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Prescott National Forest
Potential Wilderness Evaluation Process

As part of the Forest Plan revision process, the Prescott National Forest is required to undergo an assessment of areas that meet the criteria for potential Wilderness. We followed the Wilderness evaluation process as outlined in Forest Service Handbook 1909.12, Chapter 70. This process consists of three steps: identification of potential areas, evaluation of potential areas, and recommendation of potential areas. These steps are outlined in more detail below.

Identification of Potential Wilderness

From the Handbook:

The first step in the evaluation of potential wilderness is to identify and inventory all areas within National Forest System (NFS) lands that satisfy the definition of wilderness found in section 2(c) of the 1964 Wilderness Act.

- FSH 1909.12 Chapter 71

The conditions for meeting the first step of the process on the Prescott National Forest are:

1. The area must be at least 5,000 acres in size **or** meet at least one of the following conditions:
 - a. Can be preserved due to physical terrain and natural conditions.
 - b. Self-contained ecosystems, such as an island, that can be effectively managed as a separate unit of the National Wilderness Preservation System.
 - c. Contiguous to existing wilderness, primitive areas, Administration-endorsed wilderness, or potential wilderness in other Federal ownership, regardless of their size.
2. The area must not contain forest roads (36 CFR 212.1) or other permanently authorized roads.

Thirty areas, listed in Appendix A, were determined to meet these conditions. These areas range in size from less than 1,000 acres to over 32,000 acres. Some of these areas were first identified during the Roadless Area Review and Evaluation (RARE II) process and were carried forward to this evaluation. One area, Hackberry PW-03-09-017, was not evaluated during this process as it is contiguous to the Hackberry PW-03-04-026 area on the Coconino NF and was included in their Potential Wilderness evaluation. Another area, Canyon Kaibab PW-03-09-017 is located on the Kaibab NF adjacent to the Sycamore Wilderness and was included as part of the Prescott NF Potential Wilderness Evaluation Process.

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Evaluation of Potential Wilderness

Capability

The capability of a potential wilderness is the degree to which that area contains the basic characteristics that make it suitable for wilderness recommendation without regard to its availability for or need as wilderness.

- FSH 1909.12 Chapter 72.1

In this process, the capability of twenty-nine potential wilderness areas was rated on fifteen criteria and a composite score for each area was calculated. Eight of the twenty-nine potential areas scored below 43 out of 57 points (<75%) and were not considered for further evaluation. These areas are listed in Appendix C.

Six of the fifteen criteria were deemed to have greater significance for Wilderness capability and were weighted appropriately. These six criteria cover the naturalness, solitude, special values, and manageability of each area. Miles of existing motorized trail were also considered and factored into the ratings as a component of manageability. One point was deducted for each mile of designated motorized trail. These criteria were developed for use in the Southwest Region by the Regional Office and are listed in Appendix B.

Availability

All National Forest System lands determined to meet wilderness capability requirements are considered potentially available for wilderness designation. However, the determination of availability is conditioned by the value of and need for the wilderness resource compared to the value of and need for other resources.

- FSH 1909.12 Chapter 72.2

During this step, consideration is given to the potential for other resource use such as timber, grazing, or minerals. The effect of the management restrictions imposed by Wilderness on other program areas, including fire, recreation, and special uses are also evaluated. Opportunity costs associated with Wilderness designation are documented, but no areas are eliminated from consideration at this stage.

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Need

Determine the need for an area to be designated as wilderness through an analysis of the degree to which it contributes to the overall National Wilderness Preservation System.

- FSH 1909.12 Chapter 72.3

The need for a potential area to be designated as Wilderness is assessed on a Regional basis. The evaluation considers the size, type and location of existing Wilderness areas in the region, along with the existing and expected demand for Wilderness and unconfined recreation opportunities. Preference may be given to areas that represent aspects or types Wilderness experience that are underrepresented in the Region.

The results of the capability, availability and needs assessment are presented to the Forest Supervisor to determine if any of the candidate areas will be forwarded to the Regional Forester for consideration. Selections from the Regional Forester will be presented to the Chief of the Forest Service as potential wilderness. Although the Chief can recommend areas for inclusion in the National Wilderness Preservation System, it takes an act of Congress to officially designate a Wilderness Area.

Public comment is welcomed at any stage of the analysis. Information that would be helpful for the evaluation could include answers to the following questions.

- a) Are there developments within an area that you know about?
- b) How might recommendation of a particular area as potential wilderness affect you or your livelihood?
- c) Are there areas that have characteristics that are unique to the southwest?

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Appendix A - Potential Wilderness areas

PW-03-09-001	Apache Creek A	1,975	acres
PW-03-09-002	Apache Creek B	3,813	acres
PW-03-09-003	Arnold Mesa	20,815	acres
PW-03-09-004	Ash Creek	16,086	acres
PW-03-09-005	Bald Mountain	7,662	acres
PW-03-09-006	Black Canyon	9,617	acres
PW-03-09-007	Blind Indian Creek	32,338	acres
PW-03-09-008	Castle Creek Wilderness	4,925	acres
PW-03-09-009	Cedar Bench A	1,932	acres
PW-03-09-010	Cedar Bench B	602	acres
PW-03-09-011	Connell Mountains	9,975	acres
PW-03-09-012	Fritsche A	8,938	acres
PW-03-09-013	Fritsche B	15,596	acres
PW-03-09-014	Fritsche C	5,690	acres
PW-03-09-029	Fritsche D	5,364	acres
PW-03-09-015	Granite Mountain	10,386	acres
PW-03-09-016	Grief Hill	16,477	acres
PW-03-09-017	Hackberry *	1,036	acres
PW-03-09-018	Hyde Mountain	6,168	acres
PW-03-09-019	Juniper Mesa	4,891	acres
PW-03-09-020	Muldoon	20,428	acres
PW-03-09-021	Pine Mountain A	6,268	acres
PW-03-09-022	Pine Mountain B	2,810	acres
PW-03-09-023	Pine Mountain C	9,476	acres
PW-03-09-024	Sheridan Mountain	42,510	acres
PW-03-09-025	Sycamore Canyon A	4,435	acres
PW-03-09-026	Sycamore Canyon B	789	acres
PW-03-09-027	Sycamore Canyon C	4,496	acres
PW-03-09-030	Sycamore Canyon Kaibab **	5,188	acres
PW-03-09-028	Woodchute	1,510	acres

* The Hackberry PW-03-09-017 area on the Prescott NF is contiguous to the Hackberry PW-03-04-026 area on the Coconino NF and was evaluated as part of the Coconino NF Potential Wilderness Evaluation process.

** The Sycamore Canyon Kaibab PW-03-09-017 area adjacent to the Sycamore Wilderness is located on the Kaibab NF but will be evaluated by the Prescott NF as part of its Potential Wilderness Evaluation Process.

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Appendix B - Capability Rating Criteria

Natural

1. Presence of non-native species
 - High**- non-native species are not evident (3 points)
 - Medium** – non-native species are evident in isolated spots (2 points)
 - Low** - non-native species are common or scattered throughout the area (0 points)
2. Rivers within the wilderness area are in free-flowing condition
 - High**- Rivers within the area are considered free-flowing (3 points)
 - Medium** – Some rivers have impoundments or other issues that affect their free-flowing character (2 points)
 - Low** – Rivers within the wilderness area are seasonal or heavily impacted by impoundments (0 points)
3. Quality of night-sky as affected by light pollution
 - High** – The night sky is clear with little to no interference from light pollution (3 points)
 - Medium** – Some stars are visible and there is moderate degradation from light pollution (2 points)
 - Low** – Few stars are visible at night and the presence of light pollution is evident (0 points)
4. Presence of pollutants that degrade water
 - High** – All rivers/streams have been sampled and there are no water quality issues (3 points)
 - Medium** – There are no known water quality issues within the area but not all rivers/streams have been sampled (2 points)
 - Low** – There are rivers within the area that are listed on the State Impaired Waters List (303d) (0 points)
5. Area provides elements of biological diversity and naturalness, including unique habitats, TES or rare plants and wildlife.
 - High** - has critical or unique habitats and diverse ecological conditions (3 points)
 - Medium** - has a mix of habitats and ecological conditions (2 points)
 - Low** - has limited ecological conditions and habitats (0 points)
6. **Area contains a variety of natural resources, including a variety of tree species and vegetation structure. Examples include intermingled grasslands or meadows, numerous recreation opportunities, diversity of wildlife habitats, and wildlife, etc.**
 - High** - diverse amount of natural resources (5 points)
 - Medium** - mixed amount of natural resources (2 points)
 - Low** - limited amount of natural resource diversity (0 points)

Undeveloped

7. Area has current or past evidence of human activity.
 - High** - little or no evidence of human activity (3 points)
 - Medium** - unnoticeable or unobjectionable human activity (2 points)
 - Low** - obvious evidence of human activity (0 points)

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Outstanding Opportunities for Solitude or Primitive and Unconfined Recreation

8. Area provides physically and mentally challenging recreation opportunities that promote adventure and self-reliance.

High – Most of the area provides challenging recreation opportunities (5 points)

Medium - Some parts of the area have the potential for challenging recreation opportunities (2 points)

Low – Few parts of the area can provide challenging recreation opportunities (0 points)

9. Opportunity to experience solitude and isolation from human activities while recreating in the area.

High – Significant feeling of being alone or remote from civilization (5 points)

Medium – Feeling of being alone is possible but signs of civilization are possible (2 points)

Low – Little opportunity of feeling alone (0 points)

10. Opportunity to engage in primitive and unconfined recreation such as back-packing, kayaking, hunting, fishing, etc

High - There are many opportunities for engaging in primitive recreation (3 points)

Medium – There are some opportunities for engaging in primitive recreation (2 points)

Low – There are few to no opportunities to engage in primitive recreation (0 points)

Special Features and Values

11. Area contains outstanding or distinct features like rock formations, panoramic views, etc.

High - many distinct features or few but exceptional features (3 points)

Medium - some distinct features (2 points)

Low - one or no distinct features (0 points)

12. Area has potential for scientific research, environmental education, or historic/cultural opportunities.

High - good potential for two or more types of these opportunities (5 points)

Medium - potential for one type of opportunity (2 points)

Low - little or no potential for this type of opportunity (0 points)

13. Area contains unique or rare species of plants and/or animals.

High – area has several unique or rare plants and/or animals (3 points)

Medium - area has a few unique or rare plants and/or animals (2 points)

Low - area has no unique or rare plants and/or animals (0 points)

Manageability

14. Includes the ability to manage the area in for wilderness character, including distance and influence from outside activities; opportunity to access the area; and resource conflicts or encumbrances.

High – isolated from areas of activity; controlled or limited access; no encumbrances or resource conflicts (5 points)

Medium - somewhat isolated from areas of activity; adequate access opportunities; some resource conflicts and/or encumbrances (2 points)

Low – areas of activity are nearby; many access opportunities; many resource conflicts and/or encumbrances (0 points)

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15. Motorized use within the area

Yes - has motorized vehicle use (0 points) + 1 point is deducted for each mile of motorized trail

No - does not have any motorized vehicle use (5 points)

This rating system was created to assess the wilderness character of each potential Wilderness area. The 15 criteria were developed by the Southwest Regional Office with direction from the Forest Service Handbook 1909.12 Chapter 72.1. The numerical ratings were developed by the Prescott National Forest for use during the Potential Wilderness Evaluation Process concurrent with the development of a revised Forest Plan.

As the potential wilderness area was assessed on these criteria, and was assigned a high, medium, or low rating for each. A high rating was worth either three or five points, a medium rating was worth two points, and a low rating was not worth any points. The value of the high rating was dependant on the criteria. Six of the fifteen criteria were determined to have greater significance for Wilderness character and were accorded more weight for a high score. Each of the six is tied to language in the Wilderness act, as shown below.

6. Area contains a variety of natural resources, including a variety of tree species and vegetation structure. Examples include intermingled grasslands or meadows, numerous recreation opportunities, diversity of wildlife habitats, and wildlife, etc.

An area of wilderness is further defined to mean in this Act an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its *natural conditions* ...

8. Area provides physically and mentally challenging recreation opportunities that promote adventure and self-reliance.

9. Opportunity to experience solitude and isolation from human activities while recreating in the area.

... wilderness areas shall be devoted to the public purposes of *recreational, scenic, scientific, educational, conservation, and historical use.*

... has outstanding opportunities for *solitude* or a primitive and *unconfined type of recreation*;

12. Area has potential for scientific research, environmental education, or historic/cultural opportunities.

... contain ecological, geological, or other features of *scientific, educational, scenic, or historical value.*

... wilderness areas shall be devoted to the public purposes of *recreational, scenic, scientific, educational, conservation, and historical use.*

14. Includes the ability to manage the area in for wilderness character, including distance and influence from outside activities; opportunity to access the area; and resource conflicts or encumbrances.

... each agency administering any area designated as wilderness shall be responsible for preserving the wilderness character of the area and shall so administer such area for such other purposes for which it may have been established as also to preserve its wilderness character.

15. Motorized use within the area

... there shall be no temporary road, *no use of motor vehicles, motorized equipment or motorboats...*

Medium scores were not weighted as the objective was to promote areas with outstanding qualities. Similarly, low ratings received no points for displaying poor wilderness potential. As motorized use is incompatible with Wilderness character, areas that contained motorized trails received zero points for the criteria and an additional penalty of one point per mile of motorized trail. For the purpose of this evaluation, only existing, motorized Forest Service system trails, as designated per the current Motorized Vehicle Use Map (MVUM,) were considered.

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Appendix C – Areas excluded from further evaluation

- Sheridan Mountain Rating: 5 (9%)
This area was not considered for further evaluation because it contains thirty-five miles of motorized trails. It was determined that this use was incompatible with wilderness character.
- Connell Mountains Rating: 29 (51%)
This area was not considered for further evaluation because it contains eleven and a half miles of motorized trails. It was determined that this use was incompatible with wilderness character.
- Blind Indian Creek Rating: 30 (53%)
This area was not considered for further evaluation because it contains fifteen miles of motorized trails. It was determined that this use was incompatible with wilderness character.
- Granite Mountain Rating: 39 (68%)
This area was not considered for further evaluation due to a lack of wilderness character. Although the opportunities for challenge and solitude were rated high, its bio-diversity was rated average and it does not support any documented rare plants or animals. Existing recreation use in the area, including bicycles, would make management as wilderness difficult.
- Grief Hill Rating: 39 (68%)
This area was also not considered for further evaluation due to a lack of wilderness character. The opportunities for solitude, isolation, and primitive or unconfined recreation were rated average due to the proximity of Interstate 17 on the southern boundary of the area. The biodiversity and naturalness of the area were rated average and it does not support any documented rare plants or animals.
- Fritsche C & D Rating: 40 (70%)
These areas were excluded from further evaluation due to a lack of wilderness character. Although these areas do support rare plants and animals, the biodiversity and naturalness of these areas were rated average. The areas show evidence of human disturbance from firewood collection.
- Hyde Mountain Rating: 40 (70%)
This area was not considered for further evaluation because it contains seven and a half miles of motorized trails. It was determined that this use was incompatible with wilderness character.