History of Capability and Suitability in Region 4 and on the Ashley National Forest

How Capability and Suitability were defined

Over the years the Forest Service has defined capability and suitability in several different ways. The R4 Handbook and CFR Planning Rules all have different definitions. The R4 Range Analysis Handbook, as amended in November 1986, discusses only range suitability. While it states that suitability criteria shall be consistent with Forest Plan criteria, its very definition is closer to the planning definition of capability.

The following information is a brief summary of the changes that have occurred over time related to the definitions of Rangeland capability and suitability.

Prior to the 1986 Forest Plan each of the Ashley’s allotments had a complete range analysis done. A range analysis determined the range condition and trend, vegetation type, and range suitability for each allotment and also collected information related to slope and soil stability. This information was used combined with distance from water to determine capability and suitability of the allotments on the Ashley NF. Rangeland capability depends upon conditions such as climate, slope, landform, soils, and geology (Bambrough 2016).

1982 Planning Rule

Forest Plans developed under the 1982 Planning Regulations were required to identify capable rangelands, and determine their suitability for livestock grazing. Essentially, suitability was considered a subset of capable rangelands.

This direction was to be implemented through a two-phase assessment process:

- Determination (at the Forest Plan level)
- Validation (at the project level)

36 CFR 219.20 Grazing Resource

In forest planning, the suitability and potential capability of National Forest System lands for producing forage for grazing animals and for providing habitat for management indicator species shall be determined as provided in paragraphs (a) and (b) if this section. Lands so identified shall be managed in accordance with direction established in forest plans.

36 CFR 219.3 Definitions and Terminology

**Capability:** The potential of an area of land to produce resources, supply goods and services, and allow resource uses under an assumed set of management practices and at a given level of management intensity. Capability depends upon current conditions and site conditions such as climate, slope, landform, soils, and geology, as well as the application of management practices, such as silviculture or protection from fire, insects, and disease.
Suitability: The appropriateness of applying certain resource management practices to a particular area of land, as determined by an analysis of the economic and environmental consequences and the alternative uses foregone. A unit of land may be suitable for a variety of individual or combined management practices.

R4 1986 Range Handbook

For the 1986 Forest Plan the Ashley National Forest reviewed the direction in the 1986 handbook and the 1982 planning regulations and determined that the calculations for capability and suitability based off the information collected during 1964 Range Analysis were adequate and met the requirement for capability and suitability.

The following are excerpts of the definition of “Suitable Range” from the 1986 Handbook:

Suitable range is defined as land that is accessible to livestock, which produces forage or has inherent forage-producing capabilities, and that can be grazed on a sustained yield basis under reasonable management practices…Each Forest shall develop their own specific range suitability criteria. The following elements should be considered in developing suitability criteria: 1) site productivity… 2) soil stability; . . the inherent ability of soils to resist erosion…3) physical barrier… 4) management; ..the kind of livestock grazed and the management system applied … [and] 5) interrelationships; .. between accessibility, slope, distance to water, soil stability.

Range suitability is determined independently of the effects of past use [then discusses denuded areas].

Suitable range that is not available for grazing because of land management decisions should still be classified as suitable ranges. Such areas may be closed to grazing and the reason for closure indicated. …

Unsuitable range … includes any area that should not be grazed by livestock because of unstable soils, steep topography, lack of management improvements, or inherent lost potential for production. {Then goes on to list and discuss terrain, soil and vegetation characteristics, etc.}

From this 1986 Handbook direction it is apparent that “suitable but closed to grazing” is today’s definition of “not suitable.” Furthermore, it is clear that the rangeland handbook definition of “suitable rangelands” equates to the regulatory definition of capable rangelands today.

1998 R4 Protocol – Definitions

The 1998 R4 Protocol for identification of capable and suitable rangelands prescribed identification of suitable rangelands as a sub-set of capable rangelands. Logically, using this protocol one would expect that grazing would only be suitable on that sub-set of acreages. In reality, grazing occurs on all lands except where livestock grazing has been identified as an incompatible use in the LRMP (i.e., not suitable).
Livestock do graze lands that have not necessarily been classified as capable. The Forest Service never intended that livestock not be allowed access to lands not classified as capable. Livestock trail across landscapes from one area to another to forage on those capable acres. Some grazing occurs as they move through such areas. For the purposes of managing livestock, limiting their access to only the subset of acres as identified as suitable by the R4 Protocol would be logistically impossible. Indeed, the recent Memorandum Decision for Western Watersheds Project versus United States Forest Service (CV 09-629-E-BLW) states, “The Court did not hold that lands found not capable were off-limits to grazing…(“lands identified as incapable are not forever off-limits to grazing.”)"

**Capability**

Capable rangelands represent those acres where the biophysical characteristics are “capable” of sustaining long-term grazing by livestock. Total acres of capable rangelands will be the same for all forest plan alternatives.

Capable rangelands for revision of forest plans can be identified through an aggregation of planning unit determinations, or applying capability criteria at the forest scale, or a combination of the two.

The capability determination at the Forest Plan level is not a decision to graze livestock on any specific area of land or a decision on livestock grazing capacity.

**Suitability**

Classification of rangelands as suitable for grazing is a land allocation decision at the Forest Plan level. General Direction and Management Area/Land use Zone Direction will in a general sense indicate whether livestock grazing is a compatible use in a given area.

Forest Plans do not make site specific decisions. The suitability classification at the Forest Plan level is not decision to graze livestock on any specific area of land or a decision on livestock grazing capacity.

**2012 Planning Rule**

**Capability:**
The 2012 Planning Regulations do not speak to “capability,” but does include a definition for “productivity”:

The capacity of NFS lands and their ecological systems to provide the various renewable resources in certain amounts in perpetuity. For the purposes of this subpart, productivity is an ecological term, not an economic term. (36 CFR 219.19 Definitions)
Suitability:
§ 219.7 NEW PLAN DEVELOPMENT OR PLAN REVISION.
(e)(1)(v) Suitability of lands. Specific lands within a plan area will be identified as suitable for various multiple uses or activities based on the desired conditions applicable to those lands. The plan will also identify lands within the plan area as not suitable for uses that are not compatible with desired conditions for those lands. The suitability of lands need not be identified for every use or activity. Suitability identifications may be made after consideration of historic uses and of issues that have arisen in the planning process. Every plan must identify those lands that are not suitable for timber production (§ 219.11).

(c) (2) (viii) “Identify the suitability of areas for the appropriate integration of resource management and uses, with respect to the requirements for plan components. . .”

(e)(1)(v) Suitability of lands. Specific lands within a plan area will be identified as suitable for various multiple uses or activities based on the desired conditions applicable to those lands.

2012 R4 Revised Protocol
Under this 2012 protocol suitable acres were no longer defined as a subset of capable acres so suitable acres increased based on a correction in the definition of how suitability is determined. It specifies that an entire allotment would be considered suitable except for those areas where livestock grazing is not an acceptable use as identified in the Forest Plan. This correction in the definition of suitability carried over into the 2016 R4 draft protocol.

2016 R4 Protocol for the Classification/Validation of Rangeland Calculating Capability and Suitability

Capability

Inherent capability of the plan area. The ecological capacity or ecological potential of an area characterized by the interrelationship of its physical elements, its climate regime, and natural disturbances. Capability depends on current conditions and site conditions such as climate, slope, landform, soils and geology, as well as the application of management practices, such as silviculture or protection from fire, insects and disease.

Under the 2016 R4 protocol is states that bio-physical characteristics must be considered and that Forest may modify their classification criteria with data that indicates changes are warranted. The bio-physical characteristics include: slope <30% and slope < 45% for cattle and sheep respectively, average production of forage/acre, soil characteristics, ground cover, distance to water or the ability to provide water, areas accessible to livestock.

Criteria for Classification of Capable Rangelands (taken from the 2016 R4 draft protocol)

Forest Plan level identification of capable rangelands is generally model driven, using Geographic Information System data for the Forest to identify those areas that meet the
biophysical characteristics necessary to be capable. Models do not take into consideration the nuances of personal knowledge of the ground. The acreage outputs generated through GIS analysis may not be accurate for use at the site specific/allotment level. Criteria to be used for assessing rangeland capability are listed below; however Forests may modify these criteria if they have documented data which indicates changes are warranted. Also, additional criteria may be developed if local conditions warrant. If additional criteria are developed, document to rational for their use.

The following criteria should be addressed as a minimum. The determination of capability should be made considering the whole of the criteria rather than any one criterion alone.

1. Areas with less than 30% slopes for cattle and less than 45% slopes for sheep
2. Areas producing more than or having the potential to produce an average of 200 lbs of forage/acre on an air dry basis over the planning period
3. Areas with naturally resilient soils (excludes unstable or highly erodible soils)
4. Areas where ground cover vegetation, litter, rock of 3/4 inch size is sufficient to protect soil from erosion- the minimum percentage cover will be no less than 60% unless local data is available for use in modifying this minimum requirement.
5. Areas accessible to livestock without such factors as dense timber rock or other physical barriers precluding access
6. Areas within on-half mile of water or where the ability to provide water exists on areas with steep topography, and
7. Areas within one mile of water or where the ability to provide water exists for rolling hills/flat topography,
8. Area with noxious weed infestations where forage production capability has been reduced so as to leave the area incapable of supporting livestock, or such use would contribute to increase of the infestation.

National Forest System lands that meet the above criteria will be considered capable of being grazed and **acreage of capable lands will remain constant for all alternatives.** These acreages must be spatially illustrated, not just presented in table form.

**Suitability:**

*The 2016 R4 protocol uses the corrected definition of suitability by specifying that an entire allotment would be considered suitable except for those areas where livestock grazing is not an acceptable use as identified in the Forest Plan.* Suitability of lands: Specific lands within a plan area will be identified as suitable for various multiple uses or activities based on the desired conditions applicable to those lands. Classification of lands suitable for any particular management activity or permitted use is a land allocation decision made at the Forest Plan level. Validation occurs at the project level to ensure nothing has changed.
Validation of Capability and Suitability at the Project Level/Allotment Area Level

Validating Capability
Forest Plans in the Intermountain Region identified capable rangelands in a variety of ways. Some Plans listed capable acres by allotment, others by total Forest acres. In most cases there are no maps that show these acres spatially. Validation of capable rangelands at the project/allotment level is a matter of validating that the project area/allotment does indeed have acres capable of supporting long-term grazing.

Depending on the level of detail used to classify capable rangelands at the Forest Plan level, validation at the project level may take only a cursory review, or a more intensive effort. Project level validation should consider site specific information as applied to the criteria used for forest plan classifications. Personal knowledge of the ground is invaluable in ensuring polygons identified using GIS models are accurate.

Criteria for Validation of Suitable Rangelands

The Record of Decision for a Forest Plan does not result in immediate implementation of projects without additional site specific NEPA analysis. When an allotment management plan is established or revised, the suitability of the area of consideration (aka, allotment) as determined at the Forest Plan level needs to be validated at the project (allotment) level. Depending on the vintage of the Forest Plan, what was classified as suitable at the forest plan level may still be apropos at the allotment level. However, documentation needs to support that determination. A review of forest plan suitability as compared to the existing situation is necessary. Are there any situations that suggest livestock grazing is no longer a compatible use on the allotment, or on specific areas within the allotment? The following outlines the process to be used to validate the Forest Plan suitability classification at the site/allotment level.

Forest Plan suitability classification: verify that the forest plan identified grazing as a compatible use within the allotment/area.

Review existing uses and activities that are ongoing within the allotment/area. Are these uses identified as suitable uses within the allotment/area?

Have there been any changes in land allocation as a result of other NEPA decisions or administrative decisions that would have affected the compatibility of grazing as a suitable use within the allotment/area (i.e., establishment of an RNA, new developed recreational facility, or Congressional area designation).

Once the consistency review is completed, review the project area/allotment using the following criteria to refine the validation.

Areas listed below may or may not be suitable for livestock grazing depending on an overall evaluation of potential effects and opportunities to mitigate adverse effects. Additional criteria may be developed if local conditions warrant. If additional criteria are developed, document to rational for their use.
1. Developed recreation sites or special use sites
2. Special area designations such as research natural areas (based on establishment records).
3. Administrative sites and research facilities or study sites.
4. Key wildlife habitat areas such as winter ranges.
5. Municipal watersheds
6. Important habitats for TES species
7. Unique habitats such as bogs, fens, jurisdictional wetlands, or rare plant communities.
8. Areas where livestock grazing is impracticable due to economic considerations either from permittee or agency standpoint.
9. Transitory range created by timber harvest activities where the associated mitigation costs to protect timber resource values is excessive.
10. Areas where the social consequences and values foregone are not acceptable.

The number of acres suitable for livestock grazing by alternative shall be displayed spatially. The number of acres suitable may vary by alternative.

**Strawberry Peak Allotment**

*Prior to the 1986 Forest Plan each of the Ashley’s allotments had a complete range analysis done. A range analysis determined the range condition and trend, vegetation type, slope, and range suitability for each allotment. Rangeland capability depends upon conditions such as climate, slope, landform, soils, and geology.*

**How Capability and Suitability Evolved from Sheep to Cattle**

There is a difference between grazing domestic sheep and grazing cattle. Domestic sheep tend to use more of the steep hillsides than cattle. Cattle tend to be bottom dwellers and graze slopes less than 30%. Cattle have a slightly different diet where they primary eat grass but they do consume some forbs and shrubs. When capability was originally determined using vegetation type (forage), condition and trend data, suitability and for sheep areas over 45% were also excluded.

From here on out capability and suitability are used as they are defined currently using the 2016 Protocol for Calculating Capability and Suitability.

**1964:**

Calculating capable acres for rangeland on the Ashley National Forest was an extensive project that spanned 30 years. In 1964, the Strawberry Peak Allotment was part of a larger common use allotment. Eighty-one capability site analyses were done on the Strawberry Peak Allotment to determine capability for both sheep and cattle.

Following the Range Analysis Handbook, teams were created to collect Range Site Analysis data. This process included:

1. Mapping the vegetation on aerial images
2. Categorizing the plant community types
3. Measuring vegetation using a transect
4. Creating a plant list with dry weight production for desirable, intermediate and low forage potential
5. Determined ground cover
6. Classified the soil including erosion and other disturbances
7. Slope

Individual plots were established to represent the delineated vegetation communities. A vegetation and soil condition and trend was determined and a final capability rating was given to each plant community. Other factors that were used to determine capability were site specific landscape characteristics including, slope, distance from water (1/2 mile) and soil characteristics as it relates to erosion.

In 1964 rangeland was typically considered **capable** under the following criteria:

1. Community types that produce > 50 lbs of dry weight forage/per acre
2. Forage within 1/2 mile of water
3. Slopes < 30 percent

Rangeland was typically considered **secondary** under the following criteria:

1. Low potential community types
2. Areas greater than 1/2 mile from water
3. Areas seasonally available to livestock (wet meadows)

Open Coniferous Forests were typically classified as suitable range even though forage production was low. Timber sales or clear cuts had a mixed classification between Transitory rangeland (not include as capable) or Open Coniferous Forest (included as capable). An obvious trend throughout the region is an increase in conifer. Conifers have consistently encroached into meadows, open areas and even the canopy of previously classified “Open Coniferous Forests” have become denser, thus reducing the potential understory forage.

**Conclusion:** As part of a current evaluation of the suitability classification process, and knowing what we know 35 years after capable was determined, it is reasonable to assume that some community types/polygons do not produce enough forage to support livestock and should not be classified as primary capable rangeland. These sites could be considered transitory rangeland, possibly allowing for a percentage of the community type to be calculated as part of the carrying capacity of the allotment.

The range capability process was intended to make a determination with the best available information. It was intended to be updated and refined as conditions change.

**1973:**

A summary of tentative and potential grazing capacity was done for sheep from the results of the 1964 site analysis to convert the site surveys to acres. Specialists compiled the field data from 1964 to determine tentative and potential grazing capacity.
1975:
Goodrich corrected the tentative and potential grazing capacity that was done in 1973 where a small portion of the allotment was classified incorrectly. The area was considered small with low production, dominated by low value forage species and because of timber the area limited movement of sheep in the area.

1977:
A range condition map was developed using both the 1964 site analysis and 1973 grazing capacity acres for sheep. Areas on the map were colored using Range Condition measurements (Excellent, Good, Fair, Poor and Very Poor) to illustrate capable acres for sheep. It was determined that 7,769 acres were capable for sheep grazing. For this map the following biophysical characteristics were used:

1. Vegetation plant communities
2. Slope
3. Distance from water (1/2 mile)
4. Soil characteristics as it relates to erosion.

1992:
Goodrich developed a new capability area map for cattle on the Strawberry Allotment. This map was originally based on the vegetation, slope and soil data obtained from the 81 survey points done in 1964. The vegetation composition data was brought up to date and Goodrich also took in account distance to water (1/2 mile for cattle), slope (cattle use less than 30% slope), and differences of forage consumption between cattle and sheep (grass, forbs and shrubs).

1998:
Wedig calculated cattle capable acres for the Strawberry Allotment based off of the Range Analysis data of Site Analysis Studies (R4 2200-3) and Ocular Analysis Studies (R4 2200-10) of the mid-1960s. It was determined that there were 2,798 acres capable for cattle grazing. For this map the following biophysical characteristics were used:

1. Vegetation plant communities
2. Slope
3. Distance from water (1 mile)
4. Soil characteristics as it relates to erosion.

2007:
In 2007, Sherel Goodrich, Forest Ecologist, reviewed the past data and calculated the tentative grazing capability for cattle on the Strawberry Allotment. He also took in account distance to water (1 mile for cattle), slope (cattle use less than 30% slope), and differences of forage consumption between cattle and sheep (grass, forbs and shrubs). Goodrich determined that 844 acres were missing and added to the previous 2,798 acres, the new total capable acres for cattle.
were 3,642 acres. 248 acres at the head of Pine Hollow, though suitable, are likely not reasonably grazed due to distance to water and high potential for cattle drifting into Timber Canyon for water. It was determined that 3,394 acres were capable for cattle grazing. A map was generated from the original map which was based on the vegetation, slope, and soil data obtained from the 81 survey points done in 1964. Grazing capacity was then determined by verifying the capability of the Strawberry Peak Allotment and then using observations and vegetation monitoring during the trial.

**2016:**

The 1998 Protocol was developed by an interdisciplinary group the R-1 Grazing Protocols, a Draft for H-T National Forest, the W.O. April 25, 1997 clarification of requirements, and the R-4 September 8, 1997 Properly Functioning Condition Draft. A Proposed 2012 Draft of this Revised Protocol was circulated for review and comment prior to this revision, and was presented as a module of the R4 Range NEPA Training Curriculum in FYs 2012-14. This Protocol is to be used to identify those acres classified as capable and as suitable for livestock grazing. This protocol was to amend the *Rangeland Capability and Suitability Determinations for Forest Plan Revisions/R-4* protocol dated 02/20/1998. This protocol is still in draft stage as of 03/30/2016.

**Classification of Capable Rangelands on the Ashley National Forest**

**Bio-Physical Characteristics Used to Classify Capable Rangelands within a Plan Area**

(2016 draft protocol)

The bio-physical characteristics that must be considered when classifying capable rangelands are listed below. Forests may modify their classification criteria provided they have data which indicates changes are warranted. Also, additional criteria may be developed if local conditions warrant. The classification of capable rangelands should be made considering the whole of the criteria rather than any one criterion alone.

Include as capable those areas that meet the following criteria:

- Areas with less than 30% slopes (for cattle) and less than 45% slopes (for sheep).
  - **Ashley National Forest:** The 1964 site analysis took into account slope for both sheep (> 45%) and cattle (< 30%).
- Areas producing more than or having the potential to produce an average of 200 lbs. of forage/acre on an air dry basis over the planning period.
  - **Ashley National Forest:** The 1964 site analysis used 50lbs of forage/acre which was the current standards, however, vegetation was dried and recorded and sites are well over 200 lbs. of forage/acre (Bambrough 2016). In addition, vegetation monitoring data from 1964 to present shows that the allotment is stable. Monitoring on the Strawberry Allotment shows that vegetation cover exceeds 85% and trends are stable. Repeat photography shows vegetative communities have not changed since the grazing trial started in 2007.
Table 1: Vegetation Monitoring on the Strawberry Allotment.

<table>
<thead>
<tr>
<th>Vegetation Type</th>
<th>Ground Cover¹</th>
<th>Trend</th>
<th># Sites⁵</th>
<th>Year Last Monitored</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graminoid</td>
<td>Exceeds 85%</td>
<td>Stable²</td>
<td>15</td>
<td>2011</td>
</tr>
<tr>
<td>Yellowbrush</td>
<td>Exceeds 85%</td>
<td>Stable²</td>
<td>11</td>
<td>2011</td>
</tr>
<tr>
<td>Mountain Big Sagebrush</td>
<td>Exceeds 85%</td>
<td>Stable³</td>
<td>17</td>
<td>2011</td>
</tr>
<tr>
<td>Aspen</td>
<td>Near 100%</td>
<td>Stable/Upward⁴</td>
<td>8</td>
<td>2010</td>
</tr>
</tbody>
</table>

¹Total ground cover must equal to or greater than 85% of potential for all plant communities grazed by livestock.
²Yellowbrush/graminoids communities vegetation ground cover has not changed since 1988 to present.
³Mountain Big Sagebrush communities have been decreasing in canopy cover since 1952 to present.
⁴Aspen communities has had regeneration in clones and sprouts since 1985 to present.
⁵Number of vegetation monitoring sites that have ground cover measurements, ocular macro plots, line intercept, nested frequency, and/or site analysis taken.

- Areas with naturally resilient soils (Not unstable or highly erodible soils).
  - **Ashley National Forest:** The 1964 site analysis took into account soils: surface texture, subsoil texture, substratum material, erosion pattern, surface losses, % gullies, sheet erosion, inherent erosion hazard and soil disturbance. The soils report for Strawberry Peak EA states “soil condition was satisfactory and erosion was generally limited to common sheet wash with associated plant pedestalling and did not often include litter or soil deposition, rills or gullies.”
- Areas where ground cover (vegetation, litter, rock > 3/4 in.) is sufficient or the soil type has the potential to protect soil from erosion - the minimum percentage cover will be 70% unless local data is available for use in setting more specific ground cover requirements.
  - **Ashley National Forest:** The 1964 site analysis recorded ground cover and current vegetation monitoring shows that ground cover is over 85% potential (Table 1).
- Areas within 1 mile of water or where the ability to provide water exists. In mountainous country, the distance may need to be less.
  - **Ashley National Forest:** The 1964 site analysis took in account areas within ½ mile of water and considered areas over ½ mile of water secondary acres. In 1992 and 2007, guidelines changed from ½ mile to 1 mile from water considered capable acres. Goodrich reviewed the data and made adjustments for areas within 1 mile of water instead of ½ mile. He also removed acres that were once considered capable but due to lack of water they were removed and not considered capable.
- Areas accessible to livestock (without such factors as dense timber, rock or other physical barriers) that also meet the above criteria.
  - **Ashley National Forest:** The 1964 site analysis took in account timber, rock and other physical barriers.
Eliminate as capable those acres where the following conditions exist:

- Areas of extensive noxious weed infestations where forage production is lacking and any restoration effort would likely be unsuccessful, or not undertaken.
  - **Ashley National Forest:** The Strawberry Peak Allotment does not have any extensive noxious weed infestations. The weed site information can be found in the Range Specialist Report.

- Areas where extensive ground disturbance has occurred resulting in loss of potential to meet the ground cover minimum. (E.g., area where flash flood of burned area resulted in loss of topsoil.)
  - **Ashley National Forest:** The Strawberry Peak Allotment does not have any extensive ground disturbance areas (Vegetation monitoring data can be found in the project record).

National Forest System lands that meet the above criteria will be considered capable of being grazed. The acreage of capable lands will remain constant for all alternatives. Acres of capable rangelands must be mapped to illustrate their location.

  - **Ashley National Forest:** Capable acres were mapped in 2007 for cattle based on a review and verification of information collected in 1964 and updated during condition/vegetation monitoring surveys during the trail grazing period.

### Classification of Suitable Rangelands on the Ashley National Forest

#### Criteria for Determining the Context and Extent Suitable Rangeland within a Plan Area

Classification of lands suitable for any particular management activity or permitted use is a land allocation decision made at the Forest plan level. Identifying those areas where livestock grazing is an appropriate use involves consideration of forest plan management direction for the area within which the allotment area lies, the area's other uses and values, and which, if any, other uses would be foregone with livestock grazing. Forest planning records should contain a description of the criteria used in the analysis to identify suitable rangelands.

Areas where livestock grazing may not be an appropriate use are listed below. Additional uses/activities may be considered as local conditions warrant. Whereas suitability of lands for livestock grazing is a forest plan level land allocation decision, the final determination of which lands are suitable for livestock grazing will depend on an overall evaluation of potential effects, and opportunities to address unwanted effects at the project/allotment level.

- Developed recreation sites or special use sites.
  - **Ashley National Forest:** There are no recreation sites or special use sites on the Strawberry Peak Allotment so no areas were excluded from suitable acres.

- Special area designations such as research natural areas.
  - **Ashley National Forest:** There are no special area designations such as research natural areas on the Strawberry Peak Allotment.

- Administrative sites and research facilities or study sites.
  - **Ashley National Forest:** There are no administrative sites and research facilities or study sites on the Strawberry Peak Allotment.
• Municipal watersheds.
  o **Ashley National Forest**: There are no municipal watersheds on the Strawberry Peak Allotment.

• Important areas or sites where grazing use may not be compatible with other resource management objectives such as unique vegetative communities, wildlife areas where grazing would not be allowed, etc.
  o **Ashley National Forest**: There are no important areas or sites where grazing use may not be compatible with other resource management objectives on the Strawberry Peak Allotment.

• Areas or sites where grazing use may not be consistent with complying with legislated direction such as the Endangered Species Act, Historic Preservation Act, etc.
  o **Ashley National Forest**: There are no areas or sites where grazing use may not be consistent with complying with legislated direction such as the Endangered Species Act, Historic Preservation Act on the Strawberry Peak Allotment.

• Noxious weed infestations where the area impacted is expansive (e.g., several thousand acres occupied by noxious weeds within a watershed) and allowing livestock use would contribute to spread of the infestation outside of the currently impacted watershed.
  o **Ashley National Forest**: There are no noxious weed infestations where the area impacted is expansive (e.g., several thousand acres occupied by noxious weeds within a watershed) and allowing livestock use would contribute to spread of the infestation outside of the currently impacted watershed on the Strawberry Peak Allotment.

• Areas where livestock grazing is impracticable due to economic considerations, either from a permittee or agency standpoint.

  ❖ *This criterion may drive a suitability classification if the amount of capable rangeland within a plan area or allotment is limited, so as to make livestock grazing logistically difficult or impractical.*

  o **Ashley National Forest**: There are no areas where livestock grazing is impracticable due to economic considerations, either from a permittee or agency standpoint on the Strawberry Peak Allotment.

• Transitory range created by timber harvest activities where the associated mitigation costs to protect long-term timber resource values are excessive.
  o **Ashley National Forest**: There are no transitory range created by timber harvest activities where the associated mitigation costs to protect long-term timber resource values are excessive on the Strawberry Peak Allotment.

• Areas where the social consequences and values foregone are not acceptable.
  o **Ashley National Forest**: There are no Areas where the social consequences and values foregone are not acceptable on the Strawberry Peak Allotment.

On the Ashley National Forest, Strawberry Peak Allotment the suitable acres equals the allotment acres which are 9,619 acres.
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