada de la Presa	6.47	Scenic-rock outcrops, Chama Canyon rock outcrops, views of outcrops typically more than 1/4 mile. Scenic, but not ORV.	n/d	No	
Coyote	Rio Gallina	23.73	Scenic: Chama Canyon rock outcrops, water, riparian vegetation, within wilderness area. Only the section within wilderness would be considered eligible. Tributary to Rio Chama. Most people cannot access it. Wildlife: Border of peregrine falcon habitat. Fish: Rio Grande sucker. Recreation: No ORVs. Geology: No ORVs. ONRW in wilderness. Violet milk vetch. Connects to Rio Chama. Doesn't meet regionally important ORVs, it is locally important.	n/d	No	
Coyote	Rio Gallina	0.0007	No potential ORVs.	n/d	No	
Coyote	Canada de Gonzales	2.52	No potential ORVs.	n/d	No	
Coyote	Rio Chama	10.71	Scenic but not ORV for scenery. -undesignated portion to south. Inundation area makes it less free flowing because of Abiquiu Reservoir and the dam downstream. Look at undesignated portion. Rio Chama blazing star. Outstanding recreation opportunities. Already designated, Chama blazing star, reach that is not designated doesn't have ORVs. Highly managed river, artificial flows due to large reservoir upstream. It's less free flowing than the rest of the river and can be inundated with controlled stream. People come from outside the region to raft. Scenery ORV-nationally significant.	n/d		
Coyote	Salt Draw	0.43	No potential ORVs.	n/d	No	
Coyote	Canada Cueva	2.52	Heritage but not ORV.	n/d	No	
Coyote	Canada Schmidt	4.77	Heritage: No ORVs. Wildlife: Gunnison's prairie dog. Fish: No ORVs	n/d	No	
Coyote	Canoncito Seco	8.68	No potential ORVs.	n/d	No	

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District	Named Streams with Blue Labels from USGS Topo Quads	Miles	Potential ORV Discussion Notes	Free Flowing	Presence of ORVs Yes/No	Regional or National Significance R/N
Coyote	Canone's Creek*	15.58	Prehistoric: Yes, site that is a large-scale room, "Tsiping". Scenic: Yes, values related to the enclosed canyon with mesas defining the rims. Recreation: Yes. Presence of National Recreation Trail. Solitude, beautiful river. Wildlife viewing Botanical: Presence of little leaf buttercup Fish: Genetically pure RGCT present Wildlife: MSO habitat and population, goshawk. No ORVs for wildlife. Other notes: There were 3 segments last time. Upstream of the village of Cañone's the creek is on and off private and sometimes it is on private. Reviewed previous map from FEIS that has segments. From Chihuahueros creek to the headwaters at the VCNP boundary/headwaters (this is less than was considered in 1987, which was the entire portion on the forest).	Yes	Yes – Pre-history, Scenic, Recreation, Botanical, Fish	N – Pre-history, Scenic, Recreation R – Botanical, Fish
Coyote	Canada Brazo	0.97	Wildlife: Gunnison's prairie dog. Botany: riparian veg.	n/d	No	
Coyote	Arroyo Jaspe	1.18	No potential ORVs.	n/d	No	
Coyote	Canada Corral	1.73	Heritage: No ORVs. Wildlife: Gunnison's prairie dog. Fish: No ORVs.	n/d	No	
Coyote	Canada Gurule	5.51	Scenic at canyon, but not ORV.	n/d	No	
Coyote	Cave Creek	1.73	Recreation: Cave. ONRW. Cave that people go to recreate. Gallina cave is the main one. Rio Gallina originates out of the cave. Heritage: The Gallina people used minerals from the cave to make jewelry. Recreation: ORV.	n/d	No	
Coyote	Clear Creek	3.55	Two streams within wilderness. ONRW within wilderness. System trail.	n/d	No	
Coyote	Corral Canyon	2.81	No potential ORVs.	n/d	No	
Coyote	Joaquin Canyon	1.77	No potential ORVs.	n/d	No	
Coyote	Ojitos Canyon	6.51	No potential ORVs.	n/d	No	

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District	Named Streams with Blue Labels from USGS Topo Quads	Miles	Potential ORV Discussion Notes	Free Flowing	Presence of ORVs Yes/No	Regional or National Significance R/N
Coyote	Rio Capulin	12.04	ONRW in wilderness. Recreation: CDNST nearby, but not ORV. Scenic but not ORV. Diversions on north end that may affect free flow.	No	No	
Coyote	Rio Cebolla	1.09	No potential ORVs.	n/d	No	
Coyote	Rito de las Sillas	0.0004	No potential ORVs.	n/d	No	
Coyote	Canone's Creek	0.0004	No potential ORVs.	n/d	No	
Coyote	Rio Chama	5.13666E-05	No potential ORVs.	n/d	No	
Coyote	Jose Miguel Creek	3.55	No potential ORVs.	n/d	No	
Coyote	Corralitos Creek	2.42	No potential ORVs.	n/d	No	
Coyote	Rito Pelon	1.98	No potential ORVs.	n/d	No	
Coyote	Huckaby Canyon	1.37	No potential ORVs.	n/d	No	
Coyote	Rito Encino	5.50	No potential ORVs.	n/d	No	
Coyote	Dark Canyon	2.12	No potential ORVs.	n/d	No	
Coyote	Salitral Creek	9.03	No potential ORVs.	n/d	No	
Coyote	Poleo Creek	6.28	No potential ORVs.	n/d	No	
Coyote	Guardia Canyon	1.31	No potential ORVs.	n/d	No	
Coyote	Rito Redondo	2.17	No potential ORVs.	n/d	No	
Coyote	Oso Creek	2.88	No potential ORVs.	n/d	No	
Coyote	Capulin Creek	1.96	No potential ORVs.	n/d	No	
Coyote	Lino Creek	2.51	No potential ORVs.	n/d	No	
Coyote	Vega Larga	1.28	No potential ORVs.	n/d	No	
Coyote	Rio Chama	10.56	No potential ORVs.	n/d	No	
Coyote	Rito Resumidero	2.79	Resumidero Falls, unique but not ORV. Locally important. Not well known, not visible from road, people don't seek it out. Compared to Jemez falls it is not an ORV for scenery.	n/d	No	
Coyote	Jarosa Canyon	6.98	No potential ORVs.	n/d	No	
Coyote	El Rito	2.24	No potential ORVs.	n/d	No	
Coyote	Cañada Bonita	2.35	No potential ORVs.	n/d	No	
Coyote	Rio Puerco DeChama	10.85	There is a section that is a very narrow canyon with a waterfall. Difficult to get to and see. But not an ORV. Not exemplary for scenery.	n/d	No	
Coyote	Vega Cochina	3.83	No potential ORVs.	n/d	No	
Coyote	Canoncito Seco	4.76	No potential ORVs.	n/d	No	
Coyote	Rito de las Sillas	8.80	No potential ORVs.	n/d	No	
Coyote	Coyote Creek	12.97	No potential ORVs.	n/d	No	
Coyote	Rito Seco	4.94	No potential ORVs.	n/d	No	
Coyote	Canon Pinabetoso	3.42	No potential ORVs.	n/d	No	



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District	Named Streams with Blue Labels from USGS Topo Quads	Miles	Potential ORV Discussion Notes	Free Flowing	Presence of ORVs Yes/No	Regional or National Significance R/N
Coyote	Temoline Canyon	1.63	No potential ORVs.	n/d	No	
Coyote	Mine Canyon	2.39	No potential ORVs.	n/d	No	
Coyote	Canoncito de los Cordovas	4.74	No potential ORVs.	n/d	No	
Coyote	Rito del Ojo	2.66	No potential ORVs.	n/d	No	
Coyote	Agua Sarca	7.75	No potential ORVs.	n/d	No	
Coyote	Arroyo Jaspe	3.04	No potential ORVs.	n/d	No	
Coyote	Rio Cebolla	0.04	No potential ORVs.	n/d	No	
Coyote	Rio Cebolla	3.01	No potential ORVs.	n/d	No	
Coyote	Vega Cochina	0.72	No potential ORVs.	n/d	No	
Cuba	Rito del Indio	3.32	No potential ORVs.	n/d	No	
Cuba	Canada Simon	4.99	Stock tanks affect free flow.	No	No	
Cuba	Arroyo Naranjo	2.55	No potential ORVs.	n/d	No	
Cuba	Tapacitos Wash	2.13	No potential ORVs.	n/d	No	
Cuba	Canada Ojitos	9.84	Astragalus cyaneus (common name, Violet milk vetch) population.	n/d	No	
Cuba	El Poso	1.94	No potential ORVs.	n/d	No	
Cuba	Arroyo del Puerto Chiquito	5.26	No potential ORVs.	n/d	No	
Cuba	Rio de las Vacas*	25.75	Scenic: Has unique scenic features in the San Pedro Parks area. Has a large unique appearing scenic wetland. Segment within wilderness parks area has scenery ORV. Botanical: Within San Pedro Parks, a large and intact wetland area (intact) with a highly diverse botanical component associated with it. Parks are ecologically unique. Fish: Genetically pure RGCT above barrier. Locally important fish habitat. Wildlife: Proposed new Mexico jumping mouse critical habitat. Not ORV. Geology: It is geologically unique. Not ORV. Other Notes: In San Pedro Parks Wilderness. ONRW. Brown trout above barrier.	Yes	Yes - Scenic, Botanical, Fish	N – Scenic, Botanical R - Fish
Cuba	Syphers Canyon	1.74	No potential ORVs.	n/d	No	



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District	Named Streams with Blue Labels from USGS Topo Quads	Miles	Potential ORV Discussion Notes	Free Flowing	Presence of ORVs Yes/No	Regional or National Significance R/N
Cuba	Rito Anastacio East*	2.08	Scenic: Has unique scenic features in the San Pedro Parks area. Has a large unique appearing scenic wetland. Segment within wilderness parks area has scenery ORV. Botanical: Within San Pedro Parks, a large and intact wetland area (intact) with a highly diverse botanical component associated with it. Parks are ecologically unique. Fish (population): Genetically pure RGCT. Fish habitat: Not an ORV. Sediment was not properly functioning and about 50 percent sand. Other notes: In San Pedro Parks Wilderness Tributary to Rio de las Vacas (another eligible WSR). ORNW.	Yes	Yes – Scenic, Botanical, Fish	N – Scenic, Botanical R - Fish
Cuba	Barley Canyon	1.30	No potential ORVs.	n/d	No	
Cuba	Rito de los Utes	3.95	Free flowing east of the private property. Unknown if it is free flowing on the west side of the property.	No	No	
Cuba	San Miguel Canyon	4.31	No potential ORVs.	n/d	No	
Cuba	Horse Heaven Canyon	2.15	No potential ORVs.	n/d	No	
Cuba	Moon Canyon	4.40	No potential ORVs.	n/d	No	
Cuba	Arroyo Chijuilito	0.87	Mostly dry. Cuba Mesa. Free flowing if there is a flow.	n/d	No	
Cuba	Wolf Canyon	2.31	No potential ORVs.	n/d	No	
Cuba	Canada Jose	2.61	<i>Astragalus cyaneus</i> (common name, Violet milk vetch) population.	n/d	No	
Cuba	Telephone Canyon	5.20	No potential ORVs.	n/d	No	
Cuba	Rio Puerco	8.33	Scenery, Botanical, Fish	Yes	Yes	
Cuba	Rito de las Perchas	3.47	No potential ORVs.	n/d	No	
Cuba	Dark Canyon	0.44	No potential ORVs.	n/d	No	
Cuba	Wolf Draw	2.82	No potential ORVs.	n/d	No	
Cuba	Canoncito de las Llequas	12.58	No potential ORVs.	n/d	No	
Cuba	Pasture Canyon	3.11	No potential ORVs.	n/d	No	
Cuba	Middle Fork Ojitos Canyon	3.78	No potential ORVs.	n/d	No	
Cuba	Mud Springs	4.75	No potential ORVs.	n/d	No	

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Cuba	Deer Run	4.17	Free flowing most of the length on north end Deer run pit tank, check dams. Several pit tanks and check dams below 310 road.	No	No	
Cuba	Rock Creek	4.52	No potential ORVs.	n/d	No	
Cuba	Calaveras Canyon	3.63	No potential ORVs.	n/d	No	
Cuba	American Creek	4.02	No potential ORVs.	n/d	No	
Cuba	Rito de los Pinos	5.49	Follows the Continental Divide National Scenic Trail (not unique rare or exemplary because it is found on all 3 forests in the region). Below trailhead it is not free flowing because a diversion ditch. Rio Grande cutthroat trout present. Below trailhead it is not free flowing after the ditch during irrigation season which lasts 8 months. Only the portion upstream from the ditch can be considered. CDNST follows a portion of it. At trailhead diverts into Los Pinos ditch, not free flowing below.	No	No	
Cuba	Canon de la Alameda	0.86	No potential ORVs.	n/d	No	
Cuba	Arroyo de los Pinos	1.22	No potential ORVs.	n/d	No	
Cuba	Trail Creek	3.50	No potential ORVs.	n/d	No	
Cuba	South Fork Ojitos Canyon	4.32	No potential ORVs.	n/d	No	
Cuba	Rito Lodin	1.51	No potential ORVs.	n/d	No	
Cuba	Burned Canyon	0.967960 417	No potential ORVs.	n/d	No	
Cuba	Arroyo Dedos Gordos	2.42	No potential ORVs.	n/d	No	
Cuba	Rito Cafe	4.49	No potential ORVs.	n/d	No	
Cuba	Rito Penas Negras	8.55	No potential ORVs.	n/d	No	
Cuba	Canada Tanques	3.31	No potential ORVs.	n/d	No	
Cuba	Miguelito Canyon	3.78	No potential ORVs.	n/d	No	
Cuba	Road Canyon	0.98	No potential ORVs.	n/d	No	
Cuba	Turkey Creek	2.27	No potential ORVs.	n/d	No	
Cuba	Oso Canyon	2.50	Stock tank on stream. Flow is not natural after the stock tank. Focus above stock tank. Stock tank diverts the water. Above tank free flowing. Stock tank takes all water.	No	No	
Cuba	School Section Canyon	1.78	No potential ORVs.	n/d	No	

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Cuba	San Pablo Canyon	5.30	No potential ORVs.	n/d	No	
Cuba	Bond Canyon	1.75	No potential ORVs.	n/d	No	
Cuba	Arroyo Chijuillita	0.82	Mostly dry, sand wash on Cuba Mesa. Sandy wash, there are retention ponds on the BLM portion (downstream).	n/d	No	
Cuba	Bear Canyon	0.41	No potential ORVs.	n/d	No	
Cuba	Rito de las Palomas	5.77	No potential ORVs.	n/d	No	
Cuba	Boot Jack Canyon	2.05	No potential ORVs.	n/d	No	
Cuba	Senorito Canyon	3.92	No potential ORVs.	n/d	No	
Cuba	Canada Jacquez	2.64	An earthen dam across the creek impounds flow for livestock use. Flow is not natural after the stock tank. Focus above stock tank. Downstream it only gets the overflow. Above stock tank it is free flowing.	No	No	
Cuba	Rio Gallina	0.21	Violet milk vetch. Portion in the wilderness is an ORNW. Several diversions on the north end, impaired stream below the wilderness, free flowing above the diversions.	No	No	
Cuba	Vega Larga	0.02	No potential ORVs.	n/d	No	
Cuba	Salazar	2.48	No potential ORVs.	n/d	No	
Cuba	South Fork Arroyo de los Pinos	1.17	No potential ORVs.	n/d	No	
Cuba	Rito Anastacio West	1.53	No potential ORVs.	n/d	No	
Cuba	Chupadero Arroyo	6.47	No potential ORVs.	n/d	No	
Cuba	Nacimiento Creek	0.49	No potential ORVs.	n/d	No	

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Cuba	Nacimiento Creek	3.80	Does not meet water quality standards. Acequia near wilderness boundary. At this point the water has been diverted and stream is not free flowing after. San Gregorio is an impoundment at the beginning of the Creek. Diversion is about 1 mile from reservoirs. Has a recorded historic acequia. There is an acequia diversion near the wilderness boundary. This acequia impacts the amount of water below it (diverts all or most of it). In the Wilderness there is a reservoir and dam that make it not free flowing.	No	No	
Cuba	North Fork Ojitos Canyon	4.24	No potential ORVs.	n/d	No	
Cuba	Bales Canyon	7.40	No potential ORVs.	n/d	No	
Cuba	Lang Canyon	1.66	No potential ORVs.	n/d	No	
Cuba	Trail Canyon	1.49	No potential ORVs.	n/d	No	
Cuba	La Jara Creek	6.25	At the forest boundary, there are diversions taking water out of the creek as it enters private land. On the forest is free flowing. Does not meet water quality standards. Rio Grande cutthroat trout core conservation population. At forest boundary La Jara acequia and municipal water company have diversions taking water out of the creek.	No	No	
Cuba	Rito Leche	3.39	No potential ORVs.	n/d	No	
Cuba	Archuleta Arroyo	4.40	Heritage: Rattlesnake ruin, large pueblo. Small impoundments on tributaries. Intermittent and ephemeral, small impoundments on tributaries. Not always flowing, more of a dry wash. Main channel is free flowing. Not ORV because not river dependent.	No	No	
Cuba	Stock Driveway Canyon	0.56	No potential ORVs.	n/d	No	
Cuba	Mine Canyon	0.57	No potential ORVs.	n/d	No	
Cuba	Salado Creek	2.81	No potential ORVs.	n/d	No	
Cuba	Canada Jesus Moya	5.36	Stock tanks affect free flow. Every place that flows with water has a tank.	No	No	
Cuba	Windy Canyon	1.70	No potential ORVs.	n/d	No	
Cuba	Horse Canyon	3.07	No potential ORVs.	n/d	No	

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Cuba	San Jose Creek	2.85	No potential ORVs.	n/d	No	
Cuba	Arroyo San Jose	0.33	West of San Pedro Parks. There is another stream with the same name near Cuba Mesa Admin Site. Same findings apply to both. Perennial and intermittent segments N. of Arroyo Naranjo. Perennial and intermittent segments, more southern, across from Cuba Mesa admin site.	n/d	No	
Cuba	Canada Gurule	7.66	Stock tanks affect free flow. Every place that flows with water has a tank.	n/d	No	
Cuba	Canon Madera	3.78	No potential ORVs.	n/d	No	
Cuba	Clear Creek	9.32	No potential ORVs.	n/d	No	
Cuba	Corral Canyon	8.08	No potential ORVs.	n/d	No	
Cuba	Ojitos Canyon	2.57	No potential ORVs.	n/d	No	
Cuba	Rio Cebolla	0.22	No potential ORVs.	n/d	No	
Cuba	Spring Canyon	6.65	No potential ORVs.	n/d	No	
Cuba	Spring Canyon	0.24	No potential ORVs.	n/d	No	
Cuba	Spruce Canyon	1.76	No potential ORVs.	n/d	No	
Española	Rio Jaroso	2.23	No potential ORVs.	n/d	No	
Española	Canon Chimayo	3.69	No potential ORVs.	n/d	No	
Española	Canada Ancha	0.74	No potential ORVs.	n/d	No	
Española	Canada Ancha	8.44	Diablo Canyon has scenic rock outcrops, mountain views, and a unique box canyon. Accessibility makes it easier to reach. Ends at Buckman wells. Different than a lot of places. No ORV because not river dependent.	Yes	No	
Española	Pacheco Canyon	3.26	No potential ORVs.	n/d	No	
Española	Canada de las Corrales	1.97	No potential ORVs.	n/d	No	
Española	Sawyer Canyon	2.30	No potential ORVs.	n/d	No	
Española	Arroyo de la Anima	5.39	Most flow comes out of spring on Abiquiu land grant. No other notes	n/d	No	
Española	Arroyo de las Lemitas	2.96	No potential ORVs.	n/d	No	
Española	Canoncito de los Ranchos	2.22	No potential ORVs.	n/d	No	
Española	Canon del Oso	1.54	No potential ORVs.	n/d	No	
Española	Bayo Canyon	2.73	No potential ORVs.	n/d	No	
Española	West Fork Polvadera	5.29	No potential ORVs.	n/d	No	

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Española	La Canada del Cerro	2.05	Prehistoric: Pesedeuinge, Priority Heritage Site.	n/d	No	
Española	North Fork Tesuque Creek	2.30	No potential ORVs.	n/d	No	
Española	Water Canyon	2.91	No potential ORVs.	n/d	No	
Española	Arroyo de los Pinabetes	1.73	No potential ORVs.	n/d	No	
Española	Abiquiu Creek	3.23	Wildlife: Jemez Mountain Salamander Botany: wood lily, but not ORV. Interesting source spring. Most of the flow comes out of Abiquiu land grant. Flow unaltered.	Yes	No	
Española	Arroyo Eighteen	6.09	Wildlife: Grey vireo breeding area. Pinyon Jay and Loggerhead shrike, but not ORV. Heritage: Cultural area. Priority Heritage Asset (PHA). Los Aguajes has abundant rock art, structural remains, and artifacts. Eighteen Tank affects free flow downstream. Has multiple tanks, has some flow after the tanks.	No	No	
Española	Canada de la Mora	2.33	No potential ORVs.	n/d	No	
Española	Santa Clara Creek	0.87	No potential ORVs.	n/d	No	
Española	Rito de Abiquiu	2.30	Prehistoric: Pesedeuinge Priority Heritage Site. Prehistoric agricultural importance. Rio Grande cutthroat, but not ORV. Paper spine fish hook cactus. Boreal owl 2012.	n/d	No	
Española	North Fork Rio Quemado	3.65	No potential ORVs.	n/d	No	
Española	Rendija Canyon	6.30	No potential ORVs.	n/d	No	
Española	Cañada Bonita	1.47	No potential ORVs.	n/d	No	
Española	Chupaderos Canyon	0.27	No potential ORVs.	n/d	No	
Española	Canada del Ojitos	5.18	No potential ORVs.	n/d		
Española	Santa Fe River	15.08	Nothing exemplary for scenery.	No	No	
Española	South Fork Rio Quemado	5.03	No potential ORVs.	n/d	No	
Española	Canada Vaca	1.85	System trail in the area. Heritage but not ORV.	n/d	No	
Española	Los Alamos Canyon	9.08	No potential ORVs.	n/d	No	
Española	Canada de la Loba	1.23	No potential ORVs.	n/d	No	
Española	Rito de los Indios	0.56	No potential ORVs.	n/d	No	

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Española	La Canada de Comanche	1.54	No potential ORVs.	n/d	No	
Española	Tesuque Creek	6.80	Nothing exemplary for scenery.	n/d	No	
Española	Canada de las Latas	0.23	No potential ORVs.	n/d	No	
Española	El Canoncito	2.56	No potential ORVs.	n/d	No	
Española	Canada de las Marias	0.19	No potential ORVs.	n/d	No	
Española	Sandia Canyon	3.91	No potential ORVs.	n/d	No	
Española	Canada del Borrego	1.07	No potential ORVs.	n/d	No	
Española	Pueblo Canyon	7.18	No potential ORVs.	n/d	No	
Española	Gallina Creek	5.97	No potential ORVs.	n/d	No	
Española	Polvadera Creek	10.67	No potential ORVs.	n/d	No	
Española	Rito Conejo	1.89	No potential ORVs.	n/d	No	
Española	South Fork Tesuque Creek	1.04	No potential ORVs.	n/d	No	
Española	Little Tesuque Creek	4.95	No potential ORVs.	n/d	No	
Española	Rio Frijoles	10.22	Nothing exemplary for scenery. There are 2 other streams in the Wilderness area, Rio Mora and Rio Valdez, which are better examples of long rivers with relatively good fish habitat.	n/d	No	
Española	Mortandad Canyon	4.05	No potential ORVs.	n/d	No	
Española	Aqua Sarca Creek	2.37	No potential ORVs.	n/d	No	
Española	Cienega Tadauto	1.16	No potential ORVs.	n/d	No	
Española	South Fork Polvadera	5.18	No potential ORVs.	n/d	No	
Española	Canada del Buey	0.50	No potential ORVs.	n/d	No	
Española	Arroyo de los Frijoles	6.36	No potential ORVs.	n/d	No	
Española	Arroyo de la Presa	4.82	ONRW in wilderness. Rio Grande cutthroat trout, but not ORV. Flows on to Carson NF.	n/d	No	
Española	Rito Con Agua	4.14	No potential ORVs.	n/d	No	

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Española	Rio Grande	0.60	Consider entire length. Birding important. Southwestern willow flycatcher (TES), falcons, MSO critical habitat, Santa Fe blazing star, Bald and Golden eagle sightings, Rio Grande Chub (sensitive), Rio Grande Sucker. Very scenic, has recreational value. Not as outstanding as the Rio Grande Gorge at Taos. Frijoles waterfalls on park side, seen from the National Forest System. Recreation: one of two places to go rafting on the forest, access to the river. This portion is between 2 dams. The area could be impounded by back flow of the dam. Native plant society considers the 3 mile stretch of important plants to be very important with native plants since it hasn't been affected by agriculture. On south end is are the large scale pueblos Norte and Del Sur which have an affiliation with prehistoric agriculture fields. The flow is modified from many diversions on tributaries. The flow appears natural. Can't be designated "wild" because it has several water quality impairments. Consider the entire length of the river for ORVs, even though it goes on and off FS land. It is above a dam and there are diversions, but the channel is not altered and the flow is not regulated. FOLLOW-UP, MAY 2018: Information that we obtained from Corps of Engineers indicated that there is the potential for inundation from the dam at Cochiti for the full length of White Rock Canyon, therefore, it cannot be considered free flowing and therefore, in spite of its ORVs, it cannot be eligible as a WSR.	No	Yes- Wildlife, recreation, botany	
Española	Rito de Juan Manuel	5.52	No potential ORVs.	n/d	No	
Española	Rio Quemado	0.08	No potential ORVs.	n/d	No	



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Española	Calabasa Arroyo	0.13	Wildlife: Grey vireo breeding Pinyon Jay and Loggerhead shrike, but not ORV. Heritage: Cultural area. Priority Heritage Asset. Dams and stock tanks affect free flow.	No	No	
Española	Arroyo Montoso	3.99	Eighteen Tank affects free flow downstream. Wildlife: Pinyon Jay and Loggerhead shrike, but not ORV. Scenic downstream, near Rio Grande, but not ORV.	No	No	
Española	Arroyo del Toro	6.58	No potential ORVs.	n/d	No	
Española	Canoncito Tia Tona	2.48	No potential ORVs.	n/d	No	
Española	Arroyo del Palacio	10.21	No notes. Gates of Hell has geologic features of interest, described in local trail book.	n/d	No	
Española	Chupaderos Creek	1.03	No potential ORVs.	n/d	No	
Española	Rio de Truchas	1.13	ONRW. Flows onto Carson NF.	n/d	No	
Española	La Canada del Almagre	5.89	Prehistoric: Pesedeuinge, Priority Heritage Site. Large site with multiple components, and prehistoric agricultural terraces.	n/d	No	
Española	Chihuahueros Creek	0.27	No potential ORVs.	n/d	No	
Española	Quemazon Canyon	2.57	No potential ORVs.	n/d	No	
Española	Canon de Valle	3.00	No potential ORVs.	n/d	No	
Española	Arroyo Colorado	2.29	No potential ORVs.	n/d	No	
Española	Canada de Amole	1.83	No potential ORVs.	n/d	No	
Española	La Canada	1.70	No potential ORVs.	n/d	No	
Española	Canon Navajo	4.03	No potential ORVs.	n/d	No	
Española	Rio Molino*	4.44	Fish: Genetically pure RGCT. Fish repatriated there after the Polvadera fire.	Yes	Yes- Fish	R – Fish
Española	Pajarito Canyon	4.55	No potential ORVs.	n/d	No	
Española	Canada del Indio	1.42	No potential ORVs.	n/d	No	
Española	Rio Chama	2.92	Has tank. The stretch downstream of Abiquiu dam shows up in calendars, movies are shot there, and it is popular for photography. However, it is below a dam and flow is highly regulated.	No	No	
Española	Arroyo Hondo	1.21	No potential ORVs.	n/d	No	

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Española	Vallecitos Creek	4.94	Scenic for stream corridor, photographed below dam for calendars. Flow is highly regulated. System trail.	No	No	
Española	Arroyo de los Chamisos	0.94	No potential ORVs.	n/d	No	
Española	La Madera Arroyo	2.36	No potential ORVs.	n/d	No	
Española	Canada de Horno	3.00	No potential ORVs.	n/d	No	
Española	Canon la Madera	1.81	No potential ORVs.	n/d	No	
Española	Guaje Canyon	9.39	No potential ORVs.	n/d	No	
Española	Rio del Oso*	14.90	Pre-history and History: Large multi-component habitation on south bank of stream (Poshuingue). Historic period-Apache features. Priority Heritage Site. Ancestral Kewa place. Fish: Rio Grande cutthroat conservation population, but not ORV. Botanical: Paper spine fish hook cactus. Not ORV. Other notes: Eligibility is from FS boundary on east side upstream to Gallinas creek (about 10 miles). Cultural materials along the entire length of the stream. A number of acequias associated with it, but they don't impact the free flow.	Yes	Yes – Pre-history and History	R – Pre-history and History
Española	Rio Medio	14.75	Views of Pecos Baldy. Good views of the mountains.	n/d	No	
Española	Canoncito Seco	2.59	No potential ORVs.	n/d	No	
Española	Thirty-one Draw	4.37	No potential ORVs.	n/d	No	
Española	Rio Nambe	8.66	Nothing exemplary for scenery	n/d	No	
Española	Rito Frijoles	1.29	No potential ORVs.	n/d	No	
Española	Arroyo Tetilla	6.66	Pinyon Jay and Loggerhead shrike, but not ORV. Scenic downstream, near Rio Grande, but not ORV. Grey vireo breeding area. Cultural area. Priority Heritage Asset (PHA) Los Aguajes abundant rock art, structural remains, and artifacts. Dams and stock tanks affect free flow.	No	No	
Española	Garcia Canyon	4.31	No potential ORVs.	n/d	No	
Española	Barrancas Canyon	1.63	No potential ORVs.	n/d	No	

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Española	Rio En Medio	7.67	Has nice waterfall. Distinctive, but not ORV. Some meadows are distinctive. Notes from SMS workshop that it is scenic, it is also listed on the forest website for viewing scenery, has nice waterfall but not top 10, Distinctive meadows but not ORV.	n/d	No	
Española	Arroyo de la Plaza Larga	0.72	No potential ORVs.	n/d	No	
Española	Rinconada	0.79	No potential ORVs.	n/d	No	
Española	Rito Sin Agua	2.17	No potential ORVs.	n/d	No	
Española	Rito Quemado	4.53	No potential ORVs.	n/d	No	
Española	Aztec Springs Creek	2.05	No potential ORVs.	n/d	No	
Española	Puertecito Creek	1.06	No potential ORVs.	n/d	No	
Española	Rito Gallina	5.86	No potential ORVs.	n/d	No	
Española	Agua Sarca	3.02	No potential ORVs.	n/d	No	
Española	Alamitos Canyon	2.34	No potential ORVs.	n/d	No	
Española	Canada Corral	3.60	No potential ORVs.	n/d	No	
Española	Canon Madera	6.84	No potential ORVs.	n/d	No	
Española	Corral Canyon	0.91	No potential ORVs.	n/d	No	
Española	Rio Capulin	6.62	No potential ORVs.	n/d	No	
Española	Rio Chupadero	1.10	No potential ORVs.	n/d	No	
Española	Rito del Oso	1.20	Boreal owl 2012.	n/d	No	
Española	Sanchez Canyon	0.09	No potential ORVs.	n/d	No	
Jemez	Canovas Canyon	5.60	No potential ORVs.	n/d	No	
Jemez	Canon Cercado	5.96	No potential ORVs.	n/d	No	
Jemez	Vallecitos de los Indios	3.73	No potential ORVs.	n/d	No	
Jemez	Rio de las Vacas	0.39	No potential ORVs.	n/d	No	
Jemez	Jemez River	0.01	No potential ORVs.	n/d	No	
Jemez	Jemez River	1.97	No potential ORVs.	n/d	No	

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Jemez	Jemez River*	14.10	Pre-history: Large pueblo at confluence of Rio Guadalupe and Jemez River known as the Patokwa site which exists due to the river confluence. Also has Nonishagi, a pre-historic site medium sized pueblo and Unshagi, a nationally important pre-historic site medium sized pueblo, both are ancestral Towan sites. History: Spanish mission church. Geology: Hot springs and Soda Dam-interesting feature, but not geologic ORV. Scenic: Highly scenic but not regionally important. Distinctive scenic features, but not as scenic as other canyons within the region of comparison Recreational: Cultural-religious values (but not ORV for cultural).. Other notes: Part next to existing WSR is free flowing. Southern portion is not free flowing downstream of village of Jemez. Would extend existing WSR down to the village. Two portions 1) Extend the current East Fork Jemez WSR to include the Nanishagi site and Ushagi site up to the Northern boundary of Village of Jemez Springs.	Yes upper only	Yes – Pre-history	N – Pre-history
Jemez	Stable Canyon	5.31	No potential ORVs.	n/d	No	
Jemez	Canon del Norte	3.62	No potential ORVs.	n/d	No	
Jemez	Penasco Canyon	1.00	No potential ORVs.	n/d	No	
Jemez	Cochiti Canyon	6.95	No potential ORVs.	n/d	No	
Jemez	Hondo Canyon	3.06	No potential ORVs.	n/d	No	
Jemez	Vallecito Creek	1.93	No potential ORVs.	n/d	No	
Jemez	Rio Chiquito	0.28	MSO critical habitat, Jemez mountain salamander critical habitat, but not ORV. Old Cochiti pueblo for prehistory.	n/d		
Jemez	Calaveras Canyon	5.31	No potential ORVs.	n/d	No	
Jemez	Eagle Canyon	3.10	No potential ORVs.	n/d	No	
Jemez	Medio dia Canyon	9.50	No potential ORVs.	n/d	No	
Jemez	Colle Canyon	3.96	No potential ORVs.	n/d	No	
Jemez	Silva Canyon	2.62	No potential ORVs.	n/d	No	

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Jemez	Rio Guadalupe*	13.21	Pre-history: Pre-historic large pueblo near confluence of Rio Guadalupe and Jemez river. Site exists due to river confluence (Patokwa). Scenery: There is a spectacular canyon with a box feature and waterfalls and it is quite scenic. Scenic up to the confluence of Rio Cebolla and Rio de las Vacas. Recreation: It is located within Jemez NRA, the only NRA in the region. Access to great camping, fishing, etc. Fish: Rio Grande chub and sucker. History: Historic component- old Spanish mission church. Other notes: Has some water quality impairments and a road near it and farmland on the West bank (not qualify as wild). There are a lot of developments and a road runs parallel to it. Upper segment is more natural/ wild and not visible from road. There are some private inholdings. Entire river is eligible, Southern portion is for archeological reasons, northern part from the confluence with the Rio de las Vacas is for scenic reasons. No dams, no water bodies, no tanks. Fenton lake upstream on the Rio Cebolla, but it does not affect the free flow.	Yes	Yes – Scenery, Pre-history, Recreation	N – Pre-history, Recreation R – Scenery
Jemez	Rio Guadalupe	0.02	No potential ORVs.	n/d	No	
Jemez	Borrego Canyon	8.20	No potential ORVs.	n/d	No	
Jemez	Paliza Canyon	12.16	No potential ORVs.	n/d	No	
Jemez	Guacamalla Canyon	3.33	No potential ORVs.	n/d	No	
Jemez	Canon Cebollita	9.12	No potential ORVs.	n/d	No	
Jemez	Canon de la Canada	8.61	No potential ORVs.	n/d	No	
Jemez	Church Canyon	4.46	No potential ORVs.	n/d	No	
Jemez	Bland Canyon	9.11	No potential ORVs.	n/d	No	
Jemez	Canon del Raphael Gallegos	2.47	No potential ORVs.	n/d	No	
Jemez	La Jara Canyon	0.79	No potential ORVs.	n/d	No	

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Jemez	Medio Canyon	2.23	Peregrine falcon, big horn sheep, but not ORV. State stream list. ONRW	Yes	No	
Jemez	East Fork Jemez River	10.94	No potential ORVs.	n/d	No	
Jemez	Bear Springs Canyon	2.15	No potential ORVs.	n/d	No	
Jemez	San Antonio Creek	12.04	Distinctive, but not ORV for scenery. Very scenic from overlook, has a spring.	Yes	No	
Jemez	Pines Canyon	4.34	No potential ORVs.	n/d	No	
Jemez	Redondo Creek	1.78	No potential ORVs.	n/d	No	
Jemez	Tecolote Canyon	2.16	No potential ORVs.	n/d	No	
Jemez	Peralta Canyon	8.36	No potential ORVs.	n/d	No	
Jemez	San Juan Canyon	14.26	No potential ORVs.	n/d	No	
Jemez	Trail Canyon	2.42	No potential ORVs.	n/d	No	
Jemez	Sulphur Creek	2.34	No potential ORVs.	n/d	No	
Jemez	Virgin Canyon	14.80	No potential ORVs.	n/d	No	
Jemez	Lake Fork Canyon	6.13	No potential ORVs.	n/d	No	
Jemez	Arroyo Penasco	0.87	No potential ORVs.	n/d	No	
Jemez	Alamo Canyon	5.56	No potential ORVs.	n/d	No	
Jemez	Alamo Canyon	2.06	No potential ORVs.	n/d	No	
Jemez	Capulin Canyon	5.83	No potential ORVs.	n/d	No	
Jemez	Deer Creek	6.33	No potential ORVs.	n/d	No	
Jemez	Joaquin Canyon	4.40	No potential ORVs.	n/d	No	
Jemez	Joaquin Canyon	0.41	No potential ORVs.	n/d	No	
Jemez	Osha Canyon	5.47	No potential ORVs.	n/d	No	
Jemez	Rio Cebolla	19.01	MSO critical habitat, Jemez mountain salamander critical habitat, but not ORV. Old Cochiti pueblo for prehistory.	Yes	No	
Jemez	Sanchez Canyon	6.50	No potential ORVs.	n/d	No	
Jemez	Spring Canyon	1.44	No potential ORVs.	n/d	No	
Jemez	Spruce Canyon	3.52	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Tecolote Creek	1.33	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Tecolote Creek	0.01	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Pecos River	0.08	No potential ORVs.	n/d	No	

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<b>District</b>	<b>Named Streams with Blue Labels from USGS Topo Quads</b>	<b>Miles</b>	<b>Potential ORV Discussion Notes</b>	<b>Free Flowing</b>	<b>Presence of ORVs Yes/No</b>	<b>Regional or National Significance R/N</b>
Pecos-Las Vegas	Barillas Creek	1.80	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Padre Spring Creek	4.00	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Rito Quemazon	2.99	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Ute Canyon	1.29	No potential ORVs.	n/d	No	
Pecos-Las Vegas	North Fork Blue Canyon	3.28	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Calf Canyon	2.19	No potential ORVs.	n/d	No	
Pecos-Las Vegas	El Barro Creek	4.60	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Jarosa Creek	2.75	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Canada Lovato	2.60	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Maestas Creek	4.44	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Porvenir Canyon	5.32	No potential ORVs.	n/d	No	
Pecos-Las Vegas	El Canon de Pena	2.72	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Topside Canyon	1.15	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Noisy Brook	1.12	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Blue Canyon	2.50	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Winsor Creek	6.17	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Sebadilla Creek	12.84	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Commissary Creek	9.24	No potential ORVs.	n/d	No	

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Pecos-Las Vegas	Mica Canyon	1.74	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Cow Creek	31.75	Distinctive, but not ORV for scenery.	Yes	No	
Pecos-Las Vegas	Rito Atascoso	1.77	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Rito Perro	2.45	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Rito de la Osha	3.99	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Rito los Esteros	2.37	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Indian Creek	6.62	No potential ORVs.	n/d	No	
Pecos-Las Vegas	El Canon del Palo Amarillo	5.50	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Agua Fria Creek	3.80	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Rito de la Vega	4.20	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Arroyo Salado	1.75	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Hagen Creek	2.24	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Ruiz Canyon	4.00	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Rito Oscuro	3.29	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Bull Creek	16.70	Distinctive, but not ORV for scenery.	Yes	No	
Pecos-Las Vegas	Hartman Canyon	1.97	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Rito Colorado	3.69	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Canon de la Presa	0.09	No potential ORVs.	n/d	No	



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Pecos-Las Vegas	Canoncito Creek	1.47	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Canon Chamisolosa	3.85	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Sheep Creek	1.40	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Tres Hermanos Creek	6.35	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Albright Creek	1.27	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Carpenter Creek	2.59	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Tomas Canyon	0.75	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Mortandad Creek	4.46	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Jacks Creek	7.15	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Canon de los Trigos	3.35	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Galisteo Creek	4.56	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Rio la Casa	1.80	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Encinosa Canyon	1.50	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Ortiz Canyon	6.60	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Rito Sebadillosos	1.73	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Rito Ruidoso	4.29	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Ojo Sarco	0.71	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Canon de Manzanita	1.48	No potential ORVs.	n/d	No	

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Pecos-Las Vegas	Arroyo Leguino	10.06	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Bear Creek*	6.87	Core Conservation Population for Rio Grande Cutthroat Trout.	Yes	Yes	
Pecos-Las Vegas	Grasshopper Canyon	4.02	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Canon Ancho	3.59	No potential ORVs.	n/d	No	
Pecos-Las Vegas	South Fork Rito Azul	1.29	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Glorieta Canyon	8.84	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Rio Valdez*	7.98	Fish: Genetically pure population of RGCT. Other notes: Long stream in protected wilderness watershed. No water quality impairments. Recreation: People travel long distances to visit the area for scenery/recreation/fishing. It is good for solitude and experiencing unaltered aquatic and riparian habitats. Popular for fishing but not ORV. Geology: Has a glacial cirque, but not ORV. Other notes: Tributary to the Rio Mora. Completely in Wilderness, similar features to Rio Mora.	Yes	Yes - Fish	R - Fish
Pecos-Las Vegas	Johns Canyon	3.39	No potential ORVs.	n/d	No	
Pecos-Las Vegas	La Cueva Canyon	6.94	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Rito de los Alamos	2.51	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Cascade Canyon	2.69	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Gallinas Creek	5.39	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Holy Ghost Creek	7.17	No potential ORVs.	n/d	No	

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<b>District</b>	<b>Named Streams with Blue Labels from USGS Topo Quads</b>	<b>Miles</b>	<b>Potential ORV Discussion Notes</b>	<b>Free Flowing</b>	<b>Presence of ORVs Yes/No</b>	<b>Regional or National Significance R/N</b>
Pecos-Las Vegas	Dalton Canyon	9.11	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Willow Creek	5.91	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Dry Gulch	3.86	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Rito Manzanares	3.44	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Macho Canyon	8.11	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Barbero Canyon	8.23	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Tortolita Canyon	2.98	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Encinal Creek	1.46	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Elk Creek	2.91	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Horsethief Creek	4.30	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Vega Bonita	1.11	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Ortiga Creek	3.47	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Canon de la Madera	3.12	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Rito Maestas	2.09	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Canyon Agua del Corral	14.88	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Burro Canyon	5.62	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Canon de la Cueva	2.46	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Panchuela Creek	7.65	No potential ORVs.	n/d	No	

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<b>District</b>	<b>Named Streams with Blue Labels from USGS Topo Quads</b>	<b>Miles</b>	<b>Potential ORV Discussion Notes</b>	<b>Free Flowing</b>	<b>Presence of ORVs Yes/No</b>	<b>Regional or National Significance R/N</b>
Pecos-Las Vegas	Lucero Canyon	0.44	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Canon Cedro	0.60	No potential ORVs.	n/d	No	
Pecos-Las Vegas	South Fork Bear Creek	2.40	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Santiago Creek	4.05	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Canon Corrales	2.60	No potential ORVs.	n/d	No	
Pecos-Las Vegas	El Begoso Arroyo	3.86	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Gallinas Creek	4.01	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Sparks Creek	4.41	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Tecolote Creek	6.28	No potential ORVs.	n/d	No	
Pecos-Las Vegas	North Fork Rio la Casa	4.91	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Beatty Creek	0.85	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Rito de Gascon	4.06	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Wright Canyon	2.51	No potential ORVs.	n/d	No	

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District	Named Streams with Blue Labels from USGS Topo Quads	Miles	Potential ORV Discussion Notes	Free Flowing	Presence of ORVs Yes/No	Regional or National Significance R/N
Pecos-Las Vegas	Rio Mora	19.40	Long stream in protected wilderness watershed. No water quality impairments. Reference stream for biological component. Popular for fishing. People travel long distances to visit the area for scenery/recreation/fishing. Has a lot of brown trout so it is a popular wilderness fishing area. ONRW. It has a glacial cirque that towers over the headwaters which is a unique geologic feature. There is a lake on the top of the mountain. This is the largest wilderness in the Region of Comparison, so it tends to attract more people for backcountry recreation. Granite outcrops, riparian areas, springs all contribute to scenery. Other similar streams with cirque features in the Region of Comparison have stronger scenic attributes. Very pristine and in good shape. Reference area for macroinvertebrates. Mostly in Wilderness.	Yes	No	
Pecos-Las Vegas	Rito Chavez	3.43	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Rito Garcia	2.89	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Santillanes Creek	2.75	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Ranch Canyon	1.68	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Rito Azul	2.00	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Arroyo Hondo	3.79	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Middle Fork Rio de la Casa	5.31	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Carreton Canyon	2.88	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Cabo Lucero Creek	0.38	No potential ORVs.	n/d	No	

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District	Named Streams with Blue Labels from USGS Topo Quads	Miles	Potential ORV Discussion Notes	Free Flowing	Presence of ORVs Yes/No	Regional or National Significance R/N
Pecos-Las Vegas	Corrales Creek	4.09	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Pine Canyon	0.40	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Los Caraneras Canyon	1.70	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Rito Chaperito	2.73	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Dead Horse Canyon	2.12	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Hollinger Canyon	5.88	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Canon Ojo Sarco	7.85	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Rito del Padre	4.99	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Beaver Creek*	6.87	Scenery: Pools, caves, and a unique spectacular gorge very different from Rio Guadalupe. Fish: Genetically pure RGCT population. Recreation: Solitude and experiencing unaltered aquatic and riparian habitats. Popular for fishing, hiking, backpacking, scenery, cliffs, pools, caves. Visitors travel long distances but is not as popular as other creeks. Other notes: No water quality impairments. ONRW. Eligible from campground upstream to the confluence of Hollinger.	Yes	Yes – Fish, Scenery	R – Fish, Scenery
Pecos-Las Vegas	Los Alamitos Canyon	3.37	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Daily Creek	5.42	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Glorieta Creek	2.81	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Rito San Jose	7.53	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Sapello River	8.73	No potential ORVs.	n/d	No	

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District	Named Streams with Blue Labels from USGS Topo Quads	Miles	Potential ORV Discussion Notes	Free Flowing	Presence of ORVs Yes/No	Regional or National Significance R/N
Pecos-Las Vegas	South Fork Rio de la Casa	6.84	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Youngs Canyon	2.94	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Valle de la Cabra	2.89	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Wild Horse Creek	2.69	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Falls Creek	1.93	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Pecos River	34.08	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Pecos River*	2.78	History: Has historic regional significance due to old hacienda site on the edge of the Anton Chico Grant. Other notes: We need to consider that it is channelized or rip rapped on the private side of the river. There is water use in some valleys upstream but there isn't a reservoir. River is able to flood, indicating it is free-flowing.	Yes	Yes - History	R - History
Pecos-Las Vegas	Rito Cola y Largo	5.31	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Rito las Trampas	2.04	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Soldier Creek	4.14	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Canovas Canyon	1.92	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Rito del Torito	3.49	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Doctor Creek	3.55	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Rito Morphy	3.87	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Canon de los Diegos	6.86	No potential ORVs.	n/d	No	

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District	Named Streams with Blue Labels from USGS Topo Quads	Miles	Potential ORV Discussion Notes	Free Flowing	Presence of ORVs Yes/No	Regional or National Significance R/N
Pecos-Las Vegas	Rito de las Quemazone's	2.02	No potential ORVs.	n/d	No	
Pecos-Las Vegas	San Pablo Creek	2.42	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Manuelitas Creek	3.00	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Davis Creek	2.86	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Arroyo de Chamizal	0.16	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Corrales Canyon	2.58	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Rito de los Chimayosos	4.34	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Alamitos Canyon	6.63	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Apache Canyon	7.80	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Apache Canyon	12.21	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Canon de la Jarita	3.55	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Capulin Canyon	4.22	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Capulin Canyon	3.22	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Cave Creek	3.93	Lady slippers and larkspur-rare plant species. Unique geological feature. Creek goes through cave. Unique geological feature (national spelunking conference is going on there).	Yes	No	
Pecos-Las Vegas	Deer Creek	5.19	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Deer Creek	1.60	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Osha Canyon	0.79	No potential ORVs.	n/d	No	



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<b>District</b>	<b>Named Streams with Blue Labels from USGS Topo Quads</b>	<b>Miles</b>	<b>Potential ORV Discussion Notes</b>	<b>Free Flowing</b>	<b>Presence of ORVs Yes/No</b>	<b>Regional or National Significance R/N</b>
Pecos-Las Vegas	Rito del Oso	2.10	No potential ORVs.	n/d	No	
Pecos-Las Vegas	Sanchez Canyon	0.88	No potential ORVs.	n/d	No	

## **Appendix L. Evaluation of Recommended Designated Areas - Cañada Bonita Research Natural Area**

### **Background**

Research natural areas (RNAs) are “physical or biological units in which current natural conditions are maintained insofar as possible. These conditions are ordinarily achieved by allowing natural physical and biological processes to prevail without human intervention” (FSM 4063).

RNAs help protect biological diversity at genetic, species, and ecosystem scales. They are designated to “maintain a wide spectrum of high-quality representative areas that represent the major forms of variability found in forest, shrubland, grassland, alpine, and natural situations that have scientific interest and importance that, in combination, form a national network of ecological areas for research, education, and maintenance of biological diversity” (FSM 4063.02).

As these definitions indicate, RNAs are principally for non-manipulative research, observation, and study. They are excellent areas for studying ecosystems or their component parts and for monitoring succession and other long-term ecological changes. Non-manipulative research and monitoring activities are encouraged in natural areas and can be compared with manipulative studies conducted in similar areas that are not in RNAs.

In the forest plan, there are two types of RNAs: those that were administratively designated by the Regional Forester and the Research Station Director (Designated Areas) and those that are recommended by the Forest (Management Areas). These areas contain special, exceptional, or unique values that provide important ecosystem services. Once established, the designation continues until a subsequent decision by the appropriate authority removes the designation. Any recommendations for designation of new or previously proposed RNAs may be made during revision at the Forest Supervisor’s discretion. Formal RNA establishment would have to be handled in a subsequent site-specific establishment report and NEPA process.

It is appropriate to evaluate conditions and management direction for establishment or disestablishment of RNAs during plan revision. The Southwestern Region’s RNA Work Group’s Research Natural Area Process for Forest Plan Revision under the 2012 Planning Rule Provisions (2015) was used by an interdisciplinary team of Santa Fe National Forest (Santa Fe NF) staff to complete this evaluation. The Forest Supervisor reviewed the evaluation to develop his proposal(s) to the Regional Forester. The Regional Forester is the responsible official for coordinating with a research station director on final RNA designation (FSM 4063.04b).

### **Regional RNA Inventory and Needs Assessment**

A region-wide RNA inventory identified all existing designated and proposed RNAs. This information was then used to evaluate what ecosystem types were underrepresented among the Region 3’s currently established RNAs and assigned a “need” rating between 1 and 3. A rating of “1” reflects the least degree of need according to the regional needs assessment and corresponds to ecosystem types that is well represented. A rating of “2” indicates moderate representation, but additional representation across the region may be warranted. A rating of “3” reflects little to no

representation in the existing RNAs. In this assessment, need ratings of 2 and 3 may be considered for RNA recommendations. Table L-1 displays Santa Fe NF’s ecological response units (ERUs) and their needs ratings, and Table L-2 displays the ERUs covered by designated or previously proposed RNAs in the forest. For more detail on the ERUs, see chapter 3.2 of the EIS.

**Table L-1. Santa Fe NF ERUs and riparian ERU groups that may be considered for RNA recommendation**

Ecological Response Unit (ERU)	Abbreviation	System Type	% of Forest	RNA Need Rating+
Mixed Conifer - Frequent Fire	(MCD)	Forest	25.58%	1
Ponderosa Pine Forest	(PPF)	Forest	24.03%	2
Spruce-Fir Forest	(SFF)	Forest	14.90%	1
Piñon-Juniper (PJ) Woodland	(PJO)	Woodland	13.77%	2
Juniper Grass	(JUG)	Woodland	5.80%	3
PJ Grass*	(PJG)	Woodland	2.58%	n/a
Colorado Plateau Great Basin Grassland	(CPGB)	Grassland	2.48%	1
Mixed Conifer with Aspen	(MCW)	Forest	2.39%	1
Sagebrush Shrubland	(SAGE)	Shrubland	2.23%	2
PJ Sagebrush	(PJS)	Woodland	1.81%	1
Montane Subalpine Grassland	(MSG)	Grassland	1.05%	1
Alpine and Tundra	(ALP)	Shrubland/Mixed	0.30%	3
Bristlecone Pine*	(BP)	Forest	0.17%	n/a
Gambel Oak Shrubland	(GAMB)	Shrubland	0.10%	2
Mixed-Grass Prairie*	(MGP)	Grassland	0.07%	n/a
Shortgrass Prairie	(SGP)	Grassland	0.01%	3

+ Ratings are based on a region-wide analysis

\*These ERUs were not covered in the inventory

**Table L-2. Ecological response units (ERUs) of designated and proposed research natural areas (RNAs) in the Santa Fe NF**

RNA Type	RNA	Primary ERU <sup>4</sup>	RNA Need Rating
Designated	Mesita De Los Ladrones	Juniper grassland	3
Designated	Monument Canyon	Ponderosa pine forest	2
Previously Proposed	Cañada Bonita	Montane/subalpine grassland	1

## Summary of Evaluation Process

This summary is intended to provide an overview of the regionally established process to evaluate RNAs. First, existing designated RNAs and their associated 1986 plan direction are evaluated against defined criteria to determine if conditions have changed such that the RNA is no longer

<sup>4</sup> ERUs drawn from the PNVT categories in the original RNA PNVT Assessment

able to serve the function for which it was originally created, or if there is a need for new, additional, or corrective management direction (FSM 4063.03).

The evaluation criteria for existing designated RNAs are:

1. Does current plan direction protect the RNA from human-caused environmental disruptions?
2. What are the threats that may affect the RNA?
3. Does the RNA continue to be managed in a manner that maintains current natural conditions to the extent possible?
4. Are ecological processes being allowed to prevail without human intervention? If not, is deliberate manipulation consistent with maintaining the unique feature(s) for which the RNA was established to protect?
5. What is the current status of mineral entry in the RNA?

Next, existing proposed and newly proposed RNAs are evaluated against a second set of criteria to determine if they qualify for designation. The evaluation criteria for recommended RNAs are:

1. Does the area contain ERU classes with need rankings of 2 or 3 and/or is there an outstanding example of an aquatic habitat that may be appropriate as a potential RNA?
2. Does the area contribute to a wide spectrum of high-quality, representative areas of the major forms of ecological variability and natural situations of scientific interest or importance that in combination form a national network of areas for research, education and maintenance of biological diversity?
3. Does the area contribute to the preservation and maintenance of genetic diversity, including threatened, endangered and species of conservation concern and/or aquatic systems?
4. Does the area serve as a baseline or reference area for the study of long-term biological, disturbance, hydrologic or other processes or climate change?
5. Does the area serve as a control for comparing results from manipulative research?
6. Is the area large enough to provide essentially unmodified conditions within its interior, maintain ecological processes and the features or qualities for which the RNA is proposed?
7. Does the area show little to no evidence of major disturbances by humans? (Have activities affected the area beyond its ability to recover? Is there evidence of timber cutting in the past 50 years?)
8. Does the area reflect its original, near-pristine condition as closely as possible?
9. Does the area represent the best available, qualified area?

Finally, the evaluation is reviewed by the Forest Supervisor who determines what proposals to present to the Regional Forester.

## **Evaluated RNAs**

The RNAs evaluated include two existing designated RNAs, Mesita De Los Ladrones and Monument Canyon, and one existing proposed RNA, Cañada Bonita. Cañada Bonita has never been formally established as an RNA, but has been managed to protect and maintain its natural condition since it was initially proposed as an RNA.

No new areas were identified for evaluation; ERUs with RNA needs ratings of 3 are either already represented by RNAs in the forest (e.g., juniper grasslands are in Mesita De Los

Ladrone's, see Table L-2) or are less than 1 percent of forest ERUs (Alpine Tundra and Shortgrass Prairie, see Table L-1). It was determined by the interdisciplinary team that other Region 3 forests have more of these ERUs and would be better suited to represent them in the RNA system. No public comment suggesting areas for RNA designation have been received, although some have voiced support for Cañada Bonita's designation. No further recommendations by forest staff have been brought forward.

## Evaluation

This subsection contains the evaluations for all candidate RNAs previously identified.

### Designated RNAs

#### Mesita De Los Ladrone's

Established in 1991 (USDA Forest Service 1991). Mesita De Los Ladrone's comprises approximately 500 acres in north-central New Mexico. It is located in the Las Vegas Ranger District in San Miguel County. It is a high-quality example of one-seed juniper savannah, which was recognized as a significant woodland community for protection and study in the RNA program (USDA Forest Service Regional Guide, 1983), with a variety of grassland mosaics (Fletcher 1982).

It was established because unmodified examples of the ERU are uncommon as grazing, chaining, and firewood harvesting all commonly take place within juniper savannahs, substantially altering vegetation composition. Mesita De Los Ladrone's has a minimal use history, likely because it sits atop a small mesa, or "mesita," that is less accessible, and thus, provides the best alternative for maintaining a juniper savannah in the Southwestern Region (USDA Forest Service 1991).

1. ***Does current (1987) plan direction protect the RNA from human-caused environmental disruptions?***

**Yes.** Current (1987) plan direction includes standards for management activities that would not be appropriate within an RNA such as:

- prohibit all timber and firewood activities,
- stipulating no surface occupancy for mineral leasing,
- excluding utility corridors,
- prohibiting new trail construction, and
- allowing non-motorized dispersed recreation activities.

All Forest Plan alternatives include established RNAs as designated areas and have updated management direction that includes standards for management activities that would not be appropriate within an RNA such as:

- stipulating no surface occupancy for minerals, geothermal, or oil and gas development,
- prohibiting vegetation manipulation or removal of forest projects for commercial purposes unless it is necessary to maintain the natural characteristics for which an area was established,

- prohibiting new trail and road construction or opening closed roads,
- prohibiting campfires, and
- excluding utility corridors.

**2. *What are the threats that may affect the RNA?***

**No current threats have been identified.** General threats are those the RNA is protected against in Plan components, including timber and firewood activities; ground disturbance via mining activity, construction of utility corridors, or trail construction; and motorized recreation.

**3. *Does the RNA continue to be managed in a manner that maintains current natural conditions to the extent possible?***

**Yes.** The current (1987) Forest Plan and all revised Plan alternatives emphasize protecting and maintaining natural conditions.

**4. *Are ecological processes being allowed to prevail without human intervention? If not, is deliberate manipulation consistent with maintaining the unique feature(s) for which the RNA was established to protect?***

**Yes.** No deliberate manipulation is occurring unless necessary to maintain the area's natural characteristics.

**5. *What is the current status of mineral entry in the RNA?***

There are no known mineral resources in this area (USDA Forest Service 1991).

## Monument Canyon

Proposed in 1932, the Monument Canyon RNA comprises approximately 640 acres in the Jemez Ranger District. The area is located along a trail from Jemez Springs to Upper Vallecitos. The Monument Canyon RNA was set aside to preserve in a natural state a "typical area of western yellow pine (*Pinus ponderosa*) forest as found in northern New Mexico" (USDA Forest Service 1932). The stands of western yellow pine in this region differ from those of the Colorado Plateau in being denser and more evenly spaced with trees of relatively small diameter.

**1. *Does current (1987) Plan direction protect the RNA from human-caused environmental disruptions? Does the revised Forest Plan direction protect the RNA from human-caused environmental disruptions?***

**Yes.** Current (1987) Plan direction includes standards for management activities that would not be appropriate within an RNA such as:

- prohibiting all timber and firewood activities,
- stipulating no surface occupancy for mineral leasing,
- excluding utility corridors,
- prohibiting new trail construction, and
- allowing non-motorized dispersed recreation activities.

All revised Plan alternatives include established RNA as a designated area and have management direction that includes standards for management activities that would not be appropriate within an RNA such as:

- stipulating no surface occupancy for minerals, geothermal, or oil and gas development,
- prohibiting vegetation manipulation or removal of forest projects for commercial purposes unless it is necessary to maintain the natural characteristics for which an area was established,
- prohibiting new trail and road construction or opening closed roads,
- prohibiting campfires, and
- excluding utility corridors.

**2. *What are the threats that may affect the RNA?***

**Threats to this RNA include** grazing impacts, as the area has been grazed by domestic livestock in the past. Suitable grazing lands are limited within the area, though, and grazing value is negligible; no recent livestock was found in late 1982 (Peterson and Rasmussen 1986). Minor amounts of dead wood have been removed from the area in the past, but there has been no evidence of removal of live trees (R.E. Latimere, Forest Supervisor, United States Government Memorandum, 1967)<sup>5</sup>. To maintain seral structure and natural fire frequencies, the area is burned regularly (permitted by an amendment to the 1987 Forest Plan). Motorized uses are permitted on the RNA's existing roads in line with the MVUM. No recent threats have been documented.

**3. *Does the RNA continue to be managed in a manner that maintains current natural conditions to the extent possible?***

**Yes.** The current (1987) Plan and all revised Plan alternatives emphasize protecting and maintaining natural conditions.

**4. *Are ecological processes being allowed to prevail without human intervention? If not, is deliberate manipulation consistent with maintaining the unique feature(s) for which the RNA was established to protect?***

The area is burned to mimic natural fire-frequencies for this ERU, which is consistent with maintaining the unique features for which the RNA was established. No other deliberate manipulation is occurring.

**5. *What is the current status of mineral entry in the RNA?***

There are no known mineral resources in this area (USDA Forest Service 1932).

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<sup>5</sup>Memorandum can be found at

<https://usfs.app.box.com/s/vvov2rog83dap5lveuu5vc4xdfy4u1xh/file/289496112908>

## Existing Proposed RNAs

### Cañada Bonita

The Cañada Bonita proposed RNA comprises about 300 acres in the Jemez Mountains, in the Española Ranger District of the Santa Fe NF, Los Alamos County, New Mexico. It is an example of an outstanding high-elevation (9,200 to 9,700 feet) Thurber fescue community at or near its climax expression (USDA Forest Service 2016, pages 206-207). The meadow is surrounded by old-growth mixed conifer and aspen forests; several aspens were dated to around 300 years old in 1996, and piñon seedlings were found that had survived in near stasis in the understory since the 1930s (C. Allen, personal communication, 2018). Thurber fescue meadows are dominant on the south-facing slopes. The meadows have not been grazed by permitted domestic livestock since at least 1940 (USDA Forest Service 1988).

- 1. Does the area contain ERU classes with need rankings of 2 or 3 and/or is there an outstanding example of an aquatic habitat that may be appropriate as a potential RNA?***

**No.** The RNA contains montane/subalpine grasslands as its primary ERU. This ERU is well-represented in the Region 3 RNA network, according to the RNA Assessment. However, the Thurber fescue grassland, as a sub-category of the montane/subalpine category, is not well represented in pristine quality due to high levels of grazing impacts.

The justification for Cañada Bonita as a proposed RNA is its provision of the best, and possibly only, opportunity for maintaining a Thurber fescue meadow within the USDA Forest Service Southwestern Region (USDA Forest Service 1988, page 1). The need for this biotic community in the RNA program was identified in the Southwestern Regional Guide (1983); of several candidate meadows surveyed in the Region 3 forests, Cañada Bonita was selected as the only real representative of the high-elevation Thurber fescue meadow ecosystem (USDA Forest Service 1988, page 1). Unlike many other grassland ecosystems in the region, Cañada Bonita has not been extensively grazed, having been closed to grazing for over 50 years. This not only makes it scientifically and ecologically valuable, but it meets the RNA selection guidelines in FSM 4063.2, which state that “Whenever possible, select proposed areas that show no evidence of major disturbances by humans, such as livestock grazing or timber cutting, for the past 50 years....a pristine condition is the goal” or an area that is as close to pristine as possible.

- 2. Does the area contribute to a wide spectrum of high-quality, representative areas of the major forms of ecological variability and natural situations of scientific interest or importance that in combination form a national network of areas for research, education and maintenance of biological diversity?***

**Yes.** This area would contribute to the regional and national network (see previous).

- 3. Does the area contribute to the preservation and maintenance of genetic diversity, including threatened, endangered and species of conservation concern and/or aquatic systems?***

**Yes.** The site contains potential habitat for two New Mexico state-listed endangered species: the Jemez Mountain salamander and *Lilium philadelphicum*, western wood lily.



Also, as previously mentioned, it preserves an untrammled Thurber fescue meadow community.

**4. *Does the area serve as a baseline or reference area for the study of long-term biological, disturbance, hydrologic or other processes or climate change?***

**Yes.** Due to its topography and remoteness, human influence has been minimal. It would serve as a baseline or reference area for any of these purposes. At least two research studies have included the site in their analyses since it was proposed:

- Touchan et al. 1996
- Morino et al. 1998

**5. *Does the area serve as a control for comparing results from manipulative research?***

**Yes.** Due to its topography and remoteness, human influence has been minimal. It would serve as a control for a variety of purposes.

**6. *Is the area large enough to provide essentially unmodified conditions within its interior, maintain ecological processes and the features or qualities for which the RNA is proposed?***

**Yes.** The site is 300 acres.

**7. *Does the area show little to no evidence of major disturbances by humans?***

**Yes.** The site was identified as the least disturbed of its community type in Region 3, and has been managed to exclude invasive human disturbance—grazing, motorized recreation, timber or fuelwood harvesting—since the initial proposal. Fire has been allowed as a management tool in line with the native fire-dependence of the ecosystem.

Some illegal off-road motorized activity has occurred on the site since it was proposed as an RNA; more restrictive management has since been implemented.

Some tree encroachment has continued to occur.

**8. *Does the area reflect its original, near-pristine condition as closely as possible?***

**Yes.** See previous.

**9. *Does the area represent the best available, qualified area?***

**Yes.** This area represents the best, and possibly only, opportunity for maintaining a Thurber fescue meadow within the USDA Forest Service Southwestern Region (USDA Forest Service 1988, page 1). It is a high-quality candidate for continued proposed RNA status.

## Summary and Recommendations to the Forest Supervisor

The existing designated RNAs remain high-quality representations of the ponderosa pine forest and juniper grassland ERUs. There is no reason for disestablishment at this time. Management direction in current (1987) Plan and revised Plan alternatives are adequate for protecting the natural features for which the RNAs were established.

Of the RNAs proposed in the last planning cycle, Cañada Bonita is a high-quality area. It fills regionally identified needs by protecting one of the only examples of Thurber fescue meadow that has remained ungrazed for more than 50 years. An environmental analysis was conducted as part of the EIS in the 1987 Forest Plan, which supported the recommendation to propose Cañada Bonita as an RNA. No significant impacts were identified in the establishment report, with the exception of motorized recreation, to which the area has been closed since its initial proposal (USDA Forest Service 1988, pages 14-15).

Cañada Bonita has been used in multiple research studies as a baseline ecosystem and has been managed to protect its natural features and mitigate human impacts under the current (1987) Plan and all revised Plan alternatives. Based on the analysis comparing the Cañada Bonita proposed RNA site to the objectives of an RNA, no modifications need to be made to the original proposal and this evaluation identified no reason to release the proposal. Plan components to improve management are included in the draft forest plan to ensure the site's distinguishing features for which it was proposed continue to be maintained and contribute to research and education.

All ERUs in the designated and recommended RNAs have some management needs. These are supported by management direction on RNAs in the current (1987) Plan and all revised Plan alternatives, which allow vegetation management that supports natural processes and characteristics, including the use of prescribed fire. Challenges in terms of clear signage marking the RNAs (with the exception of Monument Canyon; Peterson and Rasmussen, 1986) may make enforcement of management direction on allowable use difficult, particularly as there are existing recreation uses close to Cañada Bonita, at least.

The two existing and one recommended RNA continue to meet the definition and support the objectives of an RNA as described in FSM 4063. They are a part of all plan alternatives represented in the FEIS, and will continue to be protected and maintained in a natural condition for conducting non-manipulative research and for fostering education.

## Forest Supervisor Proposals for the Regional Forester

The Forest Supervisor proposes to retain the designated Mesita De Los Ladrones and Monument Canyon RNA, and carry forward the existing proposals for RNA designation for Cañada Bonita.

## References for Appendix L

- Fletcher, R. August 5, 1982. *Research Natural Area Proposals, Task Group Review*. Unpublished manuscript. Southwestern Region, Santa Fe, NM.
- Morino, K.A., C.H. Baisan, and T.W. Swetnam., 1998. *Expanded fire regime studies in the Jemez Mountains, New Mexico*. Laboratory of Tree-Ring Research, University of Arizona, Tucson, Arizona, USA.
- Peterson, R.S. and E. D-A. Rasmussen. 1986. *Research natural areas in New Mexico*. Fort Collins, Colo.: U.S. Dept. of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station.
- Touchan, R., C.D. Allen, and T.W. Swetnam. 1996. *Fire History and Climatic Patterns in Ponderosa Pine and Mixed-Conifer Forests of the Jemez Mountains, Northern New Mexico*. Laboratory of Tree-Ring Research, University of Arizona, Tucson, AZ.
- USDA Forest Service. 1932. Establishment Record- Monument Canyon Natural Area: 3.

USDA Forest Service. 1983. Regional guide for the Southwestern region. USDA Forest Service, Southwestern Region, Albuquerque, NM.

USDA Forest Service. 1988. Establishment Report - Canada Bonito Research Natural Area: 22.

USDA Forest Service. 1991. Establishment Record- Mesita De Los Ladrones Research Natural Area: 21.

USDA Forest Service. 2016. Final Assessment Report of Ecological/Social/Economic Conditions, Trends, and Risks to Sustainability, Santa Fe National Forest, Volume II Socioeconomic Assessment.

# Appendix M. Crosswalk between 1987 Santa Fe Forest Plan (as amended) and the Revised Forest Plan

## Introduction

The purpose of the crosswalk is to demonstrate how some of the direction in the 1987 Santa Fe National Forest Plan (1987 Plan) was incorporated into the more strategic direction of the Santa Fe National Forest, Revised Forest Plan (alternative B (modified)); referred to throughout this document as the Revised Plan or Revised Forest Plan. The crosswalk is not an exhaustive account of all management direction from the 1987 Plan, but focuses on resource topics that partners, stakeholders, and commenters have expressed the most interest, typically through informal and formal comment periods that have occurred throughout the plan revision process (see appendix H in the FEIS. Documentation of Public Engagement Process).

A great deal of the direction in the 1987 Plan has been carried forward into the Revised Plan. However, there is not always a one-to-one relationship between direction in the 1987 Plan and the plan components and management approaches in the Revised Plan. Direction from the 1987 Plan has been addressed in a number of ways in the Revised Forest Plan. In some cases, the management guidance was carried over entirely. In many cases, the purpose or intent of direction from the 1987 Plan can be seen carried forward in a variety of other ways. In a few cases, the 1987 Plan direction was not carried forward.

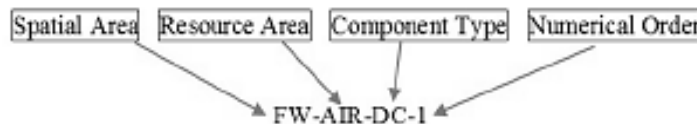
In the 1987 Plan, guidance begins on page 50 and continues through page 174. Resource topics included in the crosswalk tables can be found in this order: Recreation & Culture, Wildlife & Fish, Range, Timber, Old Growth, Watershed Management, Landownership, Fire, Minerals, Roads, and Management Areas. A map comparing management areas, between the 1987 Plan and the Revised Forest Plan can be found in attachment A. Short codes are used in the crosswalk to identify the plan components in the Revised Plan. Management approaches are coded in the same format as component codes. A quick way to find a component in the proposed revised plan is to search the electronic version. Use the Ctrl-F command for Microsoft operating systems or the Cmd-F command for Apple operating systems. Then use part of the plan code to get to the relevant section.

Several 1987 resource topics are not included in the crosswalk: Visual Resources, Human Resources, Lands and Special Uses, Utility Corridors, Special Use Permits, Administrative Sites, Law Enforcement, and Insects & Disease. The excluded resource topics did not appear to significantly concern the public during comment opportunities throughout the plan revision process or the resource topic is not required to be covered by the 2012 Planning Rule (i.e., Law Enforcement). Also, not all direction within resource topics was included in the crosswalk (only direction associated with a 1987 Management Information Handbook (MIH) activity code). The 1987 MIH activity codes represent resource management activities applicable to management practices. These activities are grouped into resource or support elements and are identified by alphanumeric codes such as A01 or D02. Each activity has a unique code, title, and unit of measure for the work performed. The MIH-coded guidance in the crosswalk is used primarily for organizational purposes. The wildlife resource section crosswalks some additional 1987 direction (guidance not associated with an MIH code). There is also a comprehensive at risk-species crosswalk in appendix E of the FEIS.

## Revised Forest Plan Components

The coding refers the reader to specific plan components in the Revised Plan. Abbreviations are used in each code to identify that a plan decision applies to: ((1) Spatial Area, (2) the resource area, and (3) component type (i.e., a desired condition (DC), objective (O), standard (S), or guideline (G)). The last part of each code is a number indicating the numerical order of the component.

So, the unique coding for Forestwide (FW) Air Resource (AIR) Desired Conditions (DC) number one (1) is FW-AIR-DC-1.



The Revised Forest Plan components guide future project and activity decision making, are required in the forest plan, and are the main substance of the document. They include desired conditions, objectives, standards, guidelines, suitability of lands, and goals. Plan components should (1) provide a strategic and practical framework for managing the Santa Fe NF; (2) be applicable to the resources and issues of the forest; and (3) reflect the forest’s distinctive roles and contributions. As a whole, the set of plan components must provide for social, economic, and ecological sustainability and multiple uses. Plan components were developed collaboratively with input from a variety of external and internal stakeholders, with broad interdisciplinary representation. Plan components do not need to reiterate existing law, regulation, or policy, although some is repeated here for emphasis. Except for desired conditions, other plan components are not necessarily in every resource section. An interdisciplinary team refined the final form and organization of the forest plan to be understandable, useable, and integrated. The plan components are described as:

**Desired Conditions** describe the vision for the Santa Fe NF. They are the ecological, cultural, and socioeconomic aspirations toward which management of the land and resources of the plan area is directed. They are not commitments or final decisions approving specific projects or activities; rather, they guide the development of projects and activities. Projects are designed to maintain or move toward desired conditions and to be consistent with the plan over the long term. The desired conditions in this forest plan have been written to contain enough specificity so that progress toward their achievement may be determined. In some cases, desired conditions may already be achieved, while in other cases, they may only be achievable over hundreds of years.

**Objectives** describe how the Santa Fe NF intends to move toward the desired conditions. Objectives are concise projections of measurable, time-specific, and fiscally achievable intended outcomes. Objectives have been established for the work considered most important to address the needs for change and make progress toward desired conditions. They also provide metrics for evaluating accomplishments.

**Standards** are technical design constraints that must be followed when an action is being taken to make progress toward desired conditions. Along with guidelines, standards make up the “rules” that the Santa Fe NF must follow. Standards differ from guidelines in that standards do not allow for any deviation without a plan amendment.

**Guidelines** are required technical design features or constraints on project and activity decision making that help make progress toward desired conditions. Along with standards, guidelines make up the “rules” that we must follow. However, different from standards, guidelines allow for departure from their terms, so long as the intent of the guideline is met. Deviation from a guideline must be specified in the site-specific National Environmental Policy

Act (NEPA) decision document or the project’s record with the supporting rationale. When deviation from a guideline does not meet the original intent, a plan amendment is required.

**Management approaches** are not a requirement of the plan, but are optional and may be used to inform future proposed and possible actions. These techniques and actions provide options for plan implementation, and represent possibilities, preferences, or opportunities, rather than obligatory actions. Not all plan components are addressed with management approaches, only those for which additional information is warranted. They may illustrate suggestions as to how desired conditions or objectives could be met, convey a sense of priority among objectives, or indicate possible future course of change to a program.

## 1987 Direction Carried Forward

The Revised Forest Plan is strategic in nature, so the specific focus or intent of some 1987 Plan components did not always fit this strategic approach. Accordingly, many of the prescriptive standards and guidelines in the 1987 Plan were reframed as desired conditions, guidelines, or management approaches in the Revised Forest Plan.

In numerous situations, the 1987 Plan included direction to prepare other plans for managing resources on the forest. The 1987 Plan also includes numerous references to conduct evaluations of certain areas or activities. Also, other necessary plans are required by law, regulation, and policy. For this reason, the Revised Forest Plan does not include direction to prepare additional plans for the management of resources on the forest in plan components. Instead, this information is addressed in appendix D (Proposed Probable and Possible Future Actions) of the Revised Plan, which includes a list of proposed and probable management actions that may take place on the forest under the Revised Plan. The list in appendix D is not intended to be all-inclusive.

The 1987 Plan direction includes references to other sources of information such as authorities, laws, regulations, policies, and other decisions and direction that the forest is already obligated to follow. The Revised Forest Plan does not repeat these authorities in plan components for several reasons. Referencing these authorities or actions required by these authorities in a plan component does not change the forest’s obligation. However, if these authorities are rescinded or the actions they require are changed, the forest would still be required to follow the outdated direction referenced in the plan component. For these reasons, authorities such as laws, regulations, policies, and other decisions and direction are not repeated in plan components in the Revised Plan, but can be found now in appendix E (Laws, Regulation, and Policy) of the Revised Forest Plan. The list included in appendix E is not intended to be all encompassing; it is meant to be a helpful list of some of the other documents that provide information useful to management of the Santa Fe NF. Accordingly, some of the authorities mentioned in the 1987 Plan may not be listed in appendix E. The crosswalk may note that the 1987 Plan direction can be found in appendix E.

**(Example)** A 1987 forestwide plan component for Range, requires “All sage and pinyon-juniper forage improvement projects will be limited to previously treated areas. Retreatment of these existing projects will be guided by the following criteria: (list of 1-5 criteria).” The Revised Plan includes forestwide vegetation management for individual Ecological Response Units (ERUs) that exists on the forest. Here is some information about the ERU framework from the Revised Plan:

The Santa Fe NF encompasses a broad range of ecosystems, including a diversity of vegetative ecosystems, ranging along elevational gradients from prairie grasslands to alpine tundra. These ecosystem types are mapped on the Santa Fe using the ecological response unit (ERU) framework. (ERUs are mapped ecosystem types based on biophysical themes that represent the range of conditions (e.g., dominant species, vegetation associations, soils, landscape features, or climate)

that prevail under natural disturbance regimes (e.g., fire, insects and disease). Each ERU has specific seral stages that describe smaller units of vegetation conditions and succession (e.g., dominance of post-disturbance species or closed-canopy conditions) that is influenced by both natural processes and management. The seral state proportions given within the desired conditions described for each ERU individually are single values reflecting the seral proportions indicative of reference conditions (LANDFIRE 2010).

There are plan components and management approaches for all relevant ERUs on the forest, including: pinyon-juniper-sage, pinyon-juniper, and sagebrush (which address the 1987 guidance for the example given above).

**(Example)** The 1987 Plan direction for ecosystem habitat maintenance at the project level or site level, has translated to a more strategic approach in the Revised Plan. The Revised Plan has a forestwide standard for forestry management directing “that harvesting systems (methods) must primarily be selected for their effectiveness to move toward ecological desired conditions” (FW-FORESTRY-S-6). Therefore, in the case of habitat maintenance in the 1987 Plan, the crosswalk may point to numerous plan components in the Revised Forest Plan. Some of those components will apply to the resource topic, while other components may address the activity. Actions under the Revised Plan will need to consider all direction and lay out a course that is consistent with all the components. That may result in an action that is exactly or very similar to the action that would be required under the 1987 Plan, or something entirely different, but it must be consistent with the Revised Plan components. For situations where the 1987 Plan direction has been carried forward into the Revised Plan, the following crosswalk tables will note that the 1987 Plan direction can be found in “Forestwide Plan Components and Management Approaches” under the “Rationale” column.

## 1987 Direction Not Carried Forward

As noted above, most of the direction from the 1987 Plan has been carried forward into the Revised Forest Plan or accounted for in another way. However, there are situations where forest management principles changed, often as a result of new science, between the creation of the 1987 Plan and today.

**(Example)** The 1987 Plan includes direction to take particular action to build or change certain recreational trails on the forest. These specific decisions were not carried forward into plan components in the Revised Plan. The Revised Plan does not make any site-specific decisions; those are made at the project level, based on site-specific information. Instead, the Revised Plan provides strategic guidance on what to consider when making a decision about a recreational trail. The forest can still pursue building or changing the trail mentioned in the 1987 Plan, but that decision will now be made at the project level, based on site-specific information. This type of guidance is noted in the crosswalk as being site-specific guidance and outside of the scope of the Forest Plan.

**(Example)** There is guidance in the 1987 Plan that references using database systems the agency is no longer using (i.e., the RIM database). The obsolete guidance was not carried forward into the Revised Plan.

## Resource: Recreation

**Table M-1. Crosswalk of recreation resource guidance from the 1987 Forest Plan to related recreation resource plan components and guidance in the Revised Forest Plan**

1987 Pg. #	Resource Sub Topic (where applicable)	Type of Guidance	1987 MIH Code	1987 Plan Guidance	Rationale (where is this guidance now?)	Related Plan Components in the Revised Forest Plan
50		Forestwide Standards & Guidelines	A01	Coordinate interpretive services with adjacent national forests, local Native American leaders, and other natural resource agencies.	Guidance from 1987 that directs coordination efforts, generally translates into Forestwide Plan Components for Partnership in the Revised Plan or exists in management approaches in each section. Guidance regarding interpretive services in relation to the tribes can be found in Forestwide Plan Components and Management Approaches for Tribes and Rural Historic Communities.	FW-PARTNER-MA-1 FW-PARTNER-DC-1 FW-PARTNER-DC-2 FW-PARTNER-DC-3 FW-RURALH-MA-2
		Forestwide Standards & Guidelines	A02	Maintain recreation opportunity spectrum (ROS) class inventory (1984) as changes occur on a project basis.	Appendix A of the Revised Plan includes maps of scenic integrity objectives (SIO) and desired recreation opportunity spectrum (ROS).  See Map of ROS in appendix A of the Revised Plan	
		Forestwide Standards & Guidelines	A05 A06	Provide for handicapped access in new recreation site construction and reconstruction. The goal is to have all interpretive facilities and at least 20% of developed recreation site capacity fully accessible to the handicapped. Evaluate the suitability for barrier-free use in all rehabilitation and construction projects to achieve this goal.	See Forestwide Plan Components and Management Approaches for Facilities.  See also the <i>Americans with Disabilities Act of 1990</i> in appendix E	FW-FAC-DC-4



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1987 Pg. #	Resource Sub Topic (where applicable)	Type of Guidance	1987 MIH Code	1987 Plan Guidance	Rationale (where is this guidance now?)	Related Plan Components in the Revised Forest Plan
		Forestwide Standards & Guidelines	A06	Projects implemented within potential recreation sites will be coordinated to maintain or enhance development opportunities.	<p>This guidance is considered project or site level under the Revised Plan and not within the current scope of the Forest Plan.</p> <p>Guidance from 1987 that directs coordination efforts, generally translates into Forestwide Management Approaches for Partnership in the Revised Plan. These can be found in each resource section, as it applies.</p>	
		Forestwide Standards & Guidelines	A07	Prepare a Recreation Opportunity Guide (ROG) on each Ranger District within 5 years and update as changes occur. Maintain a forestwide copy at the Supervisor's Office.	<p>ROG is not significantly different from ROS, which maps recreation opportunity.</p> <p>Appendix A includes maps showing scenic integrity objectives (SIO) and desired recreation opportunity spectrum (ROS).</p> <p>See Map of ROS in appendix A of the Revised Plan</p>	
		Forestwide Standards & Guidelines	A07 A08	Update and upgrade recreation data base (RIM) using sampling techniques at an average annual rate of 33% of the developed sites over the decade. Utilize periodic checks for the remaining sites.	RIM is no longer used, so this guidance has not been carried forward.	

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1987 Pg. #	Resource Sub Topic (where applicable)	Type of Guidance	1987 MIH Code	1987 Plan Guidance	Rationale (where is this guidance now?)	Related Plan Components in the Revised Forest Plan
	(off-road vehicles)	Forestwide Standards & Guidelines	A08	<p>ORV (off-road-vehicle) closure and restrictions are indicated by management area. Remaining areas are open to ORV use unless resource considerations necessitate additional restrictions or closures based upon monitoring activities and appropriate environmental analysis. These actions may vary from a seasonal restriction for specific vehicles to yearlong closures for all vehicles. User enjoyment and safety will be considered as well as needs for resource protection. Criteria for restricted use or closure of an area may include: Loss of Vegetative cover, degradation of important wildlife habitat or wildlife harassment, identifiable impacts on soils, riparian ecosystems, or water quality, disturbance of known Native American religious or cultural resource sites, need for separation of different recreation uses which may adversely affect one another, Disruption of grazing management programs or harassment of permitted livestock.</p>	<p>See Executive Order <i>EO 11644 issued February 8, 1972. Use of off-road vehicles on the public lands</i>) and 36 CFR 212 <i>Travel Management</i>, located in appendix E.</p> <p>See Forestwide Plan Components and Management Approaches for Roads, Dispersed Recreation, and Designated Area Plan Components and Management Approaches for Wild and Scenic Rivers.</p>	<p>FW-ROADS-G-8 FW-DISREC-S-1 FW-DISREC-S-2 FW-DISREC-S-3 DA-WSR-S-4</p>

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1987 Pg. #	Resource Sub Topic (where applicable)	Type of Guidance	1987 MIH Code	1987 Plan Guidance	Rationale (where is this guidance now?)	Related Plan Components in the Revised Forest Plan
	(National Scenic Trails)	Forestwide Standards & Guidelines	A10 A11	The Continental Divide National Scenic Trail (CDNST) route is identified on the enclosed Transportation System Management Map. Where the trail currently does not exist or follow roads, a corridor is identified within which the trail will be located. The corridor is defined as the area which encompasses the foreground seen area (up to one mile wide) as viewed from the identified route. The CDNST corridor has a visual sensitivity 1 classification. The resultant visual quality objectives are given in each management area the corridor crosses. The following segments exist and will be marked by 1990 with the CDNST logo according to the standards described in the CDNST Comprehensive Plan:	CDNST is included in a map in the Final Plan (figure 5 and appendix A of the Revised Plan).	DA-CDNST-DC-1 DA-CDNST-O-1 DA-CDNST-G-1
		Forestwide Standards & Guidelines	A12	Trail system operation will include monitoring use and effects of use, imposing user restrictions where appropriate and necessary and informing users through guides, signs, and personal contact of the intended use of the trail.	See Forestwide Plan Components and Management Approaches for Dispersed Recreation.	FW-DISREC-DC-2 FW-DISREC-O-1 FW-DISREC-O-2 FW-DISREC-O-3 FW-DISREC-G-1
	(Wild & Scenic Rivers)	Forestwide Standards & Guidelines	J29	The Rio Chama, Pecos River, and the East Fork of the Jemez River have been designated as national Wild & Scenic Rivers, in the following classifications:	See Designated Areas in chapter 3 of the Revised Plan.	DA-WSR-S-1 DA-WSR-S-1a DA-WSR-S-1b DA-WSR-S-1c DA-WSR-S-2

## Resource: Cultural

**Table M-2. Crosswalk of cultural resource guidance from the 1987 Forest Plan to related cultural resource components and guidance in the Revised Forest**

Plan 1987 Pg. #	Resource Sub Topic (where applicable)	Type of Guidance	1987 MIH Code	1987 Plan Guidance	Rationale (where is this guidance now?)	Related Plan Components in the Revised Forest Plan
		Forestwide Standards & Guidelines	A01	Coordinate cultural resource management with the State of New Mexico's historic preservation plan, the SHPO, the State Archeologist, and other State and Federal agencies to the extent possible. Coordinating activities may include: 1. Consultation and periodic meetings. 2. Sharing of cultural resource site data, plans, and other cultural resource documents. 3. Participation in State cultural resource planning processes.	Guidance from 1987 that directs coordination efforts, generally translates into Forestwide Management Approaches for Partnership in the Revised Plan. Forestwide Plan Components and Management Approaches for Cultural and Historic Resources is relevant here. Forest directives relevant to NM Historic Preservation can be seen in appendix E: <i>National Historic Preservation Act of 1966 as amended (NHPA) (16 U.S.C. 470) Section 110 (a)(2)(A)</i>	FW-PARTNER-MA-1 FW-ARCH-MA
		Forestwide Standards & Guidelines	A02	Survey procedures for undertakings include: (list includes four procedures)	Specific survey procedure guidance not reflected in plan components, but CFR guidance for the Protection of Historic Properties is available in appendix E.	FW-ARCH-S-1 Cultural and historic resources must be protected during projects through mitigation measures and design features. In cases where the protection of cultural and historic resources is not possible or when the benefits of a project are deemed by administrative decision to be greater than the adverse effects to the cultural and historic resources, adverse effects to those resources will be resolved or mitigated

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1987 Pg. #	Resource Sub Topic (where applicable)	Type of Guidance	1987 MIH Code	1987 Plan Guidance	Rationale (where is this guidance now?)	Related Plan Components in the Revised Forest Plan
		Forestwide Standards & Guidelines	A03	Assess the potential effects of proposed actions upon cultural resources. All sites will be initially evaluated to the extent necessary to determine if they are potentially eligible for the National Register of Historic Places (NRHP).	<p>This kind of guidance is required under Forest Directives and occurs at the project level—not required to be restated in the Forest Plan.</p> <p>See appendix E: <i>National Historic Preservation Act of 1966 as amended (NHPA) (16 U.S.C. 470) Section 110 (a)(2)(A)</i></p> <p><i>36 CFR 60 National Register of Historic Places, Criteria for Evaluation (Sets forth the procedural requirements for listing properties on the National Register.)</i></p>	
		Forestwide Standards & Guidelines	A04	Protect all sites listed in, nominated to, eligible for, or potentially eligible for the NRHP. For evidence of vandalism, artifact collecting, or illicit excavation, implement appropriate protective measures, such as signing, fencing, administrative closure, remote sensing, increased patrolling, or public education. For evidence of natural deterioration, implement appropriate stabilization measures.	<p>This kind of guidance is required under Forest Directives and not required to be restated in the Forest Plan.</p> <p><i>National Historic Preservation Act of 1966 as amended (NHPA) (16 U.S.C. 470) Section 110 (a)(2)(A)</i></p> <p><i>36 CFR 60 National Register of Historic Places, Criteria for Evaluation (Sets forth the procedural requirements for listing properties on the National Register.)</i></p>	FW-ARCH-DC-1 FW-ARCH-S-1

## Resource: Wildlife & Fish

**Table M-3. Crosswalk of wildlife and fish resource guidance from the 1987 Forest Plan to related wildlife and fish resource plan components and guidance in the Revised Forest Plan**

1987 Pg. #	Resource Sub Topic (where applicable)	Type of Guidance	1987 MIH Code	1987 Plan Guidance	Rationale (where is this guidance now?)	Related Plan Components in the Revised Forest Plan
61		Forestwide Standards & Guidelines	C01	Continue to emphasize threatened, endangered, and sensitive species for studies.	See Forestwide Plan Components and Management Approaches for At-Risk Species.	FW-ATRISK-MA-7
		Forestwide Standards & Guidelines	C01 C02 C03	Develop management plans for wintering bald eagle habitats as specified in approved recovery plans. Maintain bald eagle winter roost and perch trees. Accomplish riparian and fisheries improvements to maintain and enhance prey base for wintering bald eagles.	Bald eagles have been delisted since the 1987 Plan. They are still a sensitive species and are protected through other mandates in addition to the Forest Plan. See <i>Bald and Golden Eagle Protection Act of 1940, as amended</i> , in appendix E.  Forestwide Plan Components and Management Approaches for Terrestrial Species and Habitats are relevant to eagle habitat, along with all other terrestrial species.	FW-TERRASH-DC FW-TERRASH-O 1 FW-TERRASH-G-1 FW-TERRASH-MA-5
		Forestwide Standards & Guidelines	C04	Include game and non-game habitat improvement projects in sale area improvement plans for timber sale areas, to benefit wildlife and fish.	See Forestwide Plan Components and Management Approaches for Forestry and At-Risk Species.	FW-FORESTRY-G-2 FW-ATRISK-G-2
		Forestwide Standards & Guidelines	C06	Provide non-game entrance and escape ramps on water developments intended for livestock or wildlife use.	See Forestwide Plan Components and Management Approaches for Terrestrial Species Habitat and Range.	FW-TERRASH-S-1 FW-TERRASH-G 1 FW-RANGE-S-3
		Forestwide Standards & Guidelines		Continue to emphasize coordination with State and other Federal agencies.	See Forestwide Plan Components and Management Approaches for At-Risk Species and Partners.	FW-PARTNER-MA-1 FW-ATRISK-MA-7 FW-ATRISK-G-2 FW-ATRISK-G-3

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1987 Pg. #	Resource Sub Topic (where applicable)	Type of Guidance	1987 MIH Code	1987 Plan Guidance	Rationale (where is this guidance now?)	Related Plan Components in the Revised Forest Plan
		Forestwide Standards & Guidelines		In cooperation with the New Mexico Department of Game and Fish and the U.S. Fish and Wildlife Service, jointly review the threatened, endangered, and sensitive species program to identify species priority, direction, and joint opportunities.	See Forestwide Plan Components and Management Approaches for At-Risk Species, Aquatic Species Habitat and Partners.  See also the <i>Endangered Species Act of 1973, as amended</i> , in appendix E.	FW-PARTNER-MA-1 FW-ATRISK-MA-7 FW-AQUASH-MA-1
		Forestwide Standards & Guidelines		Adhere to applicable interagency conservation plans and agreements for sensitive species. Current examples include: Jemez Mountains Salamander Cooperative Management Plan, Arizona Willow Conservation Agreement, and Conservation Agreement for Rio Grande Cutthroat Trout. This includes following protocols developed for inventory and monitoring, evaluating impacts, and consulting with the assigned interagency team when proposed activities may impact these species or their habitats. Work cooperatively with the interagency teams to avoid or mitigate negative impacts consistent with directives for managing sensitive species (FSM 2670.32). This direction applies to future interagency agreements or conservation plans that may be developed for specific species.	See Forestwide Plan Components and Management Approaches for Partnerships and At-Risk Species.	FW-PARTNER-MA-1 FW-ATRISK-G-3 FW-ATRISK-MA-7

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1987 Pg. #	Resource Sub Topic (where applicable)	Type of Guidance	1987 MIH Code	1987 Plan Guidance	Rationale (where is this guidance now?)	Related Plan Components in the Revised Forest Plan
	(Peregrine)	Forestwide Standards & Guidelines		Continue to support the Peregrine Falcon Master Interagency Agreement with the New Mexico Department of Game and Fish and the U.S. Fish and Wildlife Service.	<p>Peregrine are now managed as an At-Risk Species in the Revised Plan. To assist in the development of plan components, each at-risk species on the Santa Fe NF is now associated with a primary ecological response unit (ERU) where most of their life-cycle requirements are secured. See Forestwide Plan Components and Management Approaches for PPF, MCD, and MCW ERUs.</p> <p>See Forestwide Plan Components and Management Approaches for At-Risk Species.</p>	<p>FW-ATRISK-G-1 FW-PPF-DC-1 FW-MCW-DC-1 FW-MCD-DC-1</p>
	(Peregrine)	Forestwide Standards & Guidelines		When a peregrine falcon site plan doesn't already exist and a Biological Evaluation finds that a proposed action may negatively impact an occupied eyrie, develop a site plan for the eyrie before approving the project. Adhere to site plan mitigations for the eyrie.	<p>Peregrine are now managed as an At-Risk Species in the Revised Plan. To assist in the development of plan components, each at-risk species on the Santa Fe NF is now associated with a primary ERU where most of their life-cycle requirements are secured.</p> <p>See Forestwide Plan Components and Management Approaches for PPF, MCD, and MCW ERUs.</p> <p>See Forestwide Plan Components and Management Approaches for At-Risk Species.</p>	<p>FW-ATRISK-G-1 FW-PPF-DC-1 FW-MCW-DC-1 FW-MCD-DC-1</p>



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1987 Pg. #	Resource Sub Topic (where applicable)	Type of Guidance	1987 MIH Code	1987 Plan Guidance	Rationale (where is this guidance now?)	Related Plan Components in the Revised Forest Plan
	(Ecosystem Management Areas)	Forestwide Standards & Guidelines		Combine watersheds, other physical land areas and dominant land uses to form ecosystem management areas, generally ranging from 10,000 to 50,000 acres. These ecosystem management areas will be used to inventory the existing and desired conditions, and identify management opportunities and possible projects to add to the Schedule of Proposed Projects.	<p>The forest has moved in a direction of forestwide resource planning that directs guidance toward desired conditions of all resources. Watershed health is covered often in the Water resource section of the Forestwide Plan Components and Management Approaches.</p> <p>See Designated Areas like research natural areas (RNAs), that are specifically designated to retain areas of high quality or unique ecosystems and allow for evaluation of change over time (given the lack of treatments impacting these areas).</p> <p>See Priority Watersheds in chapter 2 of the Revised Plan, under “Water Resources.” Priority watersheds have been identified using the Forest Service National Watershed Condition Framework (WCF) as areas where plan objectives for restoration focus on maintaining or improving watershed condition. WCF classifications and priority watersheds may change over the life of the forest plan, reflecting changes in watershed conditions.</p> <p>Chapter 5 of the Revised Plan covers the Forest Plan Monitoring section and includes watershed monitoring.</p>	DA-RNA-DC-2 FW-WATER-DC-1 FW-WATER-DC-2 FW-WATER-O-1 FW-WATER-O-2 FW-WATER-MA-1 FW-WATER-MA-2 FW-WATER-MA-5
	(Ecosystem Management Areas)	Forestwide Standards & Guidelines		Ecosystem management areas will be used to plan and evaluate age class distribution, old growth requirements, seral diversity, cover/forage distribution, etc.	(See above) and additionally see Forestwide Plan Components and Management Approaches for Vegetation.	FW-VEG-G-4

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1987 Pg. #	Resource Sub Topic (where applicable)	Type of Guidance	1987 MIH Code	1987 Plan Guidance	Rationale (where is this guidance now?)	Related Plan Components in the Revised Forest Plan
		Forestwide Standards & Guidelines		Manage at least 5 logs per acre in various stages of decomposition where consistent with visual quality and fuel loading objectives. Wildlife logs should be the largest diameter available and at least 15 feet in length.	The only ERU that references “wildlife logs” is in the desired conditions for the Ponderosa Pine ERU.  Habitat guidance can be found in Forestwide Plan Components and Management Approaches for At-Risk Species, Vegetation, and Ponderosa Pine ERU.	FW-VEG-G-4 FW-ATRISK-MA-1 FW-PPF-DC-7
		Forestwide Standards & Guidelines		See Appendix D- Standards and Guidelines for Management of Mexican Spotted Owl, Northern Goshawk, and Livestock Grazing. Mexican spotted owl Standards	MSO is managed on the forest as an At-Risk Species. To assist in the development of plan components, each At-Risk Species on the forest is now associated with a primary ERUs - where most of their life-cycle requirements are secured.  See Forestwide Plan Components and Management Approaches for At-Risk Species and for ERUs: PPF, MCD, MCW.  See the <i>Endangered Species Act of 1973, as amended</i> (Mexican Spotted Owl Recovery Plan) in appendix E.	FW-PPF-DC-1 FW-MCW-DC-1 FW-MCD-DC-1 FW-ATRISK-DC-1 MA-OGLEASE-S
		Forestwide Standards & Guidelines		Inventory, evaluate, and improve areas of streams, lakes, and wet lands for cold water fisheries, especially the Rio Grande Cutthroat trout, waterfowl and other water-related habitats.	See Forestwide Plan Components and Management Approaches for Aquatic Species Habitat.	FW-AQUASH-O-1 FW-AQUASH-O-2 FW-AQUASH-S-1 FW-AQUASH-G-1 FW-AQUASH-G-2 FW-AQUASH-MA-1
		Forestwide Standards & Guidelines		Increase carrying capacity for put-and-take, wild trout and native trout fisheries through stream improvement projects.	See Forestwide Plan Components and Management Approaches for Aquatic Species Habitat.	FW-AQUASH-O-1 FW-AQUASH-O-2 FW-AQUASH-S-1 FW-AQUASH-G-1 FW-AQUASH-G-2 FW-AQUASH-MA-1

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1987 Pg. #	Resource Sub Topic (where applicable)	Type of Guidance	1987 MIH Code	1987 Plan Guidance	Rationale (where is this guidance now?)	Related Plan Components in the Revised Forest Plan
		Forestwide Standards & Guidelines		Adjust riparian plan composition or structure through coordination with other uses or direct manipulation in order to achieve riparian standards.	See Forestwide Plan Components and Management Approaches for Riparian and Wetland Ecosystems.	FW-RWE-O FW-RWE-S
		Forestwide Standards & Guidelines		In the construction or reconstruction of campgrounds adjacent to fishing streams and lakes, keep the habitation improvements away from the stream banks and lake shores.	See Forestwide Plan Components and Management Approaches for Developed Recreation.	FW-DEVREC-G-1 FW-DEVREC-G-2 FW-DEVREC-G-3 FW-DEVREC-G-4 FW-DEVREC-G-5 FW-DEVREC-G-6 FW-DEVREC-MA-1
		Forestwide Standards & Guidelines		Utilize methods designed to protect and enhance sensitive species populations on the Forest with the goal of perpetuating the species and eliminating the need for formal listing as threatened or endangered by U.S. Fish and Wildlife Service.	See Forestwide Plan Components and Management Approaches for At-Risk Species.	FW-ATRISK-G-1 FW-ATRISK-G-2 FW-ATRISK-MA-1
		Forestwide Standards & Guidelines		Evaluate impacts of proposed actions on sensitive species or their habitats according to the procedures described in FSM 2672.4, and document results in a Biological Evaluation.	This is project level guidance and outside of the scope of the Forest Plan.  Forestwide Plan Components and Management Approaches for At-Risk Species is relevant here.	FW-ATRISK-G-1 FW-ATRISK-G-2 FW-ATRISK-MA-1
		Forestwide Standards & Guidelines		Coordinate with State and Federal agencies in identifying potential impacts to sensitive species. Avoid or minimize negative impacts, consistent with directives for managing sensitive species (FSM 2670.3 and FSM 2670.32).	This level of guidance is covered by Forest Service Directives: See <i>FSM 2600 Wildlife, Fish, and Sensitive Plant Habitat Management</i> in appendix E.  See Forestwide Plan Components and Management Approaches for At-Risk Species and Partners.	FW-PARTNER-MA-1 FW-ATRISK-G-1 FW-ATRISK-G-2 FW-ATRISK-G-3

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		Forestwide Standards & Guidelines		Emphasize conservation of plant or animal species having limited abundance and distribution on the forest, such as grama grass cactus in grasslands and woodlands, and wood lily in mid-elevation mixed conifer forests.	See Forestwide Plan Components and Management Approaches for At-Risk Species.	FW-ATRISK-G-1 FW-ATRISK-G-1e
		Forestwide Standards & Guidelines		Inventory and evaluate the Southwestern Region sensitive plant listed species.	See Forestwide Plan Components and Management Approaches for At-Risk Species and for Partners.  <i>See FSM 2600 Wildlife, Fish, and Sensitive Plant Habitat Management in appendix E</i>	FW-ATRISK-G-1 FW-PARTNER-MA-1 FW-ATRISK-DC-1 FW-ATRISK-DC-2 FW-ATRISK-DC-3
		Forestwide Standards & Guidelines		Consult and cooperate with New Mexico Natural Resource Department (Resource Survey Section) to achieve management objectives for threatened, endangered, and sensitive flora.	See Forestwide Plan Components and Management Approaches for At-Risk Species and Partners  <i>See FSM 2600 Wildlife, Fish, and Sensitive Plant Habitat Management in appendix E</i>	FW-ATRISK-G-1 FW-ATRISK-DC-1 FW-ATRISK-DC-2 FW-ATRISK-DC-3 FW-ATRISK-G-2 FW-ATRISK-G-3 FW-PARTNER-MA-1
		Forestwide Standards & Guidelines		Survey the management analysis area prior to habitat modifying activities including a ½ mile beyond the boundary.  Emphasize maintenance and restoration of healthy riparian ecosystems through conformance with forest plan riparian standards and guidelines. Management strategies should restore degraded riparian areas to good condition as soon as possible. Damage to riparian vegetation, stream banks, and channels should be prevented.  <a href="#">See Appendix D of Amendment 6</a> for more details.	See Forestwide Plan Components and Management Approaches for At-Risk Species.	FW-ATRISK-G-5 (a-d)

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1987 Pg. #	Resource Sub Topic (where applicable)	Type of Guidance	1987 MIH Code	1987 Plan Guidance	Rationale (where is this guidance now?)	Related Plan Components in the Revised Forest Plan
		Forestwide Standards & Guidelines		Avoid adverse impact upon elk calving grounds. Coordinate wildlife migration routes, watering needs, hazards, and escape routes.	See Forestwide Plan Components and Management Approaches for Oil and Gas Leasing and Terrestrial Habitat resource sections.	MA-OGLEASE-S-1e FW-TERRASH-G-3
		Forestwide Standards & Guidelines		Develop a site plan for each peregrine falcon eyrie (designated suitable nest site). Follow the specific requirements described in the site plans for each eyrie and the surrounding habitat zones, including requirements for evaluating potential impacts, monitoring, restricting the timing of activities, and controlling activities that may cause disturbance or pose a threat to the eyrie.	See Forestwide Plan Components and Management Approaches for At-Risk Species and for the ERUs where peregrine falcon are found (PPF, MCW, and MCD ERUs).	FW-ATRISK-G-1 FW-PPF-DC-1 FW-MCW-DC-1 FW-MCD-DC-1
		Forestwide Standards & Guidelines		Manage for indigenous fauna in cooperation with the New Mexico Department of Game and Fish. Generally, exotic species will not be introduced. Exotics determined to be undesirable on National Forest System lands will be managed to obtain the goal of elimination in cooperation with appropriate State or Federal agencies.	Management of indigenous fauna (native plants) can be found in Forestwide Plan Components and Management Approaches in various sections; Vegetation, Invasive Species, Facilities, At-Risk, Riparian and Wetland, and Partners components are also relevant here.	FW-PARTNER-MA-1 FW-RWE-DC FW-RWE-DC-4 FW-FAC-G-4 FW-VEG-DC-1a FW-INVASIVE-DC-1 FW-ATRISK-G-3
		Forestwide Standards & Guidelines		Cooperate with New Mexico Department of Game and Fish in monitoring indicator species populations. Establish baseline data for indicator species habitat and monitor trend at 10-year intervals. Additional plant and animal species may be selected for monitoring during project planning.	See Forestwide Plan Components and Management Approaches for Partners and At-Risk Species.	FW-PARTNER-MA-1 FW-ATRISK-MA-1 FW-ATRISK-G-3

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1987 Pg. #	Resource Sub Topic (where applicable)	Type of Guidance	1987 MIH Code	1987 Plan Guidance	Rationale (where is this guidance now?)	Related Plan Components in the Revised Forest Plan
		Forestwide Standards & Guidelines		Accomplish recovery projects included in approved recovery plans. Projects will be coordinated through integrated forest management practices.	This is project-level management and not the priority of the Forest Plan. Forestwide plan components addressing partnership and management approaches of At-Risk Species are relevant here.	FW-ATRISK-G-3 FW-PARTNER-MA-1 FW-ATRISK-MA-1
		Forestwide Standards & Guidelines		Incorporate the State Comprehensive Plan in the development of Ranger District wildlife plans for non-game and game species.	Wildlife is not managed at the district level, therefore, individual districts tier to the Forest Plan. During the development of the Forest Plan, the forest used the New Mexico State Comprehensive Management Plan to assist in identifying At-Risk Species on the forest. Much of the guidance on wildlife management that has been incorporated into the forest plan comes from assistance from New Mexico Department of Game and Fish.	FW-ATRISK-G-3
		Forestwide Standards & Guidelines		Manage threatened and endangered animal, fish and plant habitats to achieve delisting in a manner consistent with the goals established with the U.S. Fish and Wildlife Service and the New Mexico Department of Game and Fish in compliance with approved recovery plans.	See Forestwide Plan Components and Management Approaches for At-Risk Species.  <i>See Endangered Species Act of 1973, as amended in appendix E.</i>	FW-ATRISK-DC-1 FW-ATRISK-G-1 FW-ATRISK G-2 FW-ATRISK-MA-1 FW-ATRISK-G-3

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1987 Pg. #	Resource Sub Topic (where applicable)	Type of Guidance	1987 MIH Code	1987 Plan Guidance	Rationale (where is this guidance now?)	Related Plan Components in the Revised Forest Plan
		Forestwide Standards & Guidelines		Habitat requirement for TES species will take precedence over requirements for other species and habitat requirements for sensitive species will take precedence over nonsensitive species. Habitat requirements for endangered species take precedence over threatened species.	<p>See <i>Endangered Species Act of 1973, as amended</i> in appendix E.</p> <p>At-Risk Species are all equally important and emphasis on their management has been added to the Forest Plan (see At-Risk section). Guidance for threatened and endangered (T&amp;E) species typically comes from the Recovery plans provided by the U.S. Fish and Wildlife Service. The Plan requires the forest to follow the most recent recovery plan when it comes to the management of T&amp;E species, therefore, their management will take precedence.</p> <p>See Forestwide Plan Components and Management Approaches for At-Risk Species.</p>	FW-ATRISK-DC-1 FW-ATRISK-G-2
	(bald eagle)	Forestwide Standards & Guidelines		Develop management plans for wintering bald eagle habitats as specified in approved recovery plans. Maintain bald eagle winter roost and perch trees. Accomplish riparian and fisheries improvements to maintain and enhance prey base for wintering bald eagles.	The bald eagle is now managed as an At-Risk Species in the Revised Plan. To assist in the development of plan components, each at-risk species on the Santa Fe NF is now associated with a primary ERU where most of their life-cycle requirements are secured. See Forestwide Plan Components and Management Approaches for PPF, MCD, MCW ERUs and Terrestrial Species Habitat.	FW-TERRASH-DC-1 FW-TERRASH-DC-1a

## Resource: Range

**Table M-4. Crosswalk of range resource guidance from the 1987 Forest Plan to related range resource plan components and guidance in the Revised Forest Plan**

1987 Plan Pg. #	Resource Sub Topic (where applicable)	Type of Guidance	1987 MIH Code	1987 Plan Guidance	Rationale (where is this guidance now?)	Related Plan Components in the Revised Forest Plan
66		Forestwide Standards & Guidelines	D01 D02	Manage to bring all grazing allotments to satisfactory management. Satisfactory management occurs when actions are proceeding according to the Allotment Management Plan to achieve management area objectives.	Allotment management plans are part of Forest Service regulation (see <i>Rescission Act of 1995</i> in appendix E), and are not required to be included in the Revised Plan.	FW-RANGE-DC-1 FW-PARTNER-MA-1



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1987 Pg. #	Resource Sub Topic (where applicable)	Type of Guidance	1987 MIH Code	1987 Plan Guidance	Rationale (where is this guidance now?)	Related Plan Components in the Revised Forest Plan
		Forestwide Standards & Guidelines		<p>Forage use by grazing ungulate will be maintained at or above a condition which assures recovery and continued existence of threatened and endangered species.</p> <p>Identify key ungulate forage monitoring areas. These key areas will normally be ¼ to 1 mile from water, located on productive soils on level to intermediate slopes, and be readily accessible for grazing. Size of the key forage monitoring areas could be 20 to 500 acres. In some situations, such as high mountain meadows with perennial streams, key areas may be closer than ¼ mile from water and less than 20 acres. Within key forage monitoring areas, select appropriate key species to monitor average allowable use. In consultation with US Fish and Wildlife Service, develop site-specific forage use levels.</p> <p>In the event that site-specific information is not available, average key species forage utilization in key forage monitoring areas by domestic livestock and wildlife should not exceed levels in the following table during the forage growing season.</p> <p>See <a href="#">Appendix D of Amendment 6</a> for more details, including allowable use table.</p>	See Forestwide Plan Components and Management Approaches for Range.	FW-RANGE-DC-1 FW-RANGE-O-1 FW-RANGE-S-1 FW-RANGE-MA-1

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1987 Pg. #	Resource Sub Topic (where applicable)	Type of Guidance	1987 MIH Code	1987 Plan Guidance	Rationale (where is this guidance now?)	Related Plan Components in the Revised Forest Plan
		Forestwide Standards & Guidelines	D03	Evaluate the need to control insect or disease outbreaks by mechanical, biological, or chemical methods. The method utilized will be determined through NEPA process, cost analysis and coordination with the Animal and Plant Health Inspection Service (APHIS).	See Forestwide Plan Components and Management Approaches for Forestry, Invasive Species, At-Risk Species, and Vegetation.  See also <i>Healthy Forests Restoration Act of 2003 (H.R. 1904)</i> , in appendix E of the Revised Plan.	FW-FORESTRY-G-3 FW-INVASIVE-S-1 FW-INVASIVE-S-2 FW-INVASIVE-G-4 FW-ATRISK-MA-8 FW-VEG-DC-1d
		Forestwide Standards & Guidelines	D04	All sage and pinyon-juniper forage improvement projects will be limited to previously treated areas. Retreatment of these existing projects will be guided by the following criteria: (list of 1-5 criteria).	This is overly prescriptive at the project or site level and is direction that does not fit the scope of the Forest Plan.  Otherwise, see Forestwide Plan Components and Management Approaches for Vegetation and the Pinyon Juniper and Sage ERU.	FW-PJS-DC-1 FW-VEG-O-2
		Forestwide Standards & Guidelines	D04 D05	Structural and forage improvement activities will be compatible with other resource objectives.	See Forestwide Plan Components and Management Approaches for Range.	FW-RANGE-DC-7 FW-RANGE-DC-1 FW-RANGE-DC-4
				Permittee investment will be encouraged by giving priority to projects that contain contributions by the grazing permittee, with the eventual goal of permittee responsibility for replacement investment of 50% of all range improvements.	This is also considered site-level or project-level guidance in the Revised Plan.  See Forestwide Plan Components and Management Approaches for Partners is relevant here.	FW-PARTNER-DC-1 FW-PARTNER-DC-2 FW-PARTNER-DC-3 FW-PARTNER-MA-1 FW-RANGE-MA-2
		Forestwide Standards & Guidelines	D05	Wildlife values and recreation values will be integrated in all structural improvement projects.	See Forestwide Plan Components and Management Approaches for Range.	FW-RANGE-S-2 FW-RANGE-S-3

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1987 Pg. #	Resource Sub Topic (where applicable)	Type of Guidance	1987 MIH Code	1987 Plan Guidance	Rationale (where is this guidance now?)	Related Plan Components in the Revised Forest Plan
		Forestwide Standards & Guidelines	D06 D07	Assign permittee maintenance of existing structural improvements on a continuing basis to insure full life of the improvement. Jointly develop annual permittee plans of work, including a salting plan that minimizes impacts to riparian zones, meadow ecosystems, and other Forest resources.	The Revised Plan addresses this guidance through the development of partnerships and project development with grazing permittees.  Forestwide Plan Components and Management Approaches	FW-PARTNER-MA-1 FW-RANGE-MA-2 FW-RANGE-MA-3

## Resource: Timber Management

**Table M-5. Crosswalk of timber management resource guidance from the 1987 Forest Plan to related plan components and guidance in the Revised Forest Plan**

1987 Plan Pg. #	Resource Sub Topic (where applicable)	Type of Guidance	1987 MIH Code	1987 Plan Guidance	Rationale (where is this guidance now?)	Related Plan Components in the Revised Forest Plan
68		Forestwide Standards & Guidelines	E00	Review classification of forest and woodland inventories as part of project planning.	See FEIS Volume 2, Appendix C: Timber Suitability and Forest Products Analyses Processes. Otherwise, this is project-level planning and is outside the scope of the Forest Plan.	
		Forestwide Standards & Guidelines	E03	Complete compartment stand examinations to regional standards to provide data for detailed stand prescriptions and to monitor plan results. Stand sizes should range from 10 to 100 acres with the preferred size being 20 to 80 acres. Exceptions would be in areas of little anticipated activity, to meet other resource needs, or where inventoried as large, truly homogeneous stands. Exceptions will be reviewed by the appropriate line officer before the environmental analysis is complete.	This 1987 guidance allows exceptions to be made by the line officer and that is still the case. Stand exams are not a requirement, but the decision about whether a full stand exam is needed (or another level of data collection and input into forest systems modeling), may occur at the project level, prior to developing and implementing a prescription. Forestry standards and guidelines are reflected in the Forestry section of the Revised Plan.  See also the section on 'Adaptive Planning and Monitoring' in chapter 1 of the Revised Plan.	FW-FORESTRY-DC-1 FW-FORESTRY-O-1 FW-FORESTRY-S-1 FW-FORESTRY-G-1

## Resource: Old Growth

**Table M-6. Crosswalk of old growth resource guidance from the 1987 Forest Plan to related old growth resource plan components and guidance in the Revised Forest Plan**

1987 Pg. #	Resource Sub Topic (where applicable)	Type of Guidance	1987 MIH Code	1987 Plan Guidance	Rationale (where is this guidance now?)	Related Plan Components in the Revised Forest Plan
68		Forestwide Standards & Guidelines	E04	Insure regeneration by natural or artificial means to meet Regional standards or as prescribed by silviculturist for the area to be regenerated. Reforestation will be accomplished through natural regeneration whenever possible. Reforestation will be accomplished as soon as practical, following the action which resulted in the understocked condition. Harvested areas must be capable of being restocked within 5 years of final harvest.	Old growth is managed within each individual ERU and at the project level. Relevant component codes are listed here.  See also the 'Adaptive Planning and Monitoring' section in chapter 1, to understand the forest planning process. The forest is required to meet regional standards and NEPA requirements in all forest management decisions, when NEPA process is required.	FW-VEG-G-4 FW-FORESTRY-S-1 FW-FORESTRY-S-2 FW-SFF-DC-1c FW-MCW-DC-1c FW-MCD-DC-1d FW-PPF-DC-1d FW-JUG-DC-1 FW-PJS-DC-1 FW-PJO-DC-2
		Forestwide Standards & Guidelines	E05	Use pre-commercial thinning to control stocking that will meet management objectives as identified in management areas and in stand specific prescriptions.	(see above)	
		Forestwide Standards & Guidelines	E06	For stands managed for uneven aged stand characteristics: Re-entry period will be 40 years for all slopes. The silvicultural system will be single tree or group selection, with group selections generally less than one-half acre in size, along with appropriate thinning and culturing. Stands will have residual stocking in at least three canopy levels. These canopies will include a component of seedlings and saplings; a component of poles and small saw timber; and a component of mature and over mature saw timber.	The forest is managing toward uneven-aged forest systems, but guidance regarding even-aged silvicultural management occurs within each ERU as it is relevant and is addressed more broadly in Forestwide Plan Components and Management Approaches for Forestry.	FW-FORESTRY-S-4 FW-FORESTRY-S-4a FW-FORESTRY-MA-4

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1987 Pg. #	Resource Sub Topic (where applicable)	Type of Guidance	1987 MIH Code	1987 Plan Guidance	Rationale (where is this guidance now?)	Related Plan Components in the Revised Forest Plan
		Forestwide Standards & Guidelines	E06 (cont.)	<p>Silvicultural treatments will leave sound snags (10"+ DBH). Manage for 220 natural snags per 100 acres on a minimum of 40% of the ecosystem area with emphasis on peripheral edges of openings. Areas unavailable for harvest are considered as part of the 40% as long as good spatial distribution is maintained. Additional criteria for snags are:</p> <ol style="list-style-type: none"> <li>1. Unmerchantable trees selected for snag recruitment will be due to dead or broken tops, heart rot and lightning strikes and not primarily due to poor genetics.</li> <li>2. Leave dwarf mistletoe free unmerchantable trees for snag recruitment and all existing snags 10" d.b.h. and above except those to be removed for public safety or fire management.</li> <li>3. If unmerchantable trees are not available, then merchantable trees may be considered for snag or recruitment.</li> </ol> <p>Leave at least one group of turkey roost trees per 160 acres in Ponderosa pine and mixed conifer type if stands providing suitable habitat are not available. Ideally, roosting habitat should have southerly to easterly exposures and be within one mile of water. Timber activities in turkey nesting areas will be coordinated to minimize impacts between April 20 and June 10.</p> <p>Stands within 200 ft. of canyon rims in Peregrine falcon feeding zones will receive uneven age, deferral, or other silvicultural treatment which enhances this key habitat and its features.</p> <p>Log landing areas will be located outside of designated sensitive land areas to the extent practical. These sensitive areas include riparian areas, wetlands and natural meadows, archeological sites, threatened and endangered or sensitive species habitat, and along Level I roads requiring viewshed corridor plans. When landings must be located in these areas they will be coordinated to the sensitive resource.</p>		

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1987 Pg. #	Resource Sub Topic (where applicable)	Type of Guidance	1987 MIH Code	1987 Plan Guidance	Rationale (where is this guidance now?)	Related Plan Components in the Revised Forest Plan
		Forestwide Standards & Guidelines	E06 (cont.)	<p>Adequate cover status should be maintained within 8 chains (530 feet) of actively used elk wallows, licks, and seeps. The area surrounding this feature will be managed as an uneven-aged stand which provides cover over time.</p> <p>Accessible unutilized cull material and slash over 3" in diameter should be made available for firewood for up to two years after timber harvests except as prescribed to meet other resource needs. Direct the public to areas to be cleaned up. Design road systems to accommodate the post-harvest use by the public. Use road management to restrict use periods as needed for resource protection.</p> <p>Limit ground lead logging equipment in most areas to slopes less than 40 percent. Skyline logging systems generally will be used for slopes over 40 percent or areas with sensitive resource needs. These skyline systems will only be used on selected demonstration areas in the next 10 years. Openings created through harvest of timber or firewood will not exceed 40 acres in size, except with regional approval to meet resource objectives. Definitions of created openings by species are found in the "Regional Guide for the Southwestern Region" on pages 3-12 through 3-17. The guide also sets standards for minimum width between openings, maximum distance to hiding cover from openings, and defines when created openings are no longer considered to be openings. The Santa Fe National Forest will maintain the standards established in the Regional Guide.</p> <p>Forest products such as Christmas trees, posts, poles, and vigas will be available if removal complements other resource objectives for the management area.</p>		

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1987 Pg. #	Resource Sub Topic (where applicable)	Type of Guidance	1987 MIH Code	1987 Plan Guidance	Rationale (where is this guidance now?)	Related Plan Components in the Revised Forest Plan
		Forestwide Standards & Guidelines	E06 (cont.)	<p>Salvage harvesting operations will be prescribed as needed to meet conditions imposed by wildfires, insect and disease infestations, blowdown, or other catastrophic events. Salvage harvesting will conform to integrated resource management principles and management area emphasis. Small sales will be the primary tool to accomplish salvage objectives.</p> <p>Plan and administer timber harvest and firewood activities in known elk calving and deer fawning areas so as not to disrupt calving and fawning.</p> <p>Provide green personal use pinyon-juniper firewood in designated areas. When designating firewood areas consider the potential impacts to pinyon nut crops and other resource concerns.</p> <p>All firewood removal will be administered through a permit or sale system. Free use firewood for personal use will be restricted to dead and down material in designated areas to accomplish management objectives.</p> <p>Designate stands of mature or overmature Pinyon for the gathering of pinyon nuts. Consult with Native Americans and other traditional users of this resource to determine the best areas. Prohibit firewood harvest in these designated areas.</p> <p>Provide wildlings in a manner consistent with integrated stand management to accomplish resource management objectives.</p> <p>Promote the use of green aspen for firewood, saw timber, vigas, latillas, and other products within integrated stand management concepts to accomplish regeneration of overmature stands.</p> <p>Manage to perpetuate or maintain aspen.</p>		



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1987 Pg. #	Resource Sub Topic (where applicable)	Type of Guidance	1987 MIH Code	1987 Plan Guidance	Rationale (where is this guidance now?)	Related Plan Components in the Revised Forest Plan
		Forestwide Standards & Guidelines	E06 E07	Planning and administration of timber harvest activities will protect trails, blaze trees, and trail markers.	<p>Planning and administering of timber harvesting activities happen at the project level and are outside the scope of the Forest Plan.</p> <p>Relevant Forestwide Plan Components and Management Approaches for trails would be found in Recreation, Dispersed Recreation, Management Areas and Designated Areas (and the protection of those resources).</p>	
		Forestwide Standards & Guidelines	E07	After reforestation needs are met, management area emphasis will guide the priority for use of sale area improvement dollars.	Reforestation decisions occur mainly at the project level and the forest is required to adhere to all relevant laws, regulations, and guidelines including the Federal and State Statute, <i>Anderson-Mansfield Reforestation and Revegetation Act of October 11, 1949</i> .	
		Forestwide Standards & Guidelines	E08	Maintain cone collection programs to meet artificial reforestation needs by seed zones. Maintain a 10-year supply of seed.	This is project-level guidance and outside of the scope of the Forest Plan.	
		Forestwide Standards & Guidelines	E09	Continue selection of superior tree and seed areas as needed to produce sufficient seed source for a stable 10-year supply of seed.	This is project-level guidance and outside of the scope of the Forest Plan.	

## Resource: Watershed Management

**Table M-7. Crosswalk of watershed management resource guidance from the 1987 Forest Plan to related watershed management resource guidance in the Revised Forest Plan**

1987 Pg. #	Resource Sub Topic (where applicable)	Type of Guidance	1987 MIH Code	1987 Plan Guidance	Rationale (where is this guidance now?)	Related Plan Components in the Revised Forest Plan
75		Forestwide Standards & Guidelines	F01	Conduct soil terrestrial ecosystem multi-level surveys as required by the National Cooperative Soil Survey.	See the Forest Monitoring Plan for Watershed and Soils in chapter 5.  See Forestwide Plan Components and Management Approaches for Soils.	FW-SOIL-S-1
		Forestwide Standards & Guidelines	F02	Plan and design activities and management strategies specifically for soil and water resources improvement where watershed condition is unsatisfactory.	See Forestwide Plan Components and Management Approaches for Water, Aquatic Species Habitat, and Soils.	FW-WATER-DC-1 FW-WATER-O-1 FW-WATER-O-2 FW-AQUASH-MA-4 FW-SOIL-DC-1 FW-SOIL-S-1 FW-SOIL-G-1
		Forestwide Standards & Guidelines	F03	Select treatment methods for plant control or revegetation projects according to the NEPA process and the following criteria:	The forest is required by law to follow NEPA process in all activities on the forest and it is not a requirement to restate that within the Forest Plan.	
77		BMPs	F03 P04	Best management practices (BMPs)	See Programmatic Agreements <i>Memorandum of Agreement on Fostering Collaboration and Efficiencies to Address Water Quality Impairments on National Forest System Lands</i> in appendix E regarding the use of BMPs on the forest.  The use of BMPs is addressed in each resources section, as it pertains to that resource.	

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1987 Pg. #	Resource Sub Topic (where applicable)	Type of Guidance	1987 MIH Code	1987 Plan Guidance	Rationale (where is this guidance now?)	Related Plan Components in the Revised Forest Plan
	(Roads)	BMPs		<p>1. Locate roads away from watercourses. Determine the minimum distance between roads and watercourses after considering the following factors: (a) hill slope to water source, (b) soil erodibility, (c) geologic stability, (d) channel stability, and (e) obstruction such as fallen logs, boulders, and brush clumps. (Total of 12 BMPs listed here)</p>	<p>Forestwide Plan Components and Management Approaches for Water and Roads resources are relevant to resources.</p> <p>See Programmatic Agreements <i>Memorandum of Agreement on Fostering Collaboration and Efficiencies to Address Water Quality Impairments on National Forest System Lands</i> in Appendix E regarding the use of BMPs on the forest.</p>	<p>FW-WATER-S-1 FW-ROADS-G-1</p>
	(Timber Sale)	BMPs		<p>1. Protected streamcourses will be designated on the sale area map. Streamcourses include the designated area on each side of the stream which is given special management consideration. This area will be marked on the ground and will vary in width depending on the physical characters and management objectives. (Total of 5 BMPs here)</p>	<p>Forestwide Plan Components and Management Approaches for Water resources are relevant here.</p> <p>See Programmatic Agreements <i>Memorandum of Agreement on Fostering Collaboration and Efficiencies to Address Water Quality Impairments on National Forest System Lands</i> in appendix E regarding the use of BMPs on the forest.</p>	<p>FW-WATER-S-1</p>
		BMPs		<p>Identified acequias will be protected during all potentially disturbing activities.</p>	<p>Forestwide Plan Components and Management Approaches for Water and Rural resources are relevant to acequia resources.</p> <p>See Programmatic Agreements <i>Memorandum of Agreement on Fostering Collaboration and Efficiencies to Address Water Quality Impairments on National Forest System Lands</i> in appendix E regarding the use of BMPs on the forest.</p>	<p>FW-WATER-MA-3 FW-RURALH-DC-3 FW-RURALH-DC-5 FW-RURALH-G-4</p>

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1987 Pg. #	Resource Sub Topic (where applicable)	Type of Guidance	1987 MIH Code	1987 Plan Guidance	Rationale (where is this guidance now?)	Related Plan Components in the Revised Forest Plan
		BMPS		Manage riparian areas in accordance with legal requirements regarding floodplains, wetlands, wild and scenic rivers, and cultural and other resources. Protect the productivity and diversity of riparian-dependent resources and emphasize the protection of soil, water, vegetation, wildlife, and fish resources prior to implementing projects. Give preferential consideration to resources dependent on riparian areas over other resources when conflicts among uses arise.	See Forestwide Plan Components and Management Approaches for Water.  See Programmatic Agreements <i>Memorandum of Agreement on Fostering Collaboration and Efficiencies to Address Water Quality Impairments on National Forest System Lands</i> in Appendix E regarding the use of BMPs on the forest.	FW-WATER-S-1
		BMPs		Riparian areas should be managed toward meeting the following guidelines: <u>Ground cover</u> : Provide average ground cover of plants and litter at 80 percent of natural levels. <u>Shade</u> : Provide shading over perennial and intermittent water surfaces that is 80 percent of natural levels considering unit reaches of about two miles in length. <u>Bank cover</u> : Provide shrub and tree cover along bank lengths that is 80 percent of natural levels. Give emphasis to the protection of streambank stability provided by woody plant roots, particularly on outside bends of stream channel meanders. <u>Streambed Sedimentation</u> : Composition of sand, silt, and clays within streambeds should not exceed 20 percent of natural levels. <u>Plant Composition</u> : Provide at least 60 percent of the woody plant composition in three or more riparian species. <u>Plant Structure</u> : Provide at least three age classes of riparian trees and shrubs, with at least 10 percent of the cover in the seedling sapling stages and 10 percent in the mature and overmature. <u>Crown Cover</u> : Provide crown cover of both trees and shrubs that is 80 percent of natural levels considering unit reaches of about 2 miles in length.	See Forestwide Plan Components and Management Approaches for Water.  See Programmatic Agreements <i>Memorandum of Agreement on Fostering Collaboration and Efficiencies to Address Water Quality Impairments on National Forest System Lands</i> in appendix E regarding the use of BMPs on the forest.	FW-WATER-S-1

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1987 Pg. #	Resource Sub Topic (where applicable)	Type of Guidance	1987 MIH Code	1987 Plan Guidance	Rationale (where is this guidance now?)	Related Plan Components in the Revised Forest Plan
		BMPs		Coordinate with concerned individuals, state and local governments, pueblos and tribes, and other resource agencies for projects in sensitive watersheds.	See Forestwide Plan Components and Management Approaches for Water.  See Programmatic Agreements <i>Memorandum of Agreement on Fostering Collaboration and Efficiencies to Address Water Quality Impairments on National Forest System Lands</i> in appendix E regarding the use of BMPs on the forest.	FW-WATER-S-1
		BMPs		Update water uses inventory. Maintain and protect existing water rights and acquire additional water rights necessary to provide for all Forest water use needs.	See Forestwide Plan Components and Management Approaches for Water.  See Programmatic Agreements <i>Memorandum of Agreement on Fostering Collaboration and Efficiencies to Address Water Quality Impairments on National Forest System Lands</i> in appendix E regarding the use of BMPs on the forest.	FW-WATER-S-1
		BMPs		Maintain watershed structures which provide benefits and are economically efficient.	See Forestwide Plan Components and Management Approaches for Water.  See Programmatic Agreements <i>Memorandum of Agreement on Fostering Collaboration and Efficiencies to Address Water Quality Impairments on National Forest System Lands</i> in appendix E regarding the use of BMPs on the forest.	FW-WATER-S-1

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1987 Pg. #	Resource Sub Topic (where applicable)	Type of Guidance	1987 MIH Code	1987 Plan Guidance	Rationale (where is this guidance now?)	Related Plan Components in the Revised Forest Plan
		BMPs		Water quality and soil monitoring will be done in key locations to aid in identifying and correcting resource problems.	Forestwide Plan Components and Management Approaches for Water.  See Programmatic Agreements <i>Memorandum of Agreement on Fostering Collaboration and Efficiencies to Address Water Quality Impairments on National Forest System Lands</i> in appendix E regarding the use of BMPs on the forest.	FW-WATER-S-1

## Resource: Minerals

**Table M-8. Crosswalk of minerals resource guidance from the 1987 Forest Plan to related mineral resource guidance in the Revised Forest**

1987 Pg. #	Resource Sub Topic (where applicable)	Type of Guidance	1987 MIH Code	1987 Plan Guidance	Rationale (where is this guidance now?)	Related Plan Components in the Revised Forest Plan
80		Forestwide Standards & Guidelines	G01	Review, in cooperation with BLM, existing withdrawals to insure compliance with FLPMA. Consider release for exploration and development while adequately protecting surface resources.	This level of guidance is required under Forest Service directives and not required to be restated within the forest Plan.  See Forest Service Directives in FSM guidance in appendix E. <i>(FSM 2800 Minerals and Geology and FSM 2700 Special Uses Management)</i>  See relevant guidance for these resources in the Revised Plan in Special Uses, Leasable Energy Minerals.	FW-MINERAL-S-1 FW-LEASEMIN-S-1 FW-LANDSU-S-1

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1987 Pg. #	Resource Sub Topic (where applicable)	Type of Guidance	1987 MIH Code	1987 Plan Guidance	Rationale (where is this guidance now?)	Related Plan Components in the Revised Forest Plan
		Forestwide Standards & Guidelines	G04	Respond in a timely manner to oil and gas, geothermal, and other mineral lease applications. Response will normally be within 30 days of receipt of application, but extensive public involvement or environmental analysis needs may require more time. Such needs will be fully coordinated with the Bureau of Land Management (BLM).	<p>This level of guidance is required under Forest Service directives and not required to be restated within the Forest Plan.</p> <p>See FSM guidance in appendix E. (<i>FSM 2800 Minerals and Geology and FSM 2700 Special Uses Management</i>).</p> <p>See relevant guidance for these resources in the Revised Plan in Special Uses, Leasable Energy Minerals.</p>	FW-MINERAL-S-1 FW-LEASEMIN-S-1 FW-LANDSU-S-1
		Forestwide Standards & Guidelines	G05	Respond to requests for large quantities of mineral materials through the NEPA process, advertised sale (if appropriate), and permit administration where not needed for administrative use.	<p>This level of guidance is required under Forest Service directives and not required to be restated within the Forest Plan.</p> <p>See relevant guidance for mineral resources in the Revised Plan in Special Uses, Leasable Energy, and Minerals.</p> <p>See also <i>FSM 2800 Minerals and Geology</i> in Appendix E.</p>	FW-MINERAL-S-1 FW-LEASEMIN-S-1 FW-LANDSU-S-1
		Forestwide Standards & Guidelines	G06	Administer and process oil, and gas cases, per FSM 2822.41, R-3 Supplement 6, dated August 1983, or as amended. Control surface uses in mineral operations through plans of operations and permits which provide for protection of resource values. Process notices of intent and operating plans as needed.	<p>This level of guidance is required under Forest Service directives and not required to be restated within the Forest Plan.</p> <p>See <i>FSM 2700 Special Uses Management</i> (FSM 2726 Energy Generation and Transmission), in appendix e.</p> <p>See relevant guidance for these resources in the Revised Plan in Special Uses, Leasable Energy Minerals.</p>	FW-MINERAL-S-1 FW-LEASEMIN-S-1 FW-LANDSU-S-1

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1987 Pg. #	Resource Sub Topic (where applicable)	Type of Guidance	1987 MIH Code	1987 Plan Guidance	Rationale (where is this guidance now?)	Related Plan Components in the Revised Forest Plan
		Forestwide Standards & Guidelines	G07	Undertake mineral examination and contest actions on claims where activity is inconsistent with the mining laws.	<p>This level of guidance is required under Forest Service directives and not required to be restated within the Forest Plan.</p> <p>See <i>FSM 2800 Minerals and Geology</i> in appendix E.</p> <p>See Forestwide Plan Components and Management Approaches relevant to mineral resource management in the Minerals section.</p>	<p>FW-MINERAL-S-1  FW-LEASEMIN-S-1  FW-LANDSU-S-1</p>



## Resource: Landownership Management

**Table M-9. Crosswalk of landownership management resource guidance from the 1987 Forest Plan to related landownership resource guidance in the Revised Forest Plan**

1987 Pg. #	Resource Sub Topic (where applicable)	Type of Guidance	1987 MIH Code	1987 Plan Guidance	Rationale (where is this guidance now?)	Related Plan Components in the Revised Forest Plan
83		Forestwide Standards & Guidelines	J04	Review mineral withdrawal needs by the end of Fiscal Year 1988.	Any guidance related to mineral withdrawals will now exist in the Mineral resource section of the Revised Plan, but is program work that is not necessary to be included in the forest plan.	
		Forestwide Standards & Guidelines	J05	Maintain land status records by updating as needed.	This is basic program of work and not appropriate for plan direction. This guidance was not carried forward into the Revised Plan.	
		Forestwide Standards & Guidelines	J06	Update and maintain landline location data base as additional corners are found and boundary is posted.	The forest no longer maintains landline location data. This is performed by the Regional Office.	
		Forestwide Standards & Guidelines	J06 J07	Survey, post and maintain National Forest landlines in conformance with national standards.	These actions are performed by the Regional Office.	
		Forestwide Standards & Guidelines	J10	Continue to take action on occupancy trespass.	This is program work and not required to be restated within the forest plan.	
		Forestwide Standards & Guidelines	J11 J12	Rewrite landownership plans on all Ranger Districts in the first decade. These plans will identify base-in-exchange and desirable lands for acquisition.	Current Forest guidance includes criteria for acquisitions that seek to determine a given property's feasibility or desirability for acquisition once it is actually for sale.  See Forestwide Plan Components and Management Approaches for Cross-Boundary Management.	FW-XBOUND-G-2

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1987 Pg. #	Resource Sub Topic (where applicable)	Type of Guidance	1987 MIH Code	1987 Plan Guidance	Rationale (where is this guidance now?)	Related Plan Components in the Revised Forest Plan
		Forestwide Standards & Guidelines	J13 J14	<p>The land exchange program operates under several authorities and is the major land adjustment program that can be employed to acquire the lands that meet the acquisition criteria. The lands offered by the United States in a land exchange are tentatively classified as base in exchange. Currently, the Santa Fe National Forest contains 6,000 acres that have been classified as base in exchange. Because local and physical conditions may change during the life of this plan, lands classified as base in exchange will generally meet one or more of the following criteria:</p> <ol style="list-style-type: none"> <li>1. Within designated wilderness.</li> <li>2. Contain essential or critical habitat for threatened, endangered, sensitive, or other key wildlife species.</li> <li>3. Needed for developed and dispersed recreation.</li> <li>4. Wetlands or riparian areas.</li> <li>5. Contain unique, natural, or cultural values.</li> <li>6. Will improve public land management, meet specific administrative needs, or benefit other National Forest programs.</li> <li>7. Provide needed access, protection from fire, or prevention of damage to public land resources.</li> <li>8. Need rehabilitation or stabilization to restore their productivity.</li> <li>9. Needed to block up public land ownership or meet research needs.</li> <li>10. Needed to meet programs prescribed or endorsed by Congress or the Department of Agriculture.</li> <li>11. Contain needed rights-of-way and will contribute to the Forest resource management base.</li> </ol>	<p>These situations are rare and handled on a case-by-case basis at the program level.</p> <p>See Forestwide Plan Components and Management Approaches for Cross-Boundary Management.</p>	FW-XBOUND-G-2

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1987 Pg. #	Resource Sub Topic (where applicable)	Type of Guidance	1987 MIH Code	1987 Plan Guidance	Rationale (where is this guidance now?)	Related Plan Components in the Revised Forest Plan
		Forestwide Standards & Guidelines	J18	Rights-of-way will be obtained to support resource management needs. The preferred method of obtaining rights-of-way will be through negotiations and willing seller consent. Condemnation will be used after failure to reach negotiated agreements.	Condemnation is no longer used. This guidance was not carried forward.	
		Forestwide Standards & Guidelines	J20	Review the forest recreation and visitor map annually and update on at least an 8 year interval to maintain accuracy.	The Travel Management Rule supersedes this direction. See <i>36 CFR 212 Travel Management</i> , in Appendix E.	
		Forestwide Standards & Guidelines	J22	Develop and maintain a Forest Plan and Forest data base in compliance with NFMA and NEPA. This includes a review by the Forest Supervisor of the lands covered by the plan at least every 5 years. Based on the findings from monitoring or other interdisciplinary evaluation processes, amendments to the plan may be made following appropriate public notification and satisfactory completion of NEPA procedures (36 CFR 219.10).	The Planning Rule supersedes this guidance to develop and maintain a forest plan. See the Code of Federal Regulation <i>36 CFR § 219.9(b)</i> . This is not listed in appendix E, but is mentioned throughout the Revised Plan.	

## Resource: Roads

**Table M-10. Crosswalk of roads resource guidance from the 1987 Forest Plan to related road resource plan components and guidance in the Revised Forest Plan**

1987 Pg. #	Resource Sub Topic (where applicable)	Type of Guidance	1987 MIH Code	1987 Plan Guidance	Rationale (where is this guidance now?)	Related Plan Components in the Revised Forest Plan
90		Forestwide Standards & Guidelines	L01	Emphasize reconstruction and rehabilitation of existing roads over new road construction.	See Forestwide Plan Components and Management Approaches for Roads.	FW-ROADS-G-7
		Forestwide Standards & Guidelines	L01 L02 L06	Roads and facilities will be planned, designed and constructed at the minimum standards which serve the needs of resource management activities. In compliance with NEPA requirements.	See Forestwide Plan Components and Management Approaches for Roads.	FW-ROADS-G-1
		Forestwide Standards & Guidelines	L19 J01	Clearing of vegetation along rights-of-way, facilities and special use sites will be limited to that which poses a hazard to the facility and operational efficiency. Method will be determined using selection criteria in F03, Watershed Management section.	Use of specific methods would be considered a project-level decision under facilities guidance.  Relevant guidance for facilities exists in Forestwide Plan Components and Management Approaches for Facilities. Some mention of rights-of-way exists in the designated areas section of the Revised Plan (see the DA component codes in next column)	FW-REALTY-G-1 FW-LANDSU-DC-4 DA-WSR-S-7 DA-WSR-S-8 DA-CDNST-G-8
		Forestwide Standards & Guidelines	L19	Road system operation will include evaluating use and effects of use, imposing user restrictions where appropriate and necessary, and informing users through guides, signs, and personal contact.	See Forestwide Plan Components and Management Approaches for Roads.  See <i>36 CFR 212 Travel Management</i> in Appendix E.	FW-ROADS-DC-6 FW-ROADS-S-1 FW-ROADS-G-1 FW-ROADS-MA-2
		Forestwide Standards & Guidelines	L19	Clarify jurisdictional responsibility for roads by issuing USDA easements to the State and counties. Cooperate with counties in obtaining deeded ROWs for Forest access roads they maintain. Acquire ROWs for Forest roads maintained by the Forest.	See Forestwide Plan Components and Management Approaches for Roads.	FW-REALTY-DC-1 FW-REALTY-DC-2 FW-REALTY-DC-3 FW-ROADS-DC-6 FW-ROADS-S-1 FW-ROADS-MA-5

**Resource: Fire**

**Table M-11. Crosswalk of fire resource guidance from the 1987 Forest Plan to related plan fire resource plan components and guidance in the Revised Forest Plan**

1987 Pg. #	Resource Sub Topic (where applicable)	Type of Guidance	1987 MIH Code	1987 Plan Guidance	Rationale (where is this guidance now?)	Related Plan Components in the Revised Forest Plan
92		Forestwide Standards & Guidelines	P01	The National Fire Management Analysis System will be used to plan for and evaluate the most cost efficient fire protection organization and program for the Forest.	The agency's approach to fire management has evolved significantly since 1987, and is now a more integrated management program with many systems and tools to use fire for management or to detect wildfires. Fire management contains a lot of site-specific guidance and regulation. Under the 2012 Planning Rule, we are required to follow plan direction that fits within current budgets.  See Forestwide Plan Components and Management Approaches for Fire.	FW-FIRE-S-2 FW-FIRE-S-3
		Forestwide Standards & Guidelines	P02	Establish the prevention program as needed to reduce preventable person caused fires. Coordinate prevention activities with adjacent landowners and other public land managing agencies.	See Forestwide Plan Components and Management Approaches for Fire.	FW-FIRE-MA-11
		Forestwide Standards & Guidelines	P03	Detection activities will be implemented as needed on Federal, State, and adjacent private lands.	See Forestwide Plan Components and Management Approaches for Fire.	FW-FIRE-MA-2
		Forestwide Standards & Guidelines	P04 P07	Coordinate suppression objectives with surrounding landowners and public land agencies.	See Forestwide Plan Components and Management Approaches for Fire.	FW-FIRE-MA-2 FW-FIRE-S-2 FW-FIRE-G-3

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Appendix M. Crosswalk between 1987 Santa Fe Forest Plan (as amended) and the Revised Forest Plan

1987 Pg. #	Resource Sub Topic (where applicable)	Type of Guidance	1987 MIH Code	1987 Plan Guidance	Rationale (where is this guidance now?)	Related Plan Components in the Revised Forest Plan
		Forestwide Standards & Guidelines	P03 P08	Air traffic will be coordinated to minimize impacts on Peregrine falcon and Bald Eagle.	<p>Fortunately, air traffic does not tend to impact T&amp;E species on the Santa Fe NF. The ground-dwelling Jemez Mountain salamander, New Mexico meadow jumping mouse, and Holy Ghost ipomopsis are not impacted at all by air traffic. The Mexican spotted owl, which could be impacted, lives in dense mixed conifer stands where there is little to no direct flyovers.</p> <p>Peregrine falcon and the bald eagle are now managed under At-Risk Species in the Revised Plan. To assist in the development of plan components, each at-risk species on the Santa Fe NF is now associated with a primary ERU where most of their life-cycle requirements are secured.</p> <p>See Forestwide Plan Components and Management Approaches for PPF, MCD, MCW ERUs.</p>	FW-ATRISK-G-1 FW-PPF-DC-1 FW-MCW-DC-1 FW-MCD-DC-1
		Forestwide Standards & Guidelines	P09	Fires which exceed the suppression objectives are considered escape fires and appropriate response will be determined by an escape fire situation analysis.	The agency's approach to fire management has evolved significantly since 1987, and is now a more integrated management program with many systems and tools to use fire in forest management or to detect and manage wildfires. Fire management contains extensive site-specific guidance and regulation under current forest management. This guidance is not carried forward as this direction is not relevant to the agency's current approach to fire management.	
		Forestwide Standards & Guidelines	P11 P12 P13	Prescribed fire, using planned and unplanned ignitions, will be used to enhance and accomplish resource objectives, particularly in fire dependent ecosystems.	See Forestwide Plan Components and Management Approaches for Fire and Vegetation.	FW-VEG-O-1 FW-FIRE-DC-2 FW-FIRE-DC-7 FW-FIRE-G-1 FW-FIRE-MA-2

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1987 Pg. #	Resource Sub Topic (where applicable)	Type of Guidance	1987 MIH Code	1987 Plan Guidance	Rationale (where is this guidance now?)	Related Plan Components in the Revised Forest Plan
		Forestwide Standards & Guidelines	P11	Fuels treatment will be coordinated with wildlife habitat needs. Prescribed fire will be utilized to minimize high intensity fire risk in essential T&E habitat. Existing and potential snags needed for wildlife habitat will be protected.	See Forestwide Plan Components and Management Approaches for Fire and At-Risk Species.	FW-ATRISK-G-1 FW-ATRISK-G 4 FW-FIRE-DC-2

## **Resource: Management Areas**

The forest has several areas requiring different management that cannot be met through forestwide plan components and are not designated areas. These areas are identified as management areas. Management areas are similar to designated areas, but differ in that they are defined as part of the forest plan and not designated by Congress or administratively established. Management areas can include proposed designated areas, such as proposed research natural areas, recommended wilderness, or eligible wild and scenic rivers that are managed as management areas until they are designated. A management area represents a management emphasis for an area or several similar areas across the landscape.

Management areas in the Revised Plan include:

- Caja del Rio Wildlife and Cultural Management Area
- Cañada Bonita Recommended Research Natural Area
- Cultural Interpretive Management Area
- Oil and Gas Leasing Management Area
- Recommended Wilderness Management Area
- Eligible Wild and Scenic River Management Area

The management area maps included in attachment A, provide a visual of the transition of management areas from the 1987 Plan to the Revised Plan. The management areas of the 1987 Plan are distinct from the proposed management areas of the Revised Plan. The 21 (labeled A through X) management areas in the 1987 Plan directed guidance that was more prescriptive and site-specific, whereas management areas of the Revised Plan include only the list above and allow comprehensive forestwide guidance to cover the rest of the forest. The sections below are organized by resource and point to where guidance can be found for these topics in the Revised Plan. Appendix E of the Revised Plan contains any relevant laws, regulations, and policy that may be pertinent to the management of a specific resource or activity.

### **Recreation**

Forestwide plan components and management approaches that specifically address recreation guidance can be found in these sections: Recreation, Developed Recreation, and Dispersed Recreation, and Recreation (Special Use).

Forestwide plan components address relevant recreation guidance in each of these resource areas: Fire, Water, Riparian and Wetland Ecosystems, Aquatic Species Habitat, At-Risk Species, Soil, Air, Partners, Tribes, Archeology, Forestry, Range, Roads, Facilities, Cross-Boundary Management, Caves, and Scenic.

Each management area has unique guidance related to recreation within the boundaries of those areas.

Appendix E of the Revised Plan contains any relevant laws, regulations, or guidelines not listed in the Revised Plan, that direct management of rangelands across the forest.



## Cultural

See forestwide cultural resource related plan components and management approaches throughout the Revised Plan in various resource areas: Vegetation, Fire, Riparian and Wetland Ecosystems, Tribes, Rural Communities, Archaeology, Forestry, Rangeland, Recreation, Developed Recreation, Dispersed Recreation, Roads, Facilities, Cross-Boundary Management, Scenic, Wilderness, Significant Caves, Continental Divide National Scenic Trail, National Historic Trails, Caja, Oil and Gas Leasing, and Recommended Wilderness.

Appendix E contains any relevant laws, regulations, or guidelines not listed in the Revised Plan that direct management of cultural and historic resources across the forest.

## Wildlife

Forestwide plan components and management approaches in the Revised Plan address wildlife guidance in many resource areas: Vegetation, Mountain Sub Alpine Grasslands, Colorado Plateau Great Basin, Water, Riparian and Wetland Ecosystems, Aquatic Species Habitat, Terrestrial Species Habitat, At-Risk Species, Tribes, Forestry, Range, Developed Recreation, Roads, Facilities, Cross-Boundary Management, Minerals, and Caves. Each management area has unique guidance related to wildlife.

Appendix E contains any relevant laws, regulations, or guidelines not listed in the Revised Plan that direct management of wildlife (including threatened and endangered species), across the forest.

## Range

Forestwide plan components and management approaches in the Revised Plan address the management of rangelands across the forest in the Range section. This section includes desired conditions, objectives, standards, and guidelines specific to range management that apply across the forest. There are also several management approaches. This is an extensive guidance section with over 30 component codes (including management approaches). Some component codes regarding rangelands exist in the Wild Horse Territory section.

Appendix E contains any relevant laws, regulations, or guidelines not listed in the Revised Plan that direct management of rangelands across the forest.

## Timber

Forestwide plan components and management approaches for forest management can be found in these resource management areas: Forestry, Recreation, Water, Caves, Continental Divide National Scenic Trail (MA), and Recommended Wilderness (MA). Most guidance is in the Forestry section and each forest type (ERU) has unique guidance for desired conditions that must be met by any timber activities.

Appendix E contains any relevant laws, regulations, or guidelines not listed in the Revised Plan that direct management of timber resources across the forest.

## Minerals

See forestwide plan components and management approaches regarding mineral resources in these resource areas: Leasable Energy Minerals, Renewable Energy, Minerals.

See more specific mineral resource guidance in these designated areas and management areas of the Revised Plan: Research Natural Areas, Wild and Scenic Rivers, Cañada Bonita Recommended Research Natural Area, Oil & Gas Leasing, and Recommended Wilderness.

Appendix E contains any relevant laws, regulations, or guidelines not listed in the Revised Plan that direct management of mineral resources across the forest.

### **Lands (Utility Corridors, Special Use Permits, Landownership Management)**

The Revised Plan has related forestwide guidance for Lands in sections: Realty, Lands Special Uses, and Recreation Special Uses. Other resource sections address related topics, as they apply to that specific resource. For example, there is specific guidance about utility corridors “New utility corridors must not be permitted or authorized,” in the Research Natural Areas (a designated area) resource area. Management related to private lands or lands of other ownership are addressed in the Realty resource section. The first desired condition for Realty is “NFS lands are largely contiguous and promote efficient and effective management of various lands and resources found within the forest.” Information about rights-of-way and access points can be found in Realty. Special use permitting plan components can be found in Developed Recreation, Lands Special Uses, Wilderness, Research Natural Areas, Continental Divide National Scenic Trail, National Recreation Trail, and the Cañada Bonito Management Area.

Appendix E contains any relevant laws, regulations, or guidelines not listed in the Revised Plan that address these various 1987 resource topics.

### **Roads**

The Roads section in the Revised Plan contains a full suite of forestwide plan components and management approaches that apply to all roads across the forest.

Guidance for roads also exists in each of these sections as they apply to that resource: Water, Riparian and Wetland Ecosystem, Terrestrial Species and Habitats, Rural Historic Communities, Forestry, Dispersed Recreation, Cross-Boundary Management, Realty, Lands Special Uses, Scenic, Inventoried Roadless Areas, Research Natural Areas, Wild and Scenic Rivers, Continental Divide National Scenic Trail Caja, Cañada Bonito Recommended Research Natural Area, Oil and Gas Leasing, Recommended Wilderness, Eligible Wild and Scenic River.

Appendix E contains any relevant laws, regulations, or guidelines not listed in the Revised Plan that direct road management across the forest.

### **Fire**

Guidance regarding Fire can be found in various sections as it applies to that resource: Fire, WUI, and each ERU has guidance directing the use of fire in management for that ERU. Fire is also mentioned in Vegetation, Water, Riparian and Wetland Ecosystems, Aquatic Habitat, Terrestrial Habitat, At-Risk Species, Soils, Air, Forestry, Range, Recreation, Developed Recreation, Dispersed Recreation, Facilities, Cross-Boundary Management, Land Special Uses, Caves, Scenic, and All Designated Areas.

Each designated area and management area has unique guidance related to fire within the boundaries of those areas.

Appendix E contains any relevant laws, regulations, or guidelines not listed in the Revised Plan that direct fire management across the forest.

## Watershed

The first component for desired conditions in the Water resource section states, “Watersheds are functioning properly according to metrics described by the Watershed Condition Framework, other current protocols, and Properly Function Condition (PFC) protocols. Functioning watersheds have the following characteristics: (list of a-e characteristics).” (FW-WATER-DC-1)

Watershed guidance can be found in each of these sections as it applies to that resource: Water, Vegetation, Riparian and Wetland Ecosystems, Aquatic Species Habitat, Soil, Forestry, Roads, Cross-Boundary Management, Leasable Energy Minerals, Renewable Energy, Minerals, Oil and Gas Leasing, Several Geographic Areas.

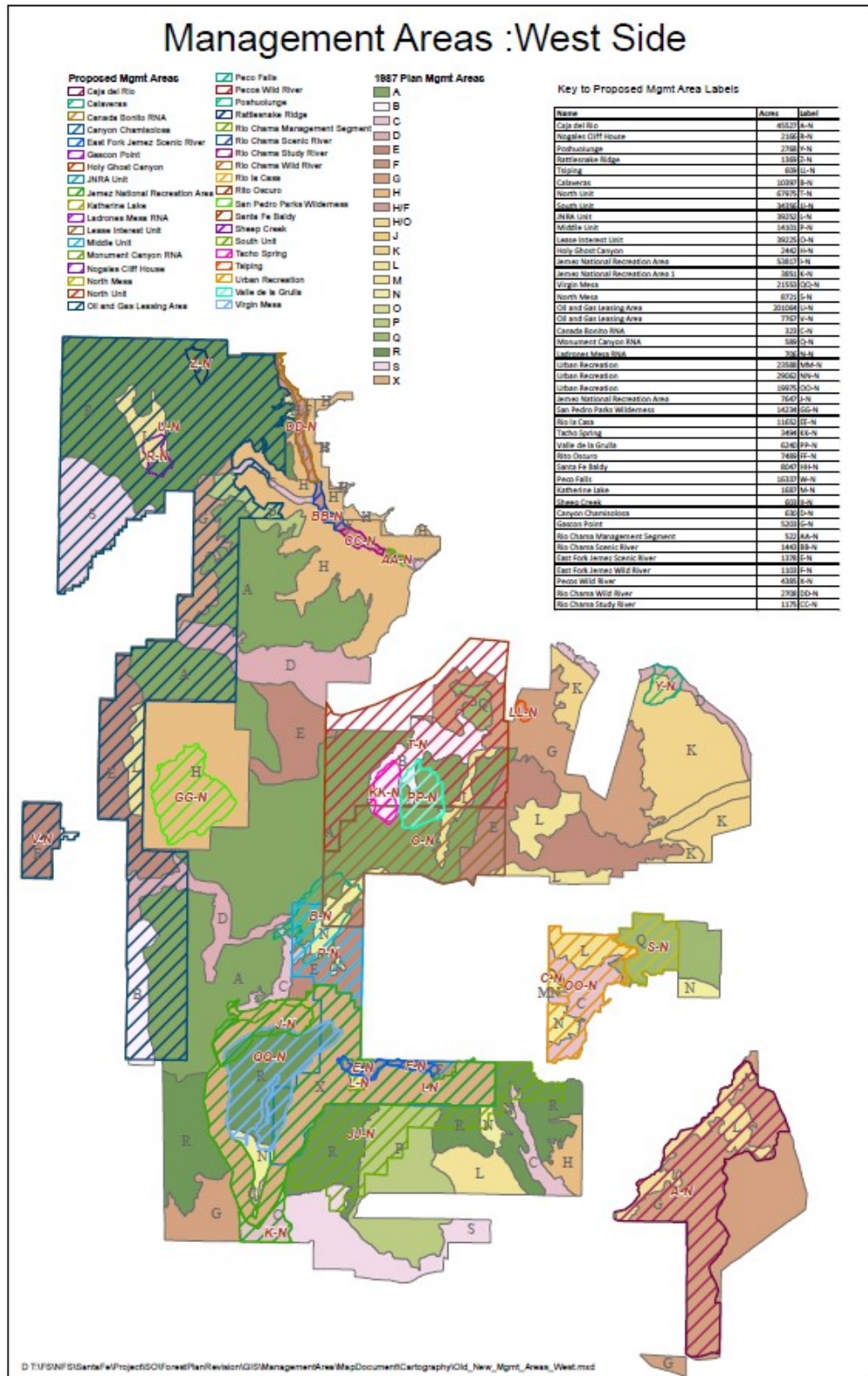
Appendix E contains any relevant laws, regulations, or guidelines not listed in the Revised Plan that directs watershed management across the forest.

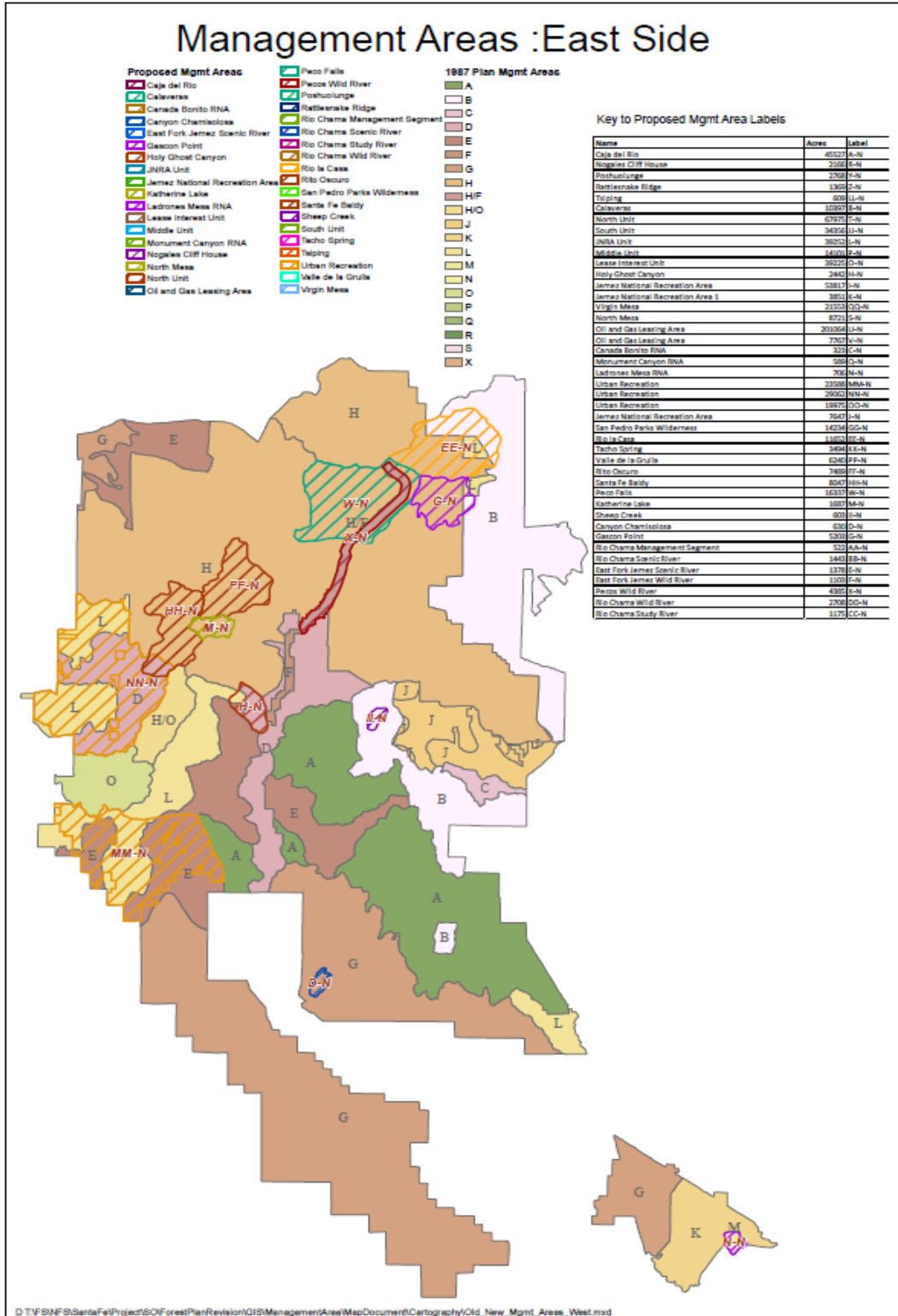
## Air

Air guidance can be found in: Vegetation, Forestry, Wilderness (DA), Wild and Scenic Rivers (DA), Recommended Wilderness (MA). The first desired condition for Air on the forest is that “Air quality meets or surpasses New Mexico and Federal ambient air quality standards.”

Also see the Monitoring Plan in Chapter 5 for Watershed, Soil, and Air monitoring information. Appendix E contains any relevant laws, regulations, or guidelines not listed in the Revised Plan that direct air management across the forest.

# Attachment A: Management Areas Crosswalk Maps





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## **Appendix N. Maps**

### **Scenic Integrity Maps by Alternative**

In the current (1987) Forest Plan (alternative 1) scenery management is done using visual management direction and Visual Quality Objective (VQO). Alternative 1 does not implement the Scenery Management System. Digital maps of VQO are only available for western portions of the forest and may not accurately reflect VQOs identified in management area direction. Since the VQO are not available in GIS for the entire forest, a map is not included in this FEIS. More detail (including a map of VQOs for the west side of the forest) can be found in the Assessment.

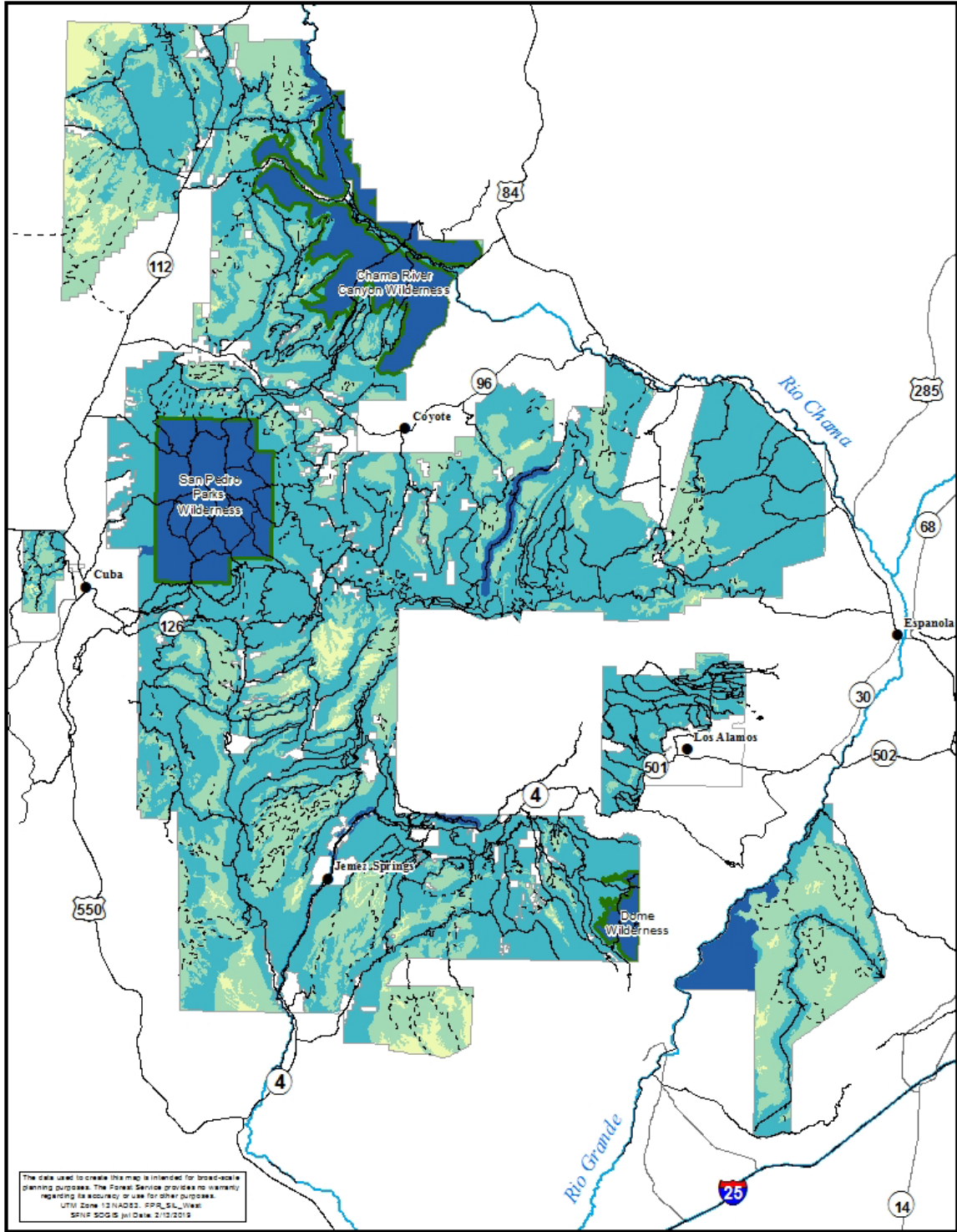


Figure N-1-west. Alternative 2 scenic integrity classifications for the western half of the Santa Fe NF, from Cuba to Española. For legend see Figure N-1-east.



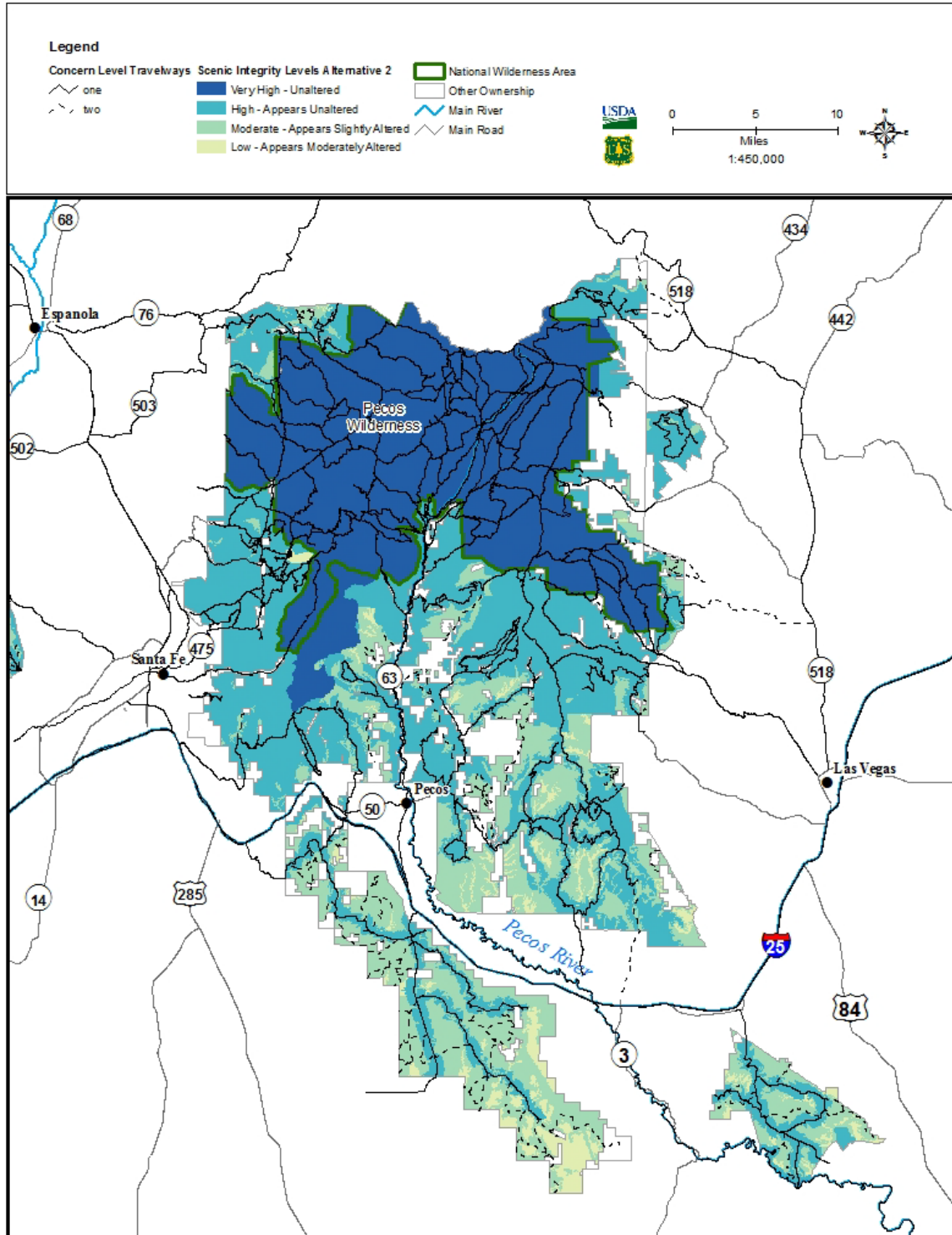


Figure N-1-east. Alternative 2 scenic integrity classifications for the eastern half of the Santa Fe NF, from Española to Las Vegas

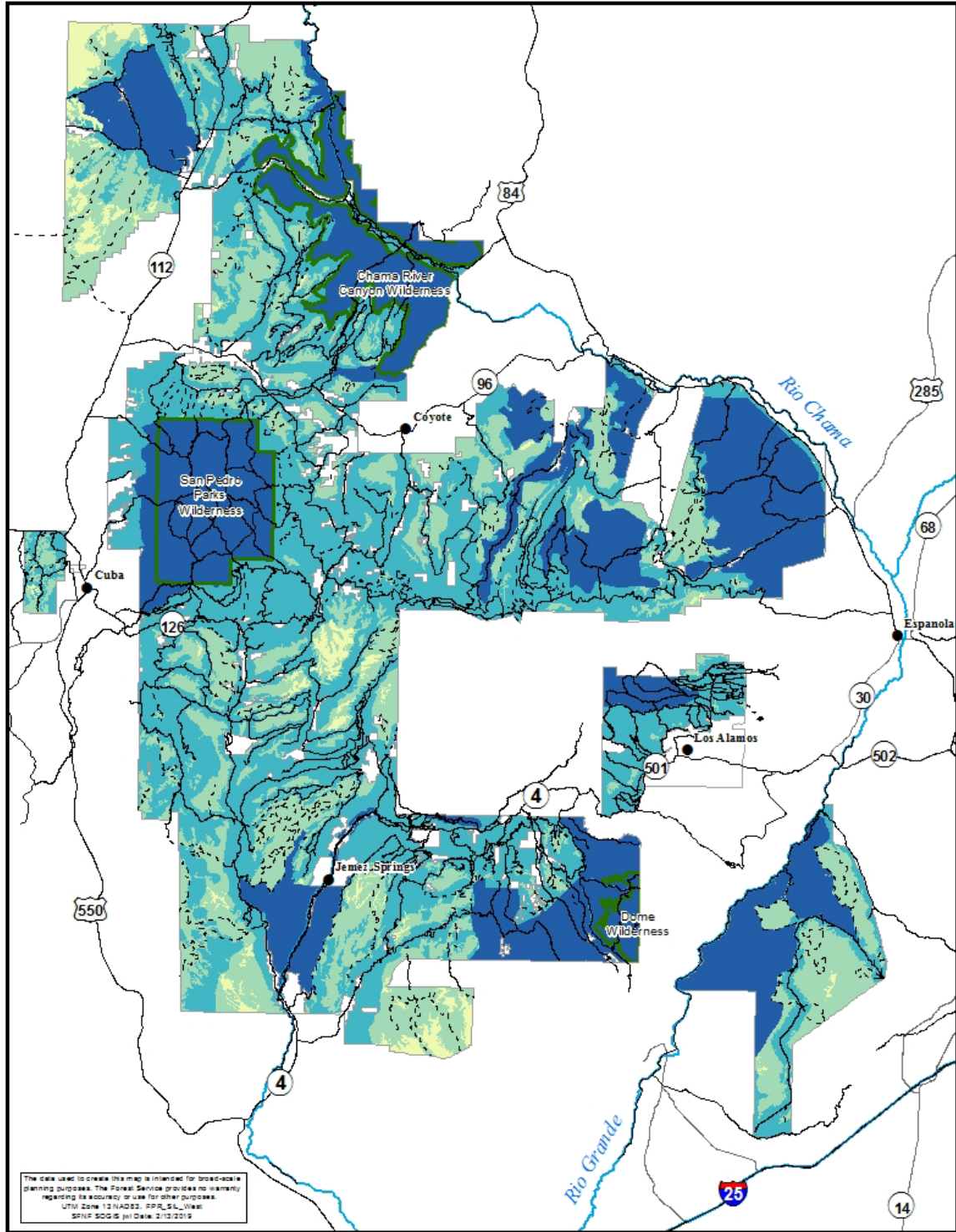


Figure N-2-west. Alternative 3 scenic integrity classifications for the western half of the Santa Fe NF, from Cuba to Española. For legend see Figure N-2-east.

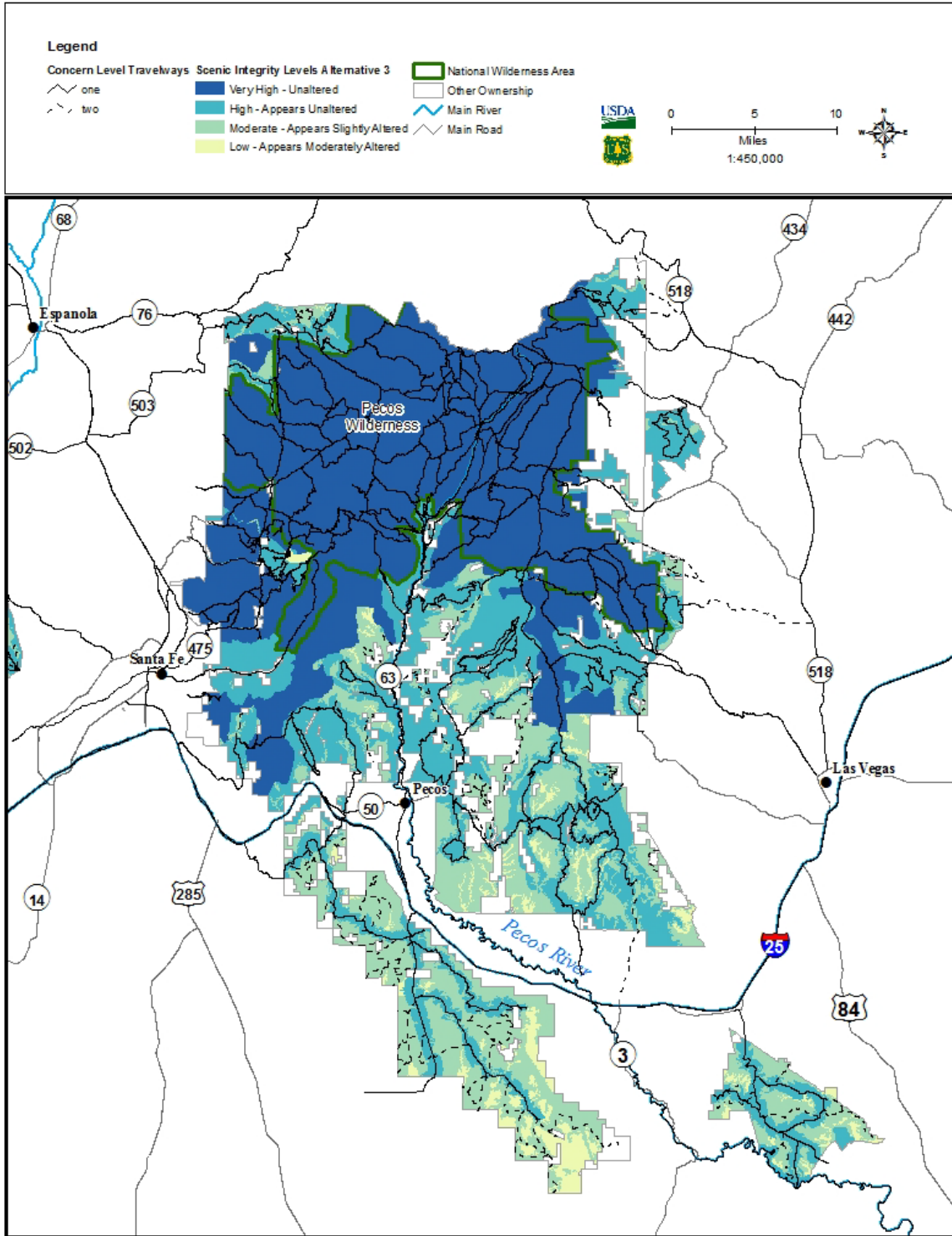


Figure N-2-east. Alternative 3 scenic integrity classifications for the eastern half of the Santa Fe NF, from Española to Las Vegas

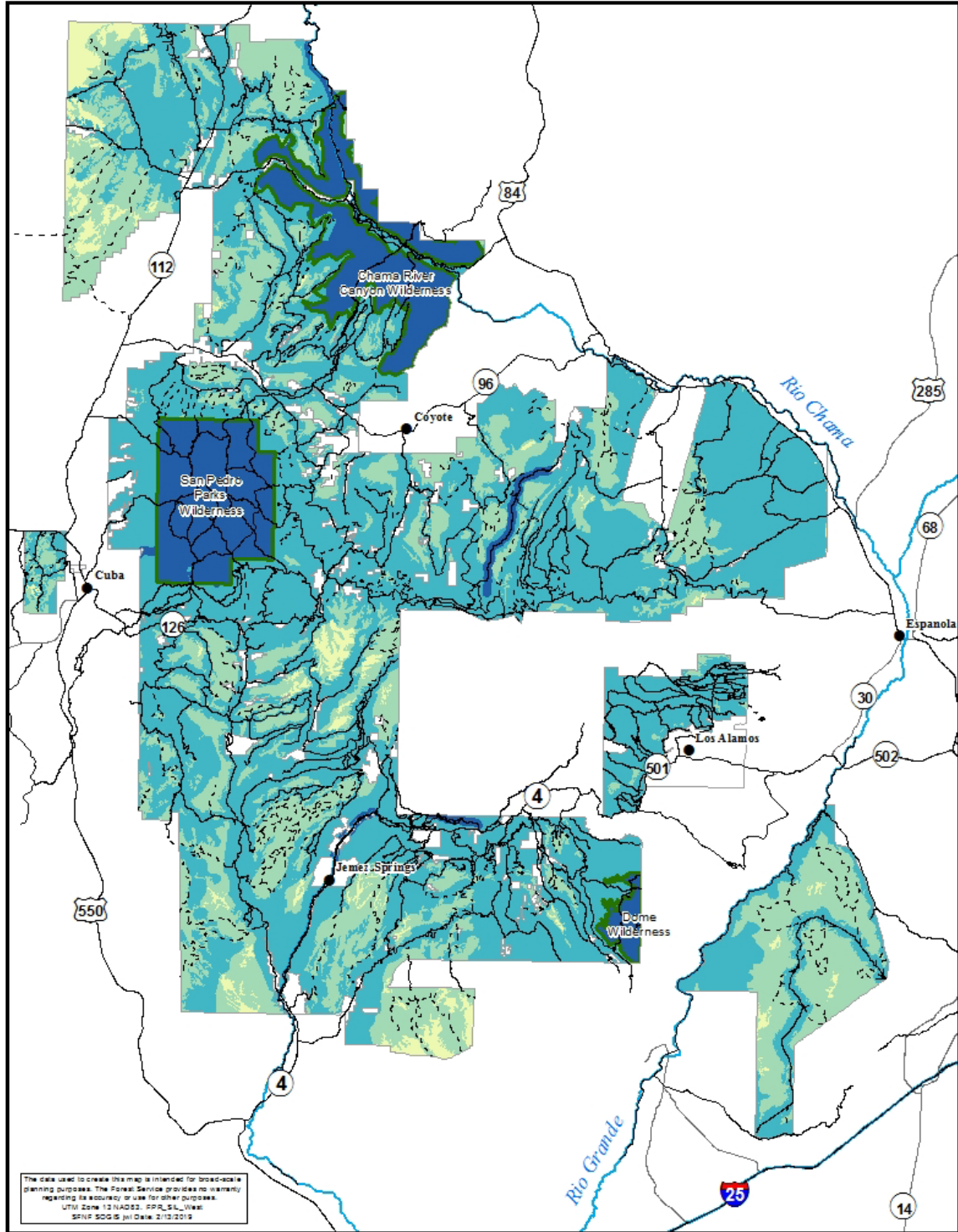


Figure N-3-west. Alternative 4 scenic integrity classifications for the western half of the Santa Fe NF, from Cuba to Española. For legend see Figure N-3-east.



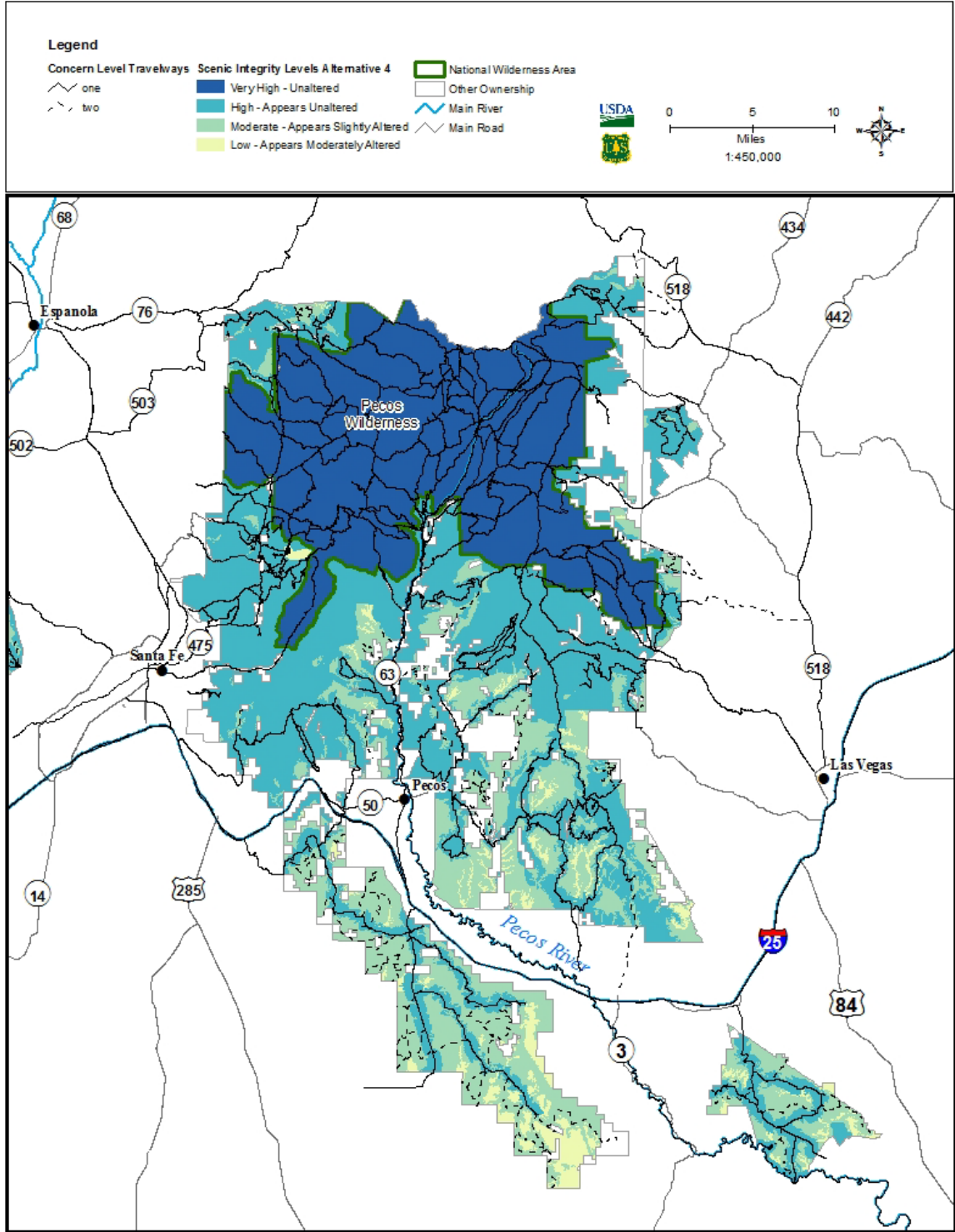
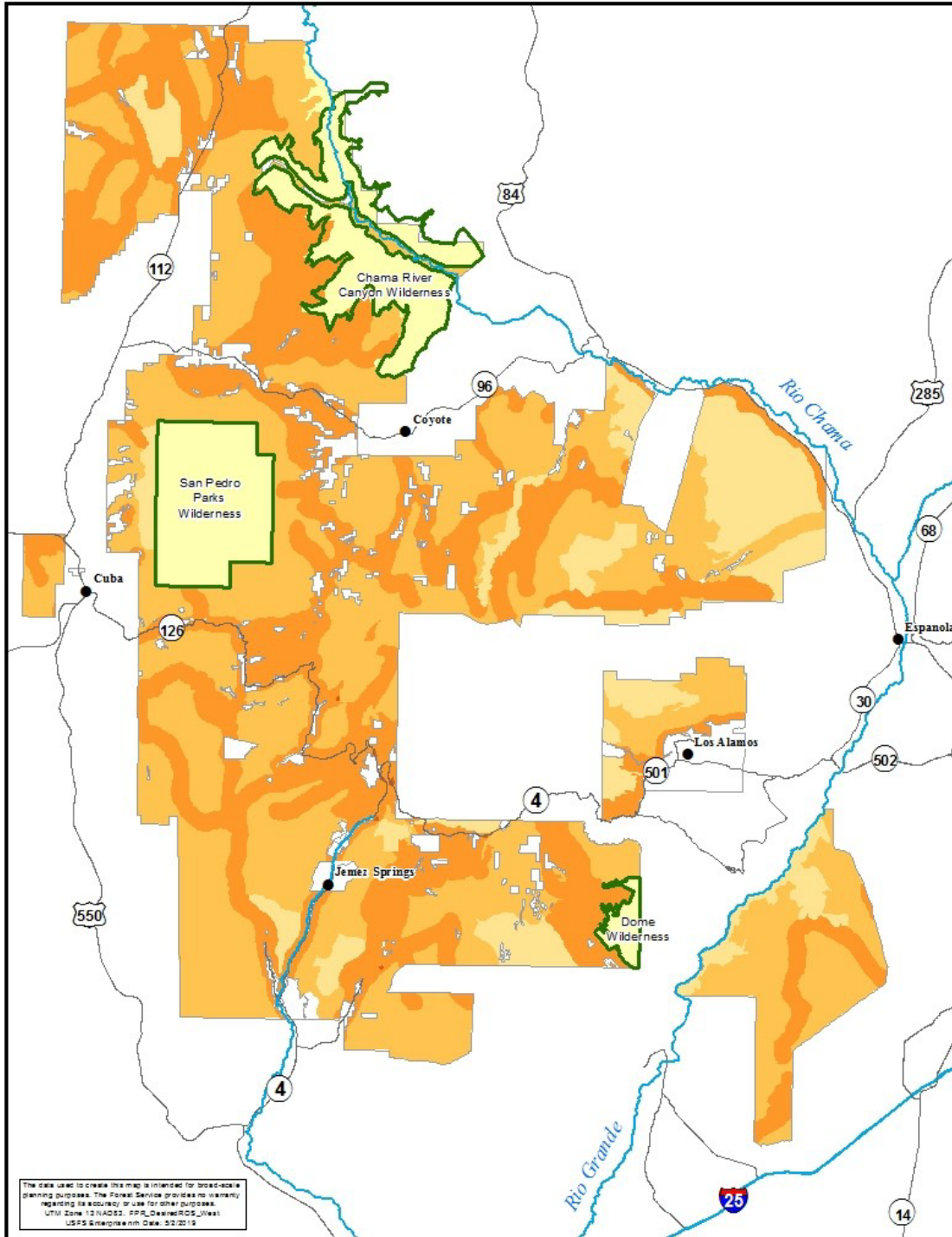
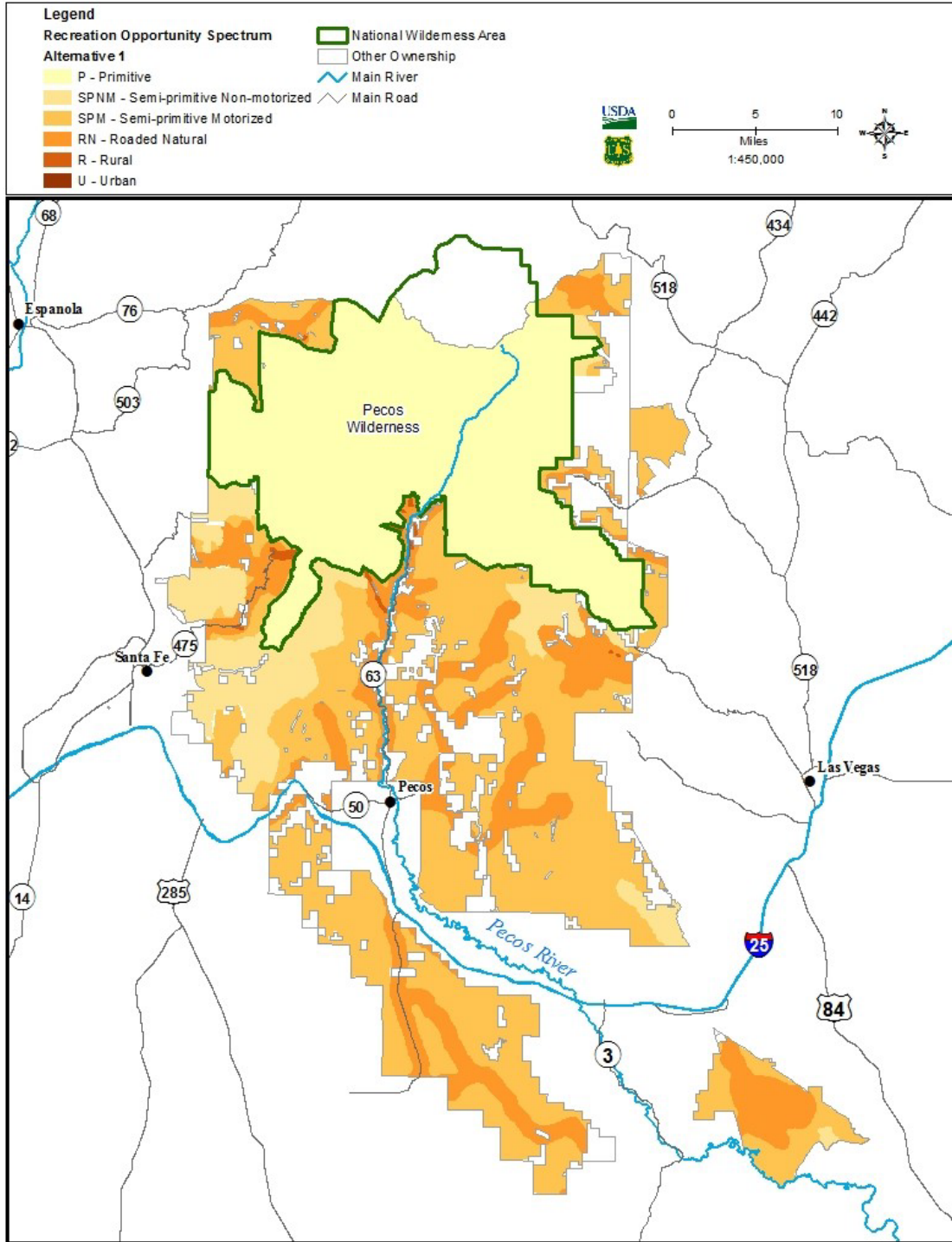


Figure N-3-east. Alternative 4 scenic integrity classifications for the eastern half of the Santa Fe NF, from Española to Las Vegas

## Desired Recreation Opportunity Spectrum Maps by Alternative



**Figure N-4-west. Alternative 1 recreation opportunity spectrum for the western half of the Santa Fe NF, from Cuba to Española. For legend see Figure N-4-east. These data represent ROS that was established in the 1987 Forest Plan, but may not identify which areas are currently providing what kinds of opportunities.**



**Figure N-4-east. Alternative 1 recreation opportunity spectrum for the eastern half of the Santa Fe NF, from Española to Las Vegas.**  
 These data represent ROS that was established in the 1987 Forest Plan, but may not identify which areas are currently providing what kinds of opportunities.

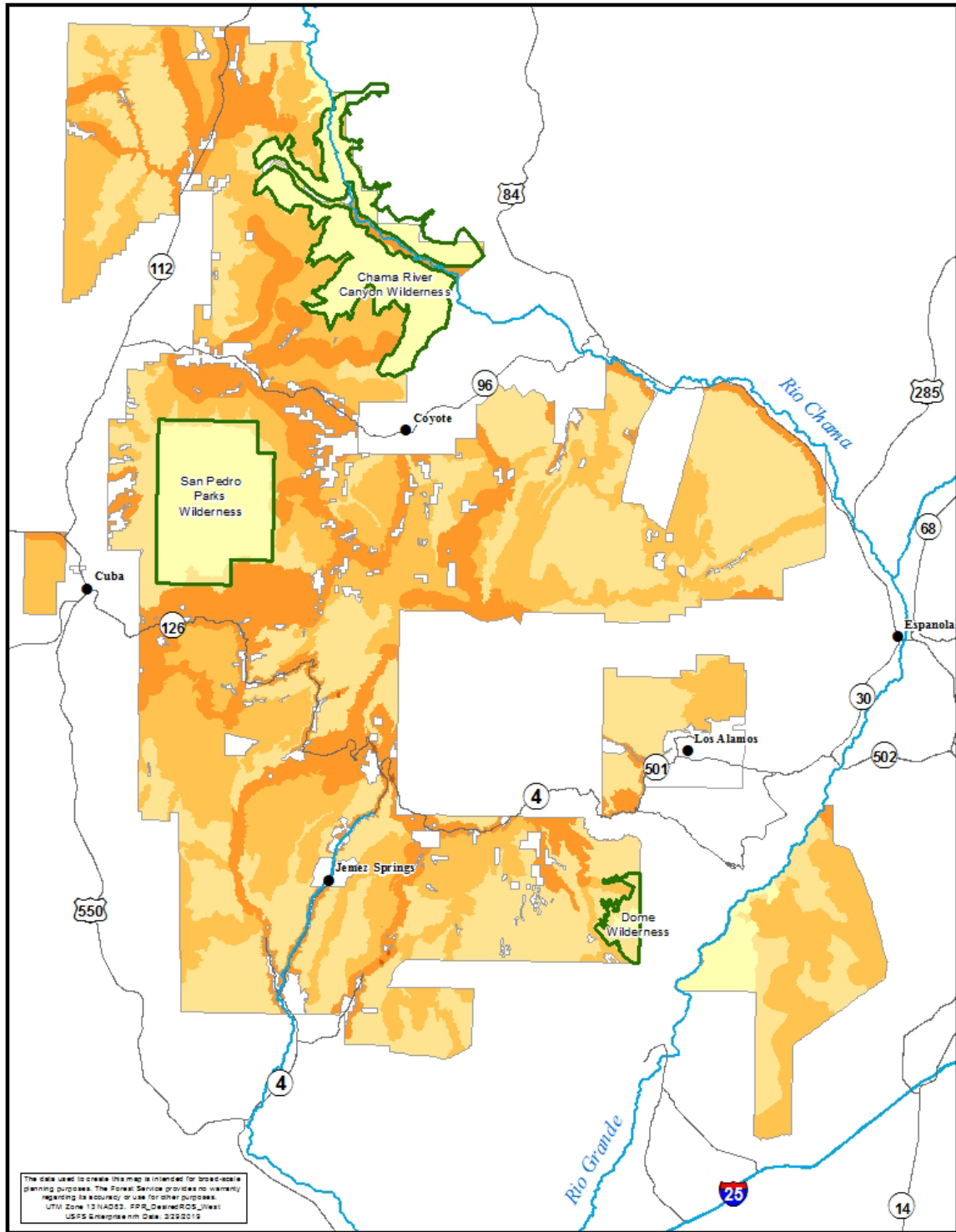


Figure N-5-west. Alternative 2 recreation opportunity spectrum for the western half of the Santa Fe NF, from Cuba to Española. For legend see Figure N-5-east.



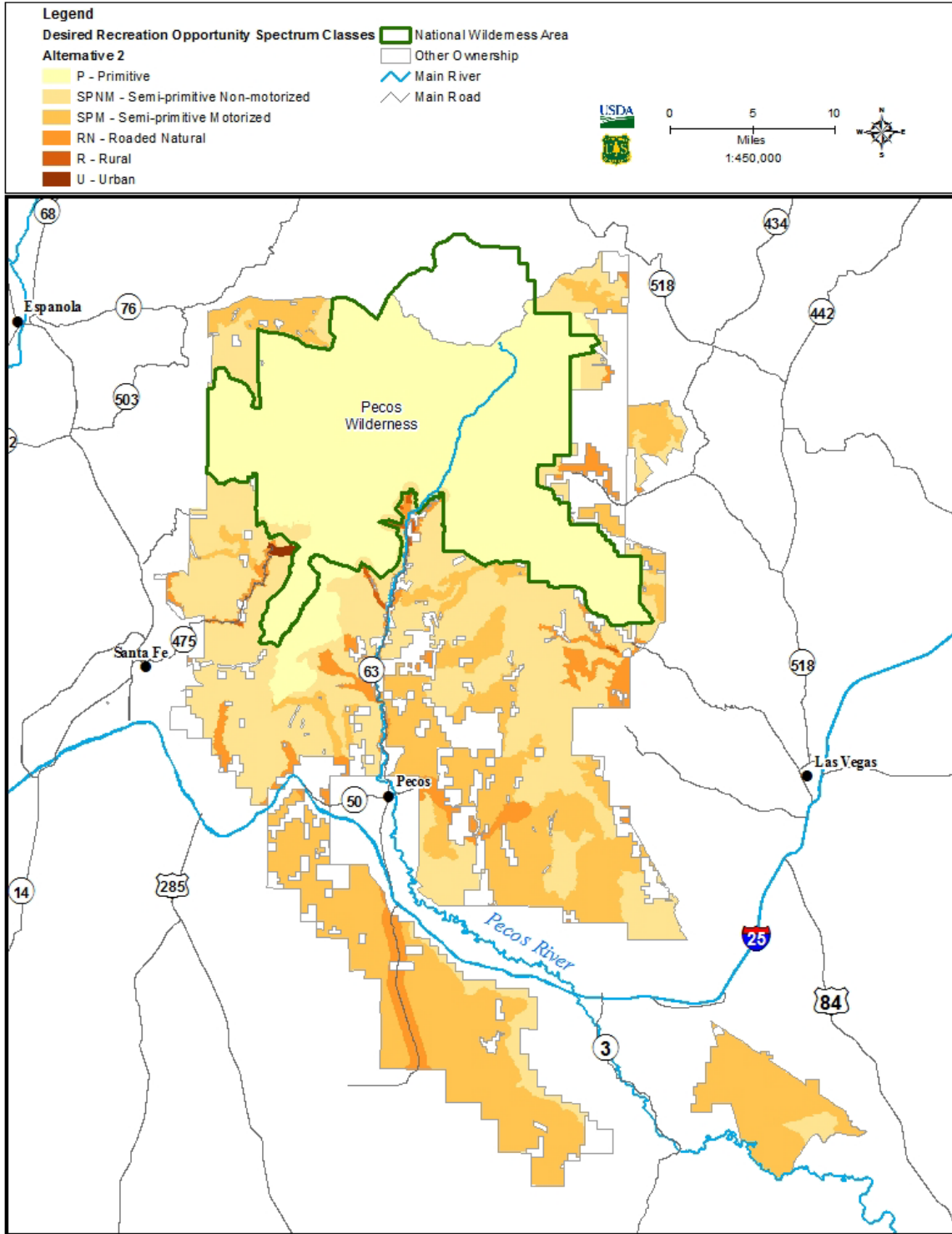


Figure N-5-east. Alternative 2 recreation opportunity spectrum for the eastern half of the Santa Fe NF, from Española to Las Vegas

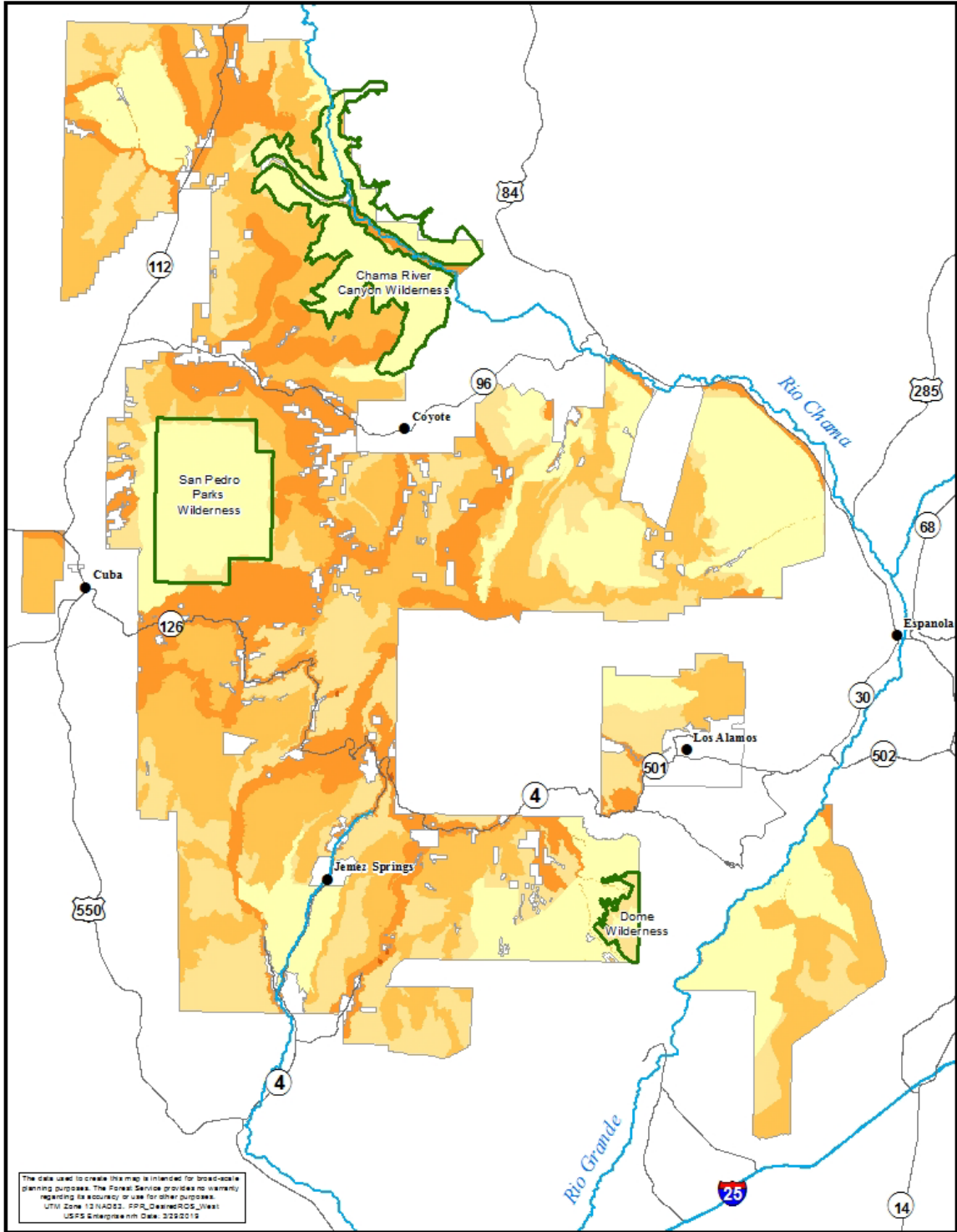


Figure N-6-west. Alternative 3 recreation opportunity spectrum for the western half of the Santa Fe NF, from Cuba to Española. For legend see Figure N-6-east.

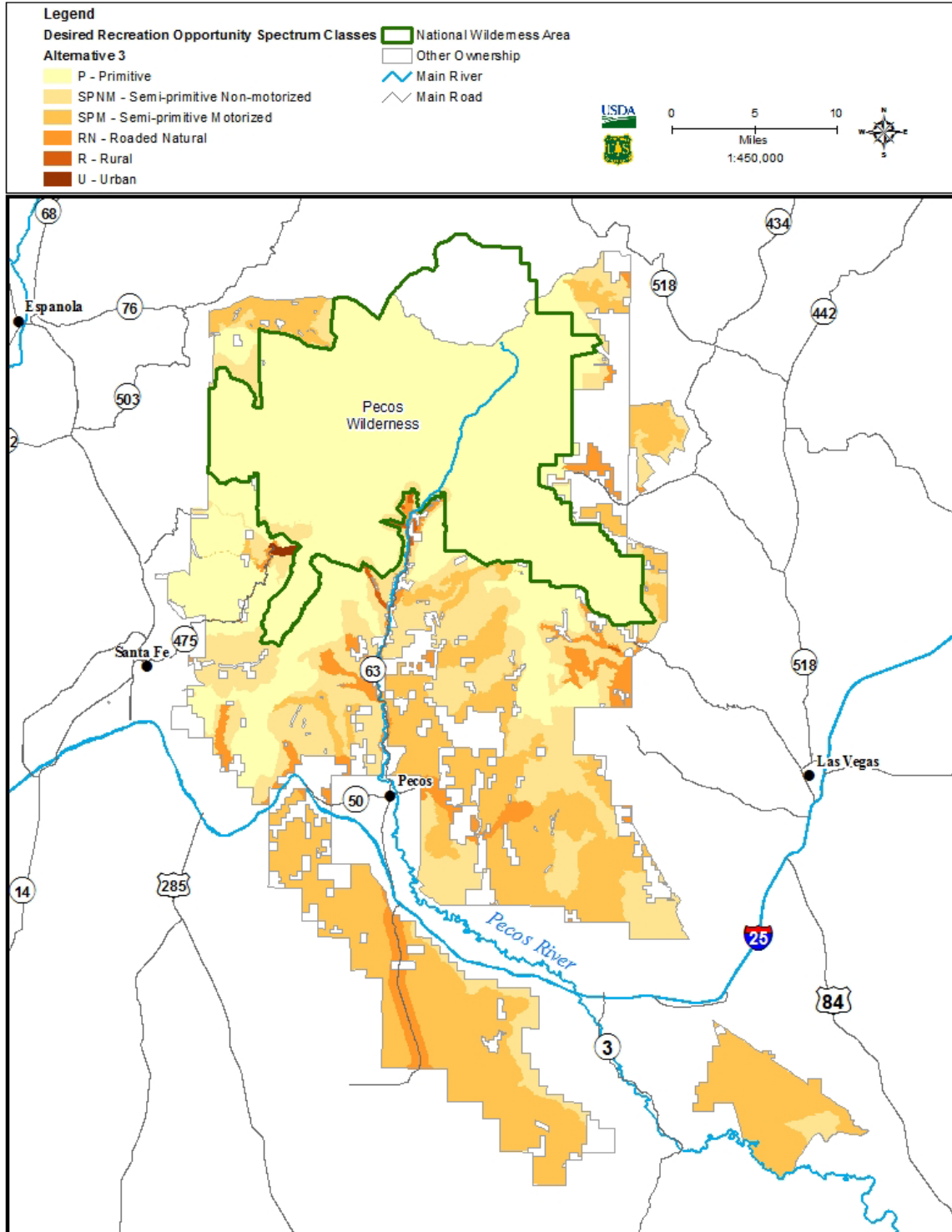


Figure N-6-east. Alternative 3 recreation opportunity spectrum for the eastern half of the Santa Fe NF, from Española to Las Vegas

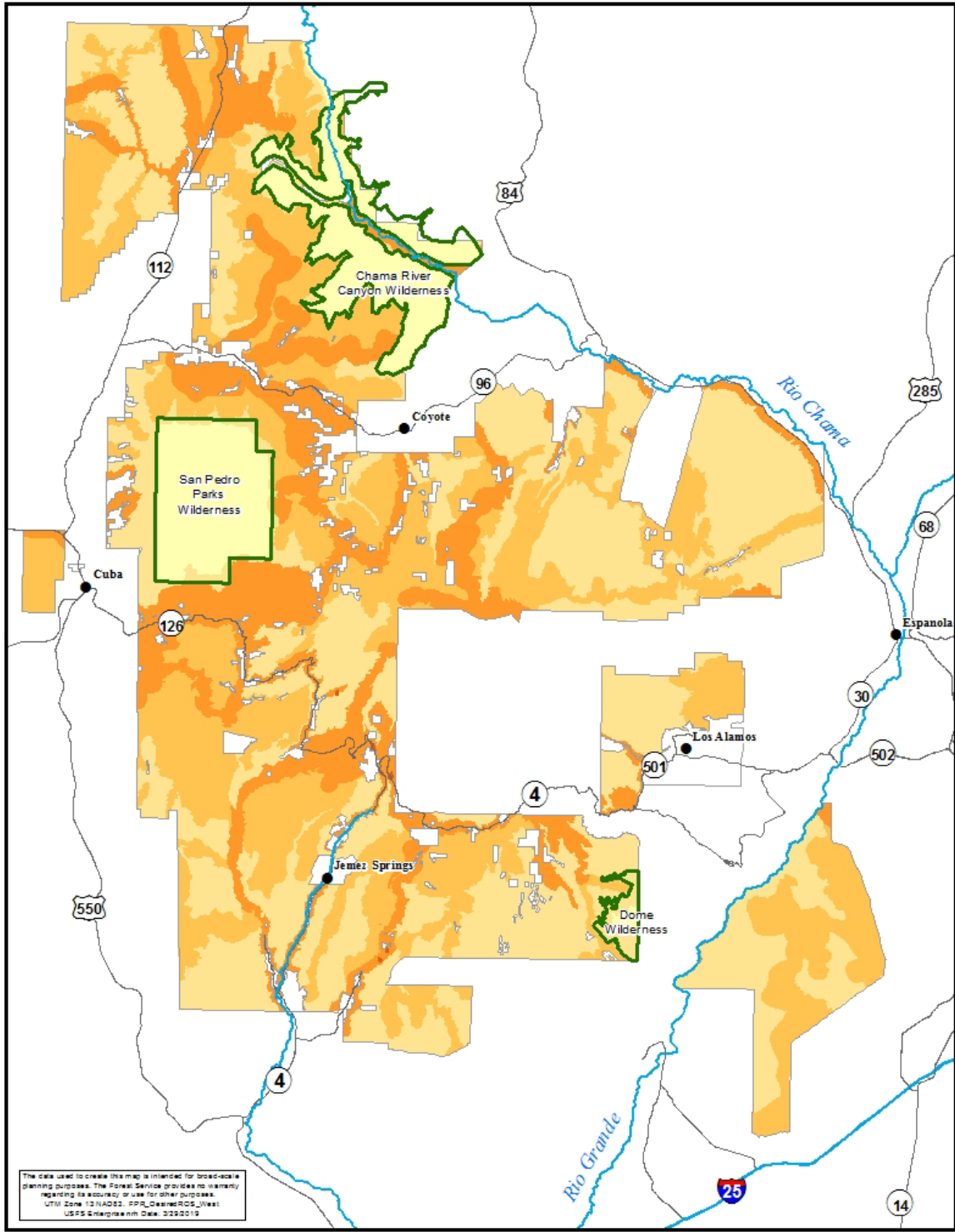


Figure N-7-west. Alternative 4 recreation opportunity spectrum for the western half of the Santa Fe NF, from Cuba to Española. For legend see Figure N-7-east.

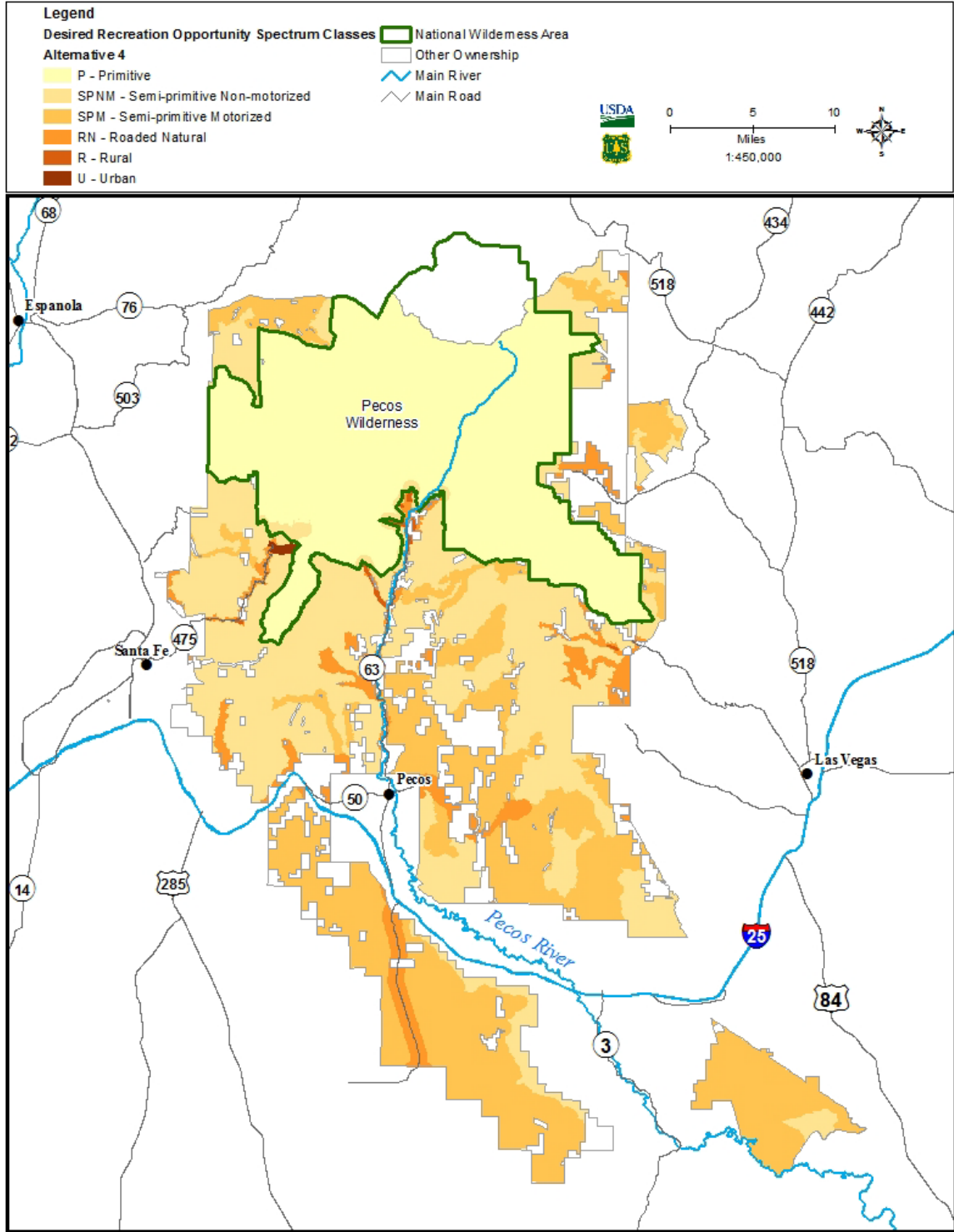


Figure N-7-east. Alternative 4 recreation opportunity spectrum for the eastern half of the Santa Fe NF, from Española to Las Vegas