**Cibola National Forest Mountain Ranger Districts**

***Evaluation Criteria Definition Matrix and Comment Form***

The Cibola National Forest plan revision interdisciplinary team developed draft questions and measures to address each of the five wilderness characteristic criteria listed in FSH 1909.12, Chapter 70- Wilderness. These are to be used to evaluate the Phase 2 Inventory areas for wilderness characteristics, and are outlined below.

Please use this form to comment on individual areas from the Phase 2 Inventory maps. Please use one form for each individual identification area, and note its identification number and location. If your comment is not addressed in the “considerations” column of each criterion, please include additional information in the “other” narrative section.

You can also comment using the Talking Points Collaborative Mapping Tool available at this website: <https://my.usgs.gov/ppgis/studio/launch/39829>. Please consider the evaluation criteria below when inputting comments on the online mapping tool.

**Inventory Identification Number/Location:**

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| **D3-5K14 and D3-5K15, Magdalena RD, Datil Mountains** |

**Criterion 1- Apparent naturalness: 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.**

**Question 1a. 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**.**

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| * **Considerations** | **Narrative** |
| * How are concentrations of invasive plants and/or animals distributed across the land? | **Polygons D3\_5K14 and D3\_5K15** contain invasive plants that are both native and unnatural across the land.  These invasive plants include excessive Juniper, Russian Thistle, Rubber Rabbit Brush, Koshia, and Snakeweed.  These invasive plants have removed this area away from the historical conditions of the natural site of this polygon.  It would require human management to regain these historic conditions of a Ponderosa Pine Forest pre Euro American settlement. |
| * Other (Include any additional information related to the question above) |  |

**Question 1b. What is the extent to which the area appears to reflect ecological conditions that would normally be associated with the area without human intervention?**

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| Considerations | Narrative |
| Extent that current vegetation species composition and structure has changed from historical conditions (pre-EuroAmerican settlement).[[1]](#footnote-1) | The current vegetation species composition and structure of **Polygons D3\_5K14 and D3\_5K15**, through human manipulation, has created a site that is substantially unnatural.  The only way to return this area to pre-Euro American status would be through extensive human intervention to include human management, equipment, fire, herbicides, etc.  With the restrictions that come with wilderness designations comes the inability to manage these areas in such a manner that historic conditions could be regained. |
| Vegetation restoration treatments (e.g. thinning) or timber harvest areas and distribution across the land (broadly dispersed vs. concentrated). This also includes associated railroad beds, skid trails, and logging decks of timber harvest areas. | **Polygons D3\_5K14 and D3\_5K15** contain several vegetation restoration treatment areas that include timber thinning and timber harvesting due to past management strategies. These areas are evident by the abundance of stump remnants and down trees and is not characteristic of authentic wilderness. Through the early to mid-1900’s the timber in this area was thinned/harvested to a point that it left the site lacking in old growth timber. With the lack of old growth timber also comes a lacking component of wildlife habitat for nesting birds and small mammals thus further removing this from what could be considered historic. The logging operation also created a system of roads and old dumpsites left over from logging camps. These roads and trails are used by motorized vehicles today. |
| Does the forest appear natural (consider elements, including but not limited to, vegetation, wildlife, soil, air, etc.)? | **Polygons D3\_5K14 and D3\_5K15** do not appear natural due to human intervention of vegetation restoration treatments, old logging roads, and current vegetation species. |
| Other (Include any additional information related to the question above) | **Polygons D3\_5K14 and D3\_5K15** contain vegetation restoration treatments that have created areas that appear altered and unnatural. These non-structural improvements are evident from many vantage points and consist of numerous stumps over 12”, as well as access roads associated with the improvements. |

##### **Question 1c. What is the extent to which improvements[[2]](#footnote-2) included in the area represent a departure from apparent naturalness?**

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| Considerations | Narrative |
| Appearance of airstrips, heliports, and/or landing zones. Include size of area and description of disturbance (soils, vegetation). | Evidence of past timber harvesting in **Polygons D3\_5K14 and D3\_5K15** is substantially noticeable. The network of roads precludes any reasonable finding of no imprints of humans. The extensiveness of the road system renders this area impossible for restoration or maintenance worthy of wilderness character.  This area should not be considered for wilderness. |
| Appearance and density of maintenance level 1 roads[[3]](#footnote-3) measured by road length per sq. mile, and spatial distribution (broadly interspersed vs. concentrated), occurrence of stream crossings, and proximity to streams channels. | The designated roads in Polygons **D3\_5K14 and D3\_5K15** are used to access existing range improvements associated with the grazing allotments. |
| Appearance and density of unauthorized routes (includes decommissioned, temporary, and user created routes per sq. mile) and distribution (broadly dispersed vs. concentrated, occurrence of stream crossings, and proximity to streams channels. | **Polygons D3\_5K14 and D3\_5K15** contain vegetation restoration treatments that have created areas that appear altered and unnatural. These non-structural improvements are evident from many vantage points and consist of numerous stumps over 12”, as well as access roads associated with the improvements. The roads within this polygon (including unauthorized routes) are currently utilized for a variety of recreation activities including woodcutting, hunting, camping, hiking, 4-wheeling, etc. The restoration and maintenance of this area should be considered in the evaluation process due to the degree it will require to preserve and manage in an unimpaired condition. |
| Miles of fencing or pipeline per square mile. | In **Polygons D3\_5K14 and D3\_5K15**, the existing fences surrounding this polygon are evident throughout vegetative openings. Several fences are located along slopes. They are viewable from both ground and aerial vantage points. Fences within this polygon are constructed of unnatural, reflective materials. Soil disturbance and clearing of vegetation for fence construction has occurred.  The concentration of fences, gates, and cattle guards does not lend itself to wilderness characteristics. |
| Appearance of areas of mining activity that were not eliminated in the Phase 2 inventory.[[4]](#footnote-4) Include size of area and description of disturbance (soils, vegetation) |  |
| Appearance of range or wildlife improvements that were not eliminated in the Phase 2 inventory. Include size of area and description of disturbance (soils, vegetation). | **Polygons D3\_5K14 and D3\_5K15** contain several range and wildlife improvements that were not eliminated in the Phase 2 inventory. These improvements include Trick Tanks, Springs, Developed Springs, Pit Tanks, Drinkers, and Wells as evident on the Phase II Wilderness Map.  **Polygon D3\_5K14**: A metered electric well is located near 570 and 569A. This area also contains a metal drinker and cattle working pens constructed of unnatural, reflective materials with little or no vegetative screening. In addition, this area is adjacent to private land with a road maintained by the county.  **Polygon D3\_5K15**: This polygon contains a metered electric well located near Forest Rd 66, an exposed pipeline, and a powerline running to boarding private property.  This area does not meet wilderness criteria. |
| Appearance of watershed treatment areas (such as contouring, diking, channeling) that were not eliminated in the Phase 2 inventory. Include size of area and description of disturbance (soils, vegetation). | **Polygons D3\_5K14 and D3\_5K15** contain several manmade dirt tanks that are utilized by both livestock and wildlife. In addition, this polygon also contains developed springs, a trick tank, electric well, and a windmill and drinker. These evident improvements have altered and contrast with the surrounding natural landscape. |
| Extent to which the improvements cause the appearance to depart from apparent naturalness to the area as a whole (Consider improvements listed above as well as water tanks, aviation crash locations, wreckage sites, locations of cemeteries or gravesites, bombing or ordinance locations, and viewshed analysis for proposed developments) | **Polygons D3\_5K14 and D3\_5K15** includes numerous structural and non-structural improvements including a large concentration of both maintained and unmaintained roads, fencing, and manmade water sources, which cause the appearance to depart from the naturalness of a wilderness experience. Ground disturbing improvements have exposed soils, causing undesirable deviations in color and texture. |
| Other (Include any additional information related to the question above) | High concentrations of structural and non-structural improvements have created an unnatural pattern across the proposed **Polygons D3\_5K14 and D3\_5K15**. The resulting imprint of humans does not provide outstanding opportunities for solitude or for a primitive and unconfined recreation, thereby, making this area inappropriate for inventory inclusion. |

**Criterion 2- Outstanding opportunities for solitude or a primitive and unconfined type of recreation: the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.**

Note: The word “or” means that 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.

**Question 2a.** **Consider impacts that are pervasive and influence a visitor’s opportunity for solitude within the evaluated area.**

Note: Factors to consider may include topography, presence of screening, distance from impacts, degree of permanent intrusions, and pervasive sights and sounds from outside the area.

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| **Considerations** | **Narrative** |
| Describe the general topography of the area in context of sight, sound, and screening. Can a traveler see or hear evidence of civilization from within the area? Is the area quiet and free from motorized noise? | The general topography of Polygon D3\_5K14 and D3\_5K15 is mountainous.  **Polygon D3\_5K14**: One side of the polygon is completely bordered by several parcels of private land with access from Highway 60, a main traffic thoroughfare for local traffic, emergency vehicles, tourists, truckers, motorcycles, bicyclists, hunters, and recreation vehicles. Most parcels of private land currently contain dwellings. This in and of itself will eliminate the feeling of solitude within the evaluated area. In addition, there are 2 permanent microwave towers visible from many vantage points within this polygon. These towers require service roads and maintenance access to the infrastructures.  **Polygon D3\_5K15**: This polygon is bordered by parcels of private land with access from Forest Road 66. Most parcels of private land currently contain dwellings. A powerline runs through the proposed polygon visible from many vantage points within this polygon. It is also bordered by an exposed pipeline which ultimately impacts a visitor’s opportunity for solitude within the evaluated area.  Both of these Polygons are not quiet and free from motorized and domestic noise. |
| Proximity to area of recreation developments and high use areas, private lands and associated infrastructure, non- Forest Service roads, and/or activities that impact opportunities for solitude. Consider effects of the area’s adjacent, cherry-stemmed roads.[[5]](#footnote-5) | There are several private lands and associated infrastructures contained in **Polygons D3\_5K14 and D3\_5K15**. The potential for future access and activities within the private lands and infrastructures will impact opportunities for solitude and primitive and unconfined recreation. Improvements on private lands are substantially noticeable with little or no visual screening from several vantage points.  Fire danger and its impacts to the neighboring subdivisions and privately held land should be included in the evaluation process.  The area’s cherry-stemmed roads will also be a management issue. |
| Other (Include any additional information related to the question above) |  |

**Question 2b. 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.**

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. This question also relates to miles of fence information from Criterion 1, Question 1c, due to the potential for miles of fence to restrict unconfined recreation opportunities.

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| **Considerations** | **Narrative** |

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| Describe the types of primitive recreation activities in the area. | Currently, there are several opportunities to engage in recreation activities in **Polygons D3\_5K14 and D3\_5K15** to include observing wildlife, hiking, backpacking, horseback riding, hunting, camping, and enjoying nature. However, due to the many well-used, large concentration of roads, fencing, manmade water sources, and private property, the potential for seeing structures from several vantage points restricts this areas unconfined recreation opportunities. |

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| Percent of area with a primitive recreation opportunity spectrum class. [[6]](#footnote-6) |  |

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| Other (Include any additional information related to the question above) | The structural and non-structural improvements contained **Polygons D3\_5K14 and D3\_5K15** contrast with the surrounding landscape for wilderness consideration. These structural improvements are incompatible with a potential wilderness landscape setting. Most of these improvements are reflective, and made from non-natural materials to include galvanized tanks, fences, windmills, solar panels, and have little or no visual screening from most vantage points within the polygon. |

**Criterion 3- Stand-alone area of less than 5,000 acres that is not adjacent to existing wilderness or administratively recommended wilderness: evaluate how an area less than 5,000 acres is of sufficient size to make its preservation and use in an unimpaired condition practicable.**

There are no stand-alone areas less than 5,000 acres on either the initial inventory or Phase 2 inventory maps. Those who offer such areas for evaluation please identify and describe how it is of sufficient size to make its preservation or use in an unimpaired condition practicable.

**Criterion 4- Unique and outstanding qualities: the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.**

Note: These values are not required to be present in an area for the area to be recommended for inclusion in the National Wilderness Preservation System, but their presence should be identified and evaluated where they exist.

**Question 4a. Does the area contain rare plant or animal communities or rare ecosystems?**

Note: Rare in this context is defined as local or regional.

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| **Considerations** | **Narrative** |

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| Average modeled species richness value from New Mexico Crucial Habitat Assessment Tool. |  |
| Presence of threatened or endangered species and/or designated or proposed critical habitat (from National Heritage database and other data sets as available). |  |
| Other (Include any additional information related to the question above) |  |

**Question 4b. Are there any outstanding landscape features such as waterfalls, mountains, viewpoints, waterbodies, or geologic features?**

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| **Considerations** | **Narrative** |

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| Description of any unique geologic features in the area. |  |
| Presence of outstanding scenic features within the area or percent of area with distinctive scenic attractiveness class.[[7]](#footnote-7) |  |
| Other (include any additional information related to the question above) |  |

**Question 4c. Are there historic and cultural resource sites in the area?**

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| **Considerations** | **Narrative** |

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| Presence of structures, dwellings, and other relics of past occupation when they are considered part of the historical and cultural landscape of the area. Also consider potential historical railroad beds/berms associated with timber harvest areas from Criterion 1, Question 1b. |  |
| Other (Include any additional information related to the question above) |  |

Note: (Confidentiality requirements with respect to cultural resource sites must be respected (25 U.S.C 3056)).

**Question 4d. Are there any research natural areas?**

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| **Considerations** | **Narrative** |

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| Percent of area that is part of a research natural area. |  |
| Other (Include any additional information related to the question above) |  |

**Question 4e. Are there any high quality water resources or important watershed features?**

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| **Considerations** | **Narrative** |

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| Miles within the area of eligible Wild and Scenic Rivers |  |
| Miles within the area of Outstanding Natural Resource Waters |  |
| Other (Include any additional information related to the question above) |  |

**Criterion 5- Management: the degree to which the area may be managed to preserve its wilderness characteristics.**

**Question 5a. Can the area be managed to preserve its wilderness characteristics?**

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| **Considerations** | **Narrative** |

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| Shape and configuration of the area. | Both **Polygons D3\_5K14 and D3\_5K15** are bordered by private land, consist of mountains and valleys, and access from a major highways and county roads. |
| Presence and extent of legally established rights or uses within the area. |  |
| Presence and extent of any specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics. |  |
| Presence and extent of non-Federal land in the area |  |
| Describe management of adjacent lands. |  |
| Describe presence and extent of cultural and traditional uses of the area (e.g. shrines, ceremonial use, etc.) |  |
| Presence and extent of wildland urban interface in the area. Include acres if possible. | **Polygons D3\_5K14 and D3\_5K15** border several parcels of privately owned land. The interspersed developed ranches, subdivisions, and stand-alone properties and infrastructures required to support them restricts the opportunities for solitude. The inability to control the future use of permanent intrusions and pervasive sights and sounds of the surrounding property (airstrips, water catchments, motorized vehicles, domestic noise, etc.) will impact a primitive and unconfined recreation within these polygons. |
| Describe any other management activities or restrictions within in the area (e.g. upcoming management decisions). |  |
| Describe existence and extent of motorized uses within the area (trails, routes, special activities). | **Polygons D3\_5K14 and D3\_5K15** contain substantially noticeable authorized and unauthorized routes. Many unmapped roads extend beyond an identified improvement and detract from the apparent naturalness. These networks of roads, both authorized and unauthorized, are accessible for woodcutting, camping, recreation vehicles, range improvement, hunting, and other recreational activities. The roads created by past timber harvesting, even though bermed and designated closed, are still being utilized. The restoration of these roads and the degree of management in which these polygons will require to preserve their wilderness characteristics should be considered in the evaluation. |
| Presence and extent of special use permits and authorizations within the area. | **Polygons D3\_5K14 and D3\_5K15** currently have authorized grazing permits in place. In addition, there are many permitted outfitters that utilize this area. Restricting use will be detrimental to the income of the community and the Forest Service. |
| Presence and extent of “cherry stemmed”[[8]](#footnote-8) roads or other linear features. | **Polygons D3\_5K14 and D3\_5K15** contain authorized and unauthorized routes that provide access to improvements and contribute to the unnaturalness of a designated wilderness. Many routes within this polygon extend beyond an identified improvement, and should be considered in the evaluation phase and the degree in which it will require management to preserve its wilderness characteristics. A buffer of 1/4 to 1/2 mile should be considered to offer potential solitude. |
| Other (Include any additional information related to the question above) | The degree of management **Polygons D3\_5K14 and D3\_5K15** will require to preserve their wilderness characteristics will inhibit the wildlife food and habitat for many of the native species that occupy this proposed wilderness area due to the inability to utilize the most practical management tools. Wilderness designation restricts the use of motorized tools (ie chainsaws for creating fields, and equipment often needed on a prescribed fire, dozer for fire-line creation & pumper units for water), and enhancement of lands is nearly impossible. Wilderness designation will limit our native plant and animal species, not simply those that thrive in unbroken mature forests. |

1. Species composition is the number and proportion of species present. Structure refers to the size, density, and arrangement of plants. [↑](#footnote-ref-1)
2. The use of 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. [↑](#footnote-ref-2)
3. For a glossary of road terminology, please see the *Cibola National Forest Mountain Ranger Districts Assessment Report, Vol, II*, page 258. [↑](#footnote-ref-3)
4. See Appendix A for Substantially Noticeable criteria used in Phase 2 inventory, and Appendix B for results from the Phase 2 Inventory. [↑](#footnote-ref-4)
5. The term “cherry stemmed” road refers to a road removed from the inventory using the 30 meter (98.4 feet) road buffer screening from the Phase 1 Inventory process. [↑](#footnote-ref-5)
6. The Forest Service’s Recreation Opportunity Spectrum (ROS) provides a framework which allows administration to manage and users to enjoy a variety of recreation environments. ROS is not a land classification system; it is a management objective, a way of describing and providing a variety of recreation opportunities. A “primitive” ROS class is one typically associated with a largely unmodified environment, a very high probability of solitude, self-reliance, little evidence of people, and no motorized use is permitted. The ROS Inventory Existing Condition maps have been completed for the Forest, and the existing condition of primitive ROS classes is being used as a measure. These maps are only existing condition, and are subject to change based on desired recreation opportunity spectrum classes developed during the interdisciplinary process of Forest Plan Revision. Please refer to the Recreation Opportunity Spectrum Handbook and Primer for more information: <http://www.fs.fed.us/cdt/carrying_capacity/rosfieldguide/ros_primer_and_field_guide.htm> [↑](#footnote-ref-6)
7. The Forest Service’s Scenery Management System (SMS) provides the framework to effectively inventory, assess, and manage scenic resources. Scenic Attractiveness is a component of the SMS inventory, and is the primary indicator of the intrinsic scenic beauty based on commonly held perceptions of preferred scenery and landscape features. The three scenic attractiveness classes are: Class A-distinctive; Class B-typical; Class C-indistinctive. To determine these classes, the landscape elements of landform, vegetation, rocks, cultural features and water features are mapped using General Terrestrial Ecosystem Survey (GTES) information for the Forest, with District personnel input on areas of the Forest that were not picked up at the GTES scale. The Scenic Attractiveness map is based largely on existing landscape features. Refer to the Forest Service Scenery Management Handbook for more information: <http://www.fs.fed.us/cdt/carrying_capacity/landscape_aesthetics_handbook_701_no_append.pdf> [↑](#footnote-ref-7)
8. The term “cherry stemmed” road refers to a road removed from the inventory using the 30 meter (98.4 feet) road buffer screening from the Phase I Inventory process. [↑](#footnote-ref-8)