USDA

United States
Department of
Agriculture

Forest
Service

September 2009

Environmental Assessment

Curry Allotment Grazing Authorization

Heber-Kamas Ranger District, Uinta-Wasatch-Cache National Forest
Duchesne County, Utah

Sections 12, 13, 14, 22, 23, 27, 34, Township 3 North, Range 9 West, Uintah Special Meridia

For Information Contact: Jim Percy
2460 South Highway 40
Heber City, Utah 84032
435-342-5211
www.fs.fed.us/r4/uwc/projects

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Document Structure

The Forest Service has prepared this environmental assessment (EA) in compliance with the National Environmental Policy Act (NEPA) of 1969 and other relevant Federal and State laws and regulations. This EA discloses the direct, indirect, and cumulative environmental impacts that would result from implementation of the proposed action and alternatives and considers the best available science. An interdisciplinary analysis on the proposed action is documented in a project record.

- *Introduction:* This section includes information on the history of the project proposal, the purpose of and need for the project, and the agency's proposal for achieving that purpose and need. This section also details how the Forest Service informed the public of the proposal and how the public responded.
- *Comparison of Alternatives, including the Proposed Action:* This section provides a more detailed description of the agency's proposed action as well as alternative methods for achieving the stated purpose. These alternatives were developed based on significant issues raised by the public and other agencies. This discussion also includes possible mitigation measures. Finally, this section provides a summary table of the environmental consequences associated with each alternative.
- *Environmental Consequences:* This section describes the environmental effects of implementing the proposed action and other alternatives. This analysis is organized by resource area. Within each section, the affected environment is described first, followed by the effects of the No Action Alternative that provides a baseline for evaluation and comparison of the other alternatives that follow.
- *Agencies and Persons Consulted:* This section provides a list of preparers and agencies consulted during the development of the environmental assessment.
- *Appendices:* The appendices provide more detailed information to support the analyses presented in the environmental assessment.

Additional documentation, including more detailed analyses of project-area resources, may be found in the project planning record located at the Heber Ranger District Office in Heber, Utah.

Introduction

The Curry Allotment is located in the Duchesne River drainage approximately 21 miles east of Kamas, Utah (Figure 1). Legal description consists of: Sections 12, 13, 14, 22, 23, 27, 34, Township 3 North, Range 9 West, Uintah Special Meridian. The allotment is approximately 940 acres. Elevation ranges from approximately 7,800 feet at the Forest Service boundary on the south to approximately 8,800 at the north end of the allotment.

The Heber-Kamas Ranger District has authorized cattle grazing on the Curry Allotment since 1957. Prior to that it was part of a large sheep allotment. The allotment consists of one unit grazed by 20 head of cattle with calves from July 6 to August 25.

Term grazing permits are generally valid for 10 years from the date of issuance. Compliance with the National Environmental Policy Act (NEPA) is required when permits are issued (or re-issued). Section 504 (b) of Public Law 104-19 provides: "Notwithstanding any other law, term grazing permits which expire or are waived before the NEPA analysis and decision pursuant to the schedule

developed by individual Forest Service System units, shall be issued on the same terms and conditions and for the full term of the expired or waived permit. Upon completion of the scheduled NEPA analysis and decision for the allotment, the terms and conditions of existing grazing permits may be modified or re-issued, if necessary to conform to such NEPA analysis." Grazing on the Curry Cattle Allotment is being continued in accordance with this direction.

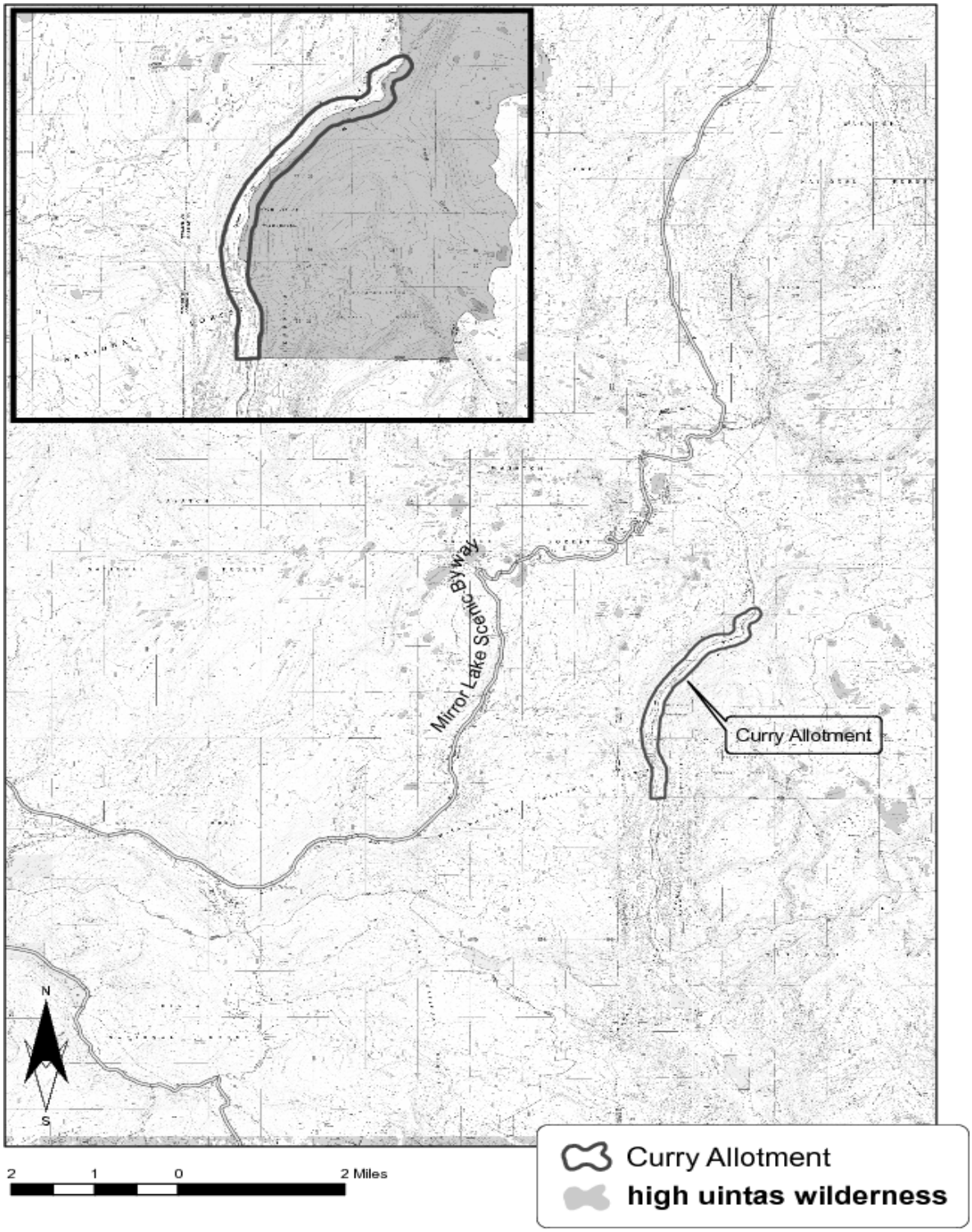

Figure 1. Curry Allotment Vicinity Map.

Purpose and Need

The purpose and need for the action is developed by considering the gaps between desired resource conditions and existing conditions. These gaps viewed as resource management needs, provide the basis for describing the purpose and need for action. Where existing resource conditions are meeting or moving toward desired conditions, the action may indicate a need to continue existing management.

The purpose is to authorize livestock grazing in a manner that maintains and/or moves the allotment toward Forest Plan objectives and desired conditions for rangeland vegetation, soil, watershed, and wildlife habitat relative to livestock grazing. Grazing is a sustainable use of National Forest System (NFS) lands and is permissible through the Multiple Use Sustained Yield Act of 1960, as amended. The Curry cattle Allotment lies within the Western Uintas Management Area and contain lands considered capable and suited for domestic livestock grazing. (FEIS for the Forest Plan, pg. B9-2; Forest Plan, pg. 4-190). Continued domestic livestock grazing is consistent with the goals, objectives, and guidelines of the Forest Plan. When continued use is consistent with the goals, objectives, standards, and guidelines of the Forest Plan, it is Forest Service policy to make forage available to qualified livestock operators from lands suitable for grazing (Forest Service Manual (FSM) 2203.1.6).

Action is needed here and now:

- To bring the allotment under current environmental analysis, using current information, pursuant to Public Law 104-19, Section 504(a): Establish and adhere to a schedule for the completion of NEPA, Act of 1969 (42 U.S.C. 4321 et seq.) analysis and decisions on all allotments within the National Forest System unit for which NEPA is needed (PL 104-19 section, General Provision 1995).
- To develop an updated allotment management plan (AMP).
- To provide for additional flexibility in the management of the allotment through an adaptive management approach so the Forest Service and permittee have the ability to respond to changing resource conditions and management objectives.

Proposed Action in Brief

The Forest Service proposes to authorize continued grazing of cattle on the Curry Allotment at a level and in a manner consistent with the direction in the Forest Plan, and other applicable laws and regulations. The proposed action recognizes the need for forage production from Forest Service administered lands as identified in the Forest Plan.

Field data suggests current grazing management is meeting or moving towards desired conditions as stated in the Forest Plan on the majority of rangelands on the allotment. The proposed action would employ an adaptive management strategy, which allows for adjusting the timing, intensity, frequency and management of grazing as needed to meet Forest Plan standards and guidelines. Monitoring would determine the need and frequency for administrative adjustments in the timing, intensity, frequency, and/or management of grazing.

Current Management Direction

The 2003 Revised Wasatch-Cache Forest Plan (Forest Plan), sets forth broad, programmatic management direction for the Forest. Management direction from the Forest Rangeland Health Forest

Plan Amendment (USDA Forest Service, 1996) was adopted in the 2003 Revised Forest Plan (USDA Forest Service, 2003a).

This EA is a project-level analysis; its scope is confined to addressing the significant issues and possible environmental consequences of the project or activity. It does not attempt to re-address decisions made in Forest planning; it does implement direction or decisions made in Forest planning and documented in the Forest Plan.

Besides Forest-wide direction, more specific management is identified as Forest Plan Management Area (MA) direction. Each MA provides for a unique combination of activities, practices, and uses. The Curry allotment is located within the Western Uintas Management Area. Goals, objectives, standards, guidelines, and the desired condition for the Curry allotment are identified in the Forest-wide and Management Area sections of the Forest Plan. More detailed direction for management specific to individual allotments is contained in AMPs, annual operating instructions (AOIs), and term grazing permits.

Additional management direction for rangeland resources can be found in Forest Service Manual (FSM) 2200, Range Management, WO Amendment 2200-90-1, Chapters 10-50; Intermountain Interim Directive FSH 2209.3-99-9, Grazing Permit Administration Handbook, Chapter 90, Rangeland Management Decision Making; and FSH 2209.21 Rangeland Ecosystem Analysis and Management Handbook, R4 Amendment 2209.21-93-1, Chapters 10-40.

Decision Framework

Given the purpose and need, the deciding official (Heber-Kamas District Ranger) reviews the proposed action and the other alternatives in order to make the following decisions:

- Determine whether livestock grazing will be authorized on all, part, or none of the Curry Allotment.
- If the decision is to authorize some level of livestock grazing, then identify what management prescriptions will be applied (including standards, guidelines, grazing management, and monitoring) and incorporated in the allotment management plan to ensure desired condition objectives are met, or movement occurs toward those objectives in an acceptable timeframe.

The decision will be consistent with the Forest Plan, National Forest Management Act, National Environmental Policy Act, and applicable laws, regulations, and Executive Orders.

Public Involvement

The proposal was listed in the Schedule of Proposed Actions on January 1, 2009. A legal notice was published in the newspaper of record on December 19, 2008 to initiate a comment and public scoping period. In addition, as part of the public involvement process, the agency sent letters on December 10 2008 to 82 individuals and agencies inviting comment on the proposal.

Using the comments from the public, other agencies, and Forest staff, the interdisciplinary team developed a list of issues to address.

Issues

Scoping and public involvement are used to identify issues for the proposed action. An issue is a point of disagreement, debate, or dispute about the specific environmental effects of the proposed action. Using the comments from the public, other agencies, and tribes, the interdisciplinary team developed a list of issues to address. The Forest Service separates issues into two groups: significant and non-significant issues. Significant issues are defined as those directly or indirectly caused by implementing the proposed action. An issue is non-significant if it is:

Outside the scope of the proposed action; Already decided by law, regulation, the forest plan, or a higher level of decision; irrelevant to the decision to be made; conjectural and not supported by scientific evidence; or a comment or position statement.

The Council for Environmental Quality (CEQ) NEPA regulations require this delineation in 40 CFR § 1501.7, "…identify and eliminate from detailed study the issues which are not significant or which have been covered by prior environmental review (§ 1506.3)…" Following is a list of non-significant issues and reasons regarding their categorization as non-significant and significant issues brought forward for detailed analysis.

Non-significant issues and reasons for not analyzing in detail:

Water Quality, Wetlands, and Bank Stability

While discussing issues brought forward during scoping and during the interdisciplinary planning process, it was assumed by specialists and public that water quality, wetlands, and bank stability would be adversely affected and would be main issues for analysis within this allotment. However, upon field review of the existing stream bank and wetland and ground cover conditions, these assumptions of adverse impacts were not substantiated by existing conditions.

During field review approximately 1,000 feet of stream was looked at for bank trampling within the most heavily used meadow area within the allotment. There was little or no evidence of cattle trailing along the length of the stream bank and 100 feet of the south bank was trampled and bare at one of three possible crossings/watering areas within the allotment. Therefore, only about 10 percent of the surveyed area had been measurably impacted by cattle grazing and is primarily due to concentrated use at a stream crossing. This observed impact can be expanded to describe the grazing related impacts at stream crossings within the entire allotment. With a maximum of three crossings, 300 feet of the 34,320 total feet of stream length is destabilized because it is trampled and bare. Cattle grazing has destabilized less than one percent of the stream bank within the allotment. This negligible impact is not creating adverse increases to erosion or sedimentation rates within the allotment area, and shows that livestock concentrate their use/impact to the stream in the same areas for water and crossings, rather than having a more diffuse and widespread impact along more of the stream bank (Hanson 2009).

Fisheries and aquatic species

The Duchesne Tunnel dewaters the river and alters aquatic habitat for several miles downstream of the diversion. From a conservation perspective, there are no populations of threatened, endangered, or sensitive aquatic species within the project area. Although Colorado River cutthroat trout (*Oncorhynchus clarki pleuriticus*) historically inhabited the Duchesne River and its tributaries, fisheries biologists believe that this river is now only occupied by non-native trout species. The

historically occupied habitat of this species would not be adversely impacted by continued grazing given proper management and regular monitoring of habitat conditions.

Aquatic habitat in the area is managed to recover and maintain habitat conditions suitable for the native cutthroat trout. Under a continuance of the grazing allotment, the anticipated grazing effects to fish habitat would be minimal given the low numbers of cattle and proper management/administration of grazing. Based on the limited areas of accessible stream, cattle grazing in the Curry allotment have their greatest impact to aquatic life along less than a mile of stream. Given 34 head months of grazing along 0.6 mile of "cattle-accessible" river, there are 61 head months of cattle per mile of the N.F. Duchesne River. Relative to other grazing allotments, this is a very low grazing intensity. Studies from other allotments indicate that persistent negative effects on riparian vegetation and stream habitats are detected when there are over 500 head months of cattle per mile of accessible stream (Chase 2000 in Fairchild 2009).

Boreal toad (*Bufo boreas*) is currently managed under a Conservation Agreement to which the Forest Service is signatory. We do not know if this species is present in the allotment. Effects to this species, if present, are related to impacts made to riparian and stream habitats. The Water Resource Technical Report and the Rangeland Resource Technical Report indicate that wetlands and riparian areas are in good condition and functioning properly therefore habitat for the Boreal toad is being sustained.

While aquatic invertebrates are found in several of the water features in the allotment, special status invertebrate species are not found in this area, thus effects to invertebrates will be general and primarily related to effects on aquatic habitats.

Botanical Resources

There is no suitable habitat for threatened, endangered, proposed or candidate plant species in the allotment, thus no effect to any federally listed species (Duncan 2009). Only one sensitive plant species has the potential to be affected by cattle grazing in the Curry allotment. The impact determination for this species (*Botrychium lineare*) is "may impact individuals or habitat, but will not likely contribute to a trend toward Federal listing or cause a loss of viability to the population or species" (Duncan 2009).

Heritage Resources

Past surveys on similar allotments have found minimum impacts to cultural resources from grazing activity. The State Historic Preservation Officer has given concurrence on a determination of "No Adverse Effect" for all grazing authorizations on the Forest (project file). Therefore, effects to heritage resources are not analyzed in detail.

Soils

Results of soil erosion modeling using the FS WEPP methodology found that the average annual erosion rate for all soil map units is either at or below the allowable soil loss ("T" value) for each soil type, except for soil map unit 100 with Aspen which is slightly above. The SMU 100 Aspen area is on extremely steep slopes (50%) which would most likely preclude this area from grazing. Therefore, long-term soil quality and productivity would not be impaired by the continuation of current grazing management.

Lack of soil compaction was verified in sites by digging soil pits and observing soil structure. There were no soil platelets or signs of limited or deflected root growth from compacted soil layers.

Therefore, a conclusion can be drawn that there is no evidence of detrimental soil compaction from grazing use.

Currently, ground cover is meeting the Forest Plan Standard of 85% of potential. No significant erosion or sedimentation is predicted under the current management, and there is no evidence of detrimental soil compaction from grazing. No long term effects to soil productivity are anticipated with the current management (Davidson 2009). Therefore, effects to soil resources are not analyzed in detail.

Significant issues and measurement indicators:

Issue 1 – Vegetation

Current livestock use may be affecting health, vigor, and diversity of upland and riparian vegetation, and causing spread of noxious weeds.

Vegetation – Riparian

Cattle tend to congregate in riparian and wetland areas and may be adversely impacting these areas.

Indicator(s): Diversity and abundance of preferred native plant species

Vegetation – Uplands

Livestock grazing may affect vegetation health, vigor, and diversity of upland vegetation.

Indicator(s): Diversity and abundance of preferred native plant species

Vegetation – Noxious Weeds

Noxious weed are plant species designated by responsible governmental officials that are considered to be aggressive, difficult to manage, poisonous, toxic or parasitic. These plants generally out-compete and replace desired plant species**.**

Indicator(s): Abundance of noxious weeds

Issue 2- Wildlife

Livestock grazing may be affecting terrestrial Management Indicator Species (MIS) habitat, threatened, endangered, and sensitive (TES) species habitat, and migratory bird species habitat.

Indicator(s): Effects to special status species habitat
Effects to sensitive species population viability
Effects to MIS population trend
Determinations made in wildlife BA/BE

Issue 3 – Recreation

Lack of cattle control may cause impacts outside the allotment boundaries, and conflicts with recreational users on the Forest.

Indicator(s): Number of cattle complaints from recreation users

Issue 4 - Wilderness characteristics

Approximately 325 acres of the 460,000 acre High Uintas Wilderness Area (HUWA) falls within the boundary of the Curry grazing allotment. Cattle grazing could adversely impact the resources within the High Uintas Wilderness Area, and detract from wilderness experience.

Indicator(s): Compliance with management direction for the HUWA
Impacts to wilderness attributes as defined in effects worksheet

Chapter 2 - Alternatives

This chapter describes and compares the alternatives considered for the Curry Allotment grazing authorization. It includes a description of each alternative considered. This section also presents the alternatives in comparative form, defining the differences between each alternative and providing a clear basis for choice among options by the decision maker and the public. Some of the information used to compare the alternatives is based upon the design of the alternative and some of the information is based upon the environmental, social, and economic effects of implementing each alternative.

Alternative 1- No Action, No Grazing

The "no action" alternative is included to meet requirements of the National Environmental Policy Act [40 CFR 1502.14 (d)] and the Grazing Permit Administration Handbook, FSH 2209.13, Chapter 90, Section 92.31 which stipulates that "in addition to the proposed action, the no action alternative shall always be fully developed and analyzed in detail." "No action" is synonymous with "no grazing" and means that livestock grazing would not be authorized within the project area. Grazing would not be authorized after a two-year notification to the permittee from the date the decision is made. In the interim the allotment would be managed according to current grazing management.

Alternative 2 – Proposed Action, Current Management with Adaptive Management Approach

The current management system would be continued with use of an adaptive management strategy. Twenty head of cows with calves would be turned out to graze from July 6 to August 25. The adaptive management system is designed to help maintain and establish plant species desirable for supporting healthy upland and riparian ecosystems, provide for a sustainable livestock forage base, and protect the watershed and other resources from unacceptable impacts. One grazing cycle (4-5 years) would allow the Forest Service time to gather data to set the grazing capacity of the allotment.

Desired conditions for Western Uintas Management Area is found in the Forest Plan on pages 4 - 176 through 4 - 191. Management area direction for rangeland/livestock grazing states "Livestock grazing will be managed to maintain or move toward desired future conditions for rangeland vegetation (see Forest-wide Desired Future Conditions)".

Table 1. Desired Future Conditions.

Resource, Ecosystem, or Community Type	Forest-wide Desired Future Condition	Additional Site-Specific Desired Condition
Soil productivity	Most soils have at least minimal protective ground cover, soil organic matter, and coarse woody material. Soils have adequate physical properties for vegetative growth and soil-hydrologic function. Degradation of soil quality and loss of soil productivity is prevented. Soil productivity, quality, and function are restored where adversely impaired and contributing to an overall decline in watershed condition.	Minimal protective ground cover is defined by Forest Plan standard S7 as at least 85% of potential. In tall forb communities minimum ground cover is defined by Guideline G14 as at least 90% of potential.

Resource, Ecosystem, or Community Type	Forest-wide Desired Future Condition	Additional Site-Specific Desired Condition
Riparian areas	Riparian areas have a range of vegetative structural stages that are at or moving toward properly functioning condition, provide a transitional zone between upland terrestrial habitats and aquatic habitats, and have the features necessary to promote stable stream channels and diverse habitat conditions. Desirable riparian vegetation occupies the historical floodplain. Riparian areas provide for fish, wildlife, and water quality requirements.	Class I riparian area within the project area listed in the Forest Plan is: Duchesne River (USFS 2003, LRMP p. VII-6) No Class II riparian areas within the project area are identified in the Forest Plan (USFS 2003, p. VII-7).
Aquatic Habitats	Habitats will be managed to maintain cool, clear water and well-vegetated stream banks for cover and bank stability. Cool water temperatures will be preserved through well-vegetated banks.	The general Desired Future Condition (DFC) for fish habitat in the Western Uintas Management Area is a state of productive habitat with cool, clear, and clean water. Riparian vegetation is functioning to provide stable streambanks, over-hanging vegetative cover, and adequate streamside shading to maintain appropriate water temperatures. Habitats within the stream channel provide a diverse array of cover in the form of deep pools and complex habitat features generally created by natural occurrences of boulders and woody debris. Natural reproduction of fish is maintained by minimizing sediment input from roads, trails and campgrounds and providing for instream flows. Undisturbed stream banks exist on at least 80% of Class I riparian areas.
Aspen	Associated herbaceous and woody vegetation is in aspen communities is highly variable and is dominated by desired perennial grasses and forbs with a range of shrub cover.	At least 10% of the understory cover in aspen communities is comprised of desired tall forb species.
Upland vegetation	Maintain upland (sagebrush, mountain brush, grassland) plant communities are dominated by desired perennial grasses, forbs, and have a range of shrub cover. Associated herbaceous and woody vegetation provides for plant communities that are diverse in seral status and structure and provide food and habitat for wildlife, forage for livestock, and a variety of recreational opportunities and aesthetic values.	A wide variety of sagebrush cover closures exist, with a maximum closure of 35%. Most (greater than 50%) vegetation cover in sagebrush stands are desired grass and forb species. A variety of shrubs such as snowberry, serviceberry, chokecherry, and elderberry are present in mountain brush communities.
Riparian vegetation	Riparian areas have a mix of seral and climax vegetation that is at or approaching PFC. Trees, willows, dogwood, birch, alder, sedges, rushes and hydric grasses, depending on stream substrate, gradient, and elevation, dominate riparian areas. These areas provide healthy self-perpetuating plant communities. Riparian plant habitats and rare riparian species will be protected from trampling and overuse by livestock grazing and recreational uses.	Adequate vegetative cover (as defined by the heights prescribed in Forest Plan standards S24 and S25) provide filtering of runoff, protection of the soil, and habitat for wildlife in riparian areas. Riparian shrub and trees are perpetuated by retaining at least 50% of annual growth of these plants (i.e., as provided for in Forest Plan standard S26.

Resource, Ecosystem, or Community Type	Forest-wide Desired Future Condition	Additional Site-Specific Desired Condition
Rangeland/Livestock Grazing	Livestock grazing is a permitted use. Grazing levels will be adjusted and managed with up-to-date Allotment Management Plans (AMPs). AMPs prescribing rest and deferred rotation grazing systems and riparian pastures will be in place. Structural improvements such as fences and water developments will be constructed or reconstructed and maintained to improve animal distribution and control. Structural improvements that are not needed will be removed from the forest. Grazing permit holders will move livestock as needed to meet management objectives for the ground. Ongoing ecosystem monitoring will be used to refine standards. Permit holders will share responsibility with the Forest Service for monitoring use, and will hold full responsibility for movement and control of livestock. Excess and unauthorized livestock use will be minimal.	Grazing levels will be adjusted and managed with an up-to-date Allotment Management Plan (AMP) that prescribes grazing systems and establishes management that ensure the time and timing of grazing is altered annually. When and/or if needed, structural improvements such as fences and water developments will be constructed or reconstructed and maintained, to improve animal distribution and control.

Adaptive Management

Livestock numbers and seasons of use described in the proposed action are only approximations. Due to annual climatic variability, the length of time livestock are allowed on the allotment varies from year to year. If adjustments in the management system, livestock numbers, and/or season of use are necessary to meet Forest Plan objectives or other laws or regulations, the Forest Service will make these changes through the adaptive management process. If management objectives are meeting desired conditions or are approaching desired conditions and objectives, then livestock stocking will be adjusted consistent with monitoring results.

There would be no changes to the allotment boundary. Livestock grazing would continue to be managed through an adaptive management strategy. Adaptive management is a strategy based on three principles: (1) achievement of realistic, clearly defined objectives, (2) ongoing monitoring to assess progress toward meeting those objectives, and (3) the flexibility to alter management when monitoring suggests there is a need for change. This management strategy is most appropriate in dynamic situations, where change is the norm. Permittee flexibility during the implementation period will be needed due to changing conditions or unexpected results.

Different management techniques would be considered under the adaptive management strategy, such as changing the season of use, timing of entry and departure, stocking levels and duration of use. Other livestock and resource management practices such as closing areas, adjusting herding, changing salt locations, supplementing with nutrients, and adding rangeland developments may also be considered. Monitoring indicators and protocols can be adjusted if warranted.

This management system would provide flexibility to adjust livestock grazing practices in response to unpredictable management situations caused by weather fluctuations, livestock behavior, or acts of nature such as wildfires. Adaptations would be constrained by Forest Plan direction and Term Grazing Permit terms & conditions. Based on monitoring results of the previous season, permitted numbers and length of stay would be predicted for the next grazing season. Seasonal adjustments would be dictated by permittee success or failure to meet grazing standards.

As mitigation and management requirements, the following Forest Plan direction is incorporated as part of the proposed action:

Standard (S) 24

As a tool to achieve desired conditions of the land, maximum forage utilization standards for vegetation types in satisfactory condition using traditional grazing systems (rest rotation, deferred rotation, season long) are as follows:

Table 2. Forest Plan utilization standards by vegetation type*

Vegetation Type	Condition	Percent Utilization Key Grass
Upland and Aspen	Satisfactory	50
Crested Wheatgrass	Satisfactory	60
Riparian Class I	Satisfactory	50
Riparian Classes II and III	Satisfactory	60

*Utilization of key grass or grass like vegetation, by vegetation type, for rangelands in satisfactory condition.

Standard (S) 25

As a tool to achieve desired conditions of riparian areas, maximum forage utilization standards (stubble height) for low to mid elevation *greenline* species in Class I, II, and III riparian areas in satisfactory condition are as follows: (Key species being grazed include water sedge, Nebraska sedge, and/or wooly sedge).

Table 3. Minimum greenline stubble height at end of growing season.

Riparian Value Class I	Condition	Stubble height at end of growing season
Riparian Value Class I	Satisfactory	5-6 inches
Riparian Value Class II	Satisfactory	4-5 inches
Riparian Value Class III	Satisfactory	3-4 inches

Standard (S) 7

Allow management activities to result in no less than 85% of potential ground cover for each vegetation cover type.

Table 4. Forest Plan required percent potential ground cover by vegetation type.

Vegetation Type	% Ground Cover Range at Potential	85% of potential ground cover
Silver Sagebrush	89 - 96	76 to 82
Mountain sagebrush	81 -96	69 – 82
Low Sagebrush	69	59
Snowberry	92	78
Aspen	90 – 98	77 – 83
Alpine grassland	97 – 100	82 – 85
Tall Forb	49 – 75	42 – 64
Oak brush	92 - 100	78 – 85

Standard (S) 26

For all rangelands, including big game winter range and riparian areas, permit no more than 50% of the current year's growth on woody vegetation to be browsed during on growth cycle (i.e., when use has reached 50% allow no additional livestock use).

Guidelines (G) 71 -75 are also applicable. These are described in the Forest Plan on page 4 – 52.

Monitoring Plan

Monitoring is a key aspect of adaptive management. The decision will include monitoring guidance intended to gauge progress toward obtaining (long term), or maintaining desired conditions stipulated in the Forest Plan. A monitoring plan is attached to this EA as appendix A. The specifics of monitoring, including protocols, etc, will be included in the evaluation section of the AMP. If monitoring indicates the need for management changes (e.g., Forest Plan standards and guidelines aren't being met; resource conditions are deteriorating or are not making adequate progress towards Forest Plan desired conditions and objectives; unacceptable use conflicts persist or are increasing, etc.), management will be adapted as appropriate and may result in modifications to the term grazing permit. Likewise, if management objectives are met and resource improvement is confirmed, increased grazing use would be considered as long as a positive trend can be maintained.

The Wasatch-Cache National Forest Noxious Weed Strategy would be followed for management of noxious weeds. This strategy provides a systematic approach to noxious weed treatment using chemical, biological, and mechanical means of weed control within the project area. Early detection and treatment with an eradication objective is the current weed control strategy for the Curry Allotment. That means all known and newly discovered noxious weed infestations will be treated as quickly and often as funding allows.

The following monitoring activities would be conducted by the Forest Service to evaluate range conditions and to ensure compliance with the grazing permit and management requirements listed above.

Table 5. Monitoring Plan

Water and Soil				
Desired Conditions	**Indicators**	**How will we monitor**	**Protocol**	**Management Action if threshold is met**
Denuded areas and trampling along stream bank is minimized in order to protect stream and groundwater from unacceptable levels of sediment input	Maintain 85% ground cover along stream bank	Conduct transects parallel to banks and document length along the stream and area of disturbance caused from cattle	Survey stream bank conditions within allotment to measure and define areas trampled or denuded	Move livestock to the next pasture or take off the allotment if ground cover along the stream bank falls below 85%
Adequate ground cover & soil organic matter is maintained to protect against erosion and to reduce sediment into streams	Maintain 85 percent of potential ground cover for each vegetation cover type	Ground cover measured during unit exams.	FS Handbook 2509.16 or approved R4 methods	Move livestock to the next pasture or take off the allotment if lack of ground cover is attributed to livestock

Vegetation				
Desired Conditions	**Indicators**	**How will we monitor**	**Protocol**	**Management Action if threshold is met**
Riparian areas have an abundance and diversity of desired native species in satisfactory condition	Meet Forest Plan standards S24 & S25	Measure greenline stubble height and percent utilization during unit exams	Approved R4 methods	Move livestock to the next pasture or take off the allotment when greenline & utilization standards are met
There is a variety of age classes of healthy Willow, Aspen and Mountain Shrub species	Meet Forest Plan standard S26	Measure browse utilization during unit exams in late summer and fall	Approved R4 methods	Move livestock to the next pasture or take off the allotment when browse utilization standards are met
Uplands have an abundance of and a diversity of desired native species in satisfactory condition	Meet Forest Plan standards for utilization of key grass or grass like vegetation (S24)	Measure percent utilization during unit exams	Approved R4 methods	Livestock will be moved to the next pasture or taken off the allotment when browse utilization standards are met
Recreation Resource				
Desired Conditions	**Indicators**	**How will we monitor**	**Protocol**	**Management Action if threshold is met**
Minimize or reduce to zero the number of public comments or occurrences of human-cattle conflicts outside the allotment	Number of public comments or notifications regarding cattle conflicts outside the allotment	Track phone calls, letters of verbal comments from public. Monitor locations where historical conflicts have been reported	Set of tracking forms for all frontline personnel as well as field going personnel	If unacceptable level or consistency of human-cattle conflicts is reached administrative action will be taken on the grazing permit

Alternatives Considered but Not Analyzed in Detail

No other alternatives to the proposed action were indentified or considered.

Comparison of Alternatives

This section provides a summary of the effects of implementing each alternative. Information in the table is focused on activities and effects where different levels of effects or outputs can be distinguished quantitatively or qualitatively among alternatives.

Table 6. Comparison of impacts by alternative.

Issue/Resource	Alternative 1 – No Grazing	Alternative 2 – Proposed Action
Riparian Vegetation	Within this forested type are many small meadows where most vegetation diversity occurs. These meadows are in stable condition. Vegetation diversity as expected for the area. Meadow diversity would be maintained.	Stable conditions with a diversity and an abundance of native plant species. Meadow diversity would be maintained.
Upland Vegetation	Stable or improving condition. It is expected that this trend would continue and the parks would increase in plant diversity.	Upland parks that have been overgrazed in the past are in stable or improving condition. It is expected that this trend would continue, but the improvement will be slower than under no action.
Noxious Weeds	Noxious weeds seem to be limited to Canada thistle. With this alternative the introduction and spread of noxious weeds would be primarily a result of human activities. When found noxious weed infections woul be treated on an integrated approach through early detection rapid response technique.	Noxious weeds in the area are limited to Canada thistle. Cattle along with other users could introduce or spread noxious weeds. Noxious weed introductions would be treated through an integrated, early detection, rapid response technique.
Wildlife - Threatened, endangered , candidate, or proposed species	No Effect	May affect, but not likely to adversely affect Canada lynx. No Effect to western yellow-billed cuckoo.
Wildlife - Sensitive Species	No Impact	May Impact Individuals or Habitat, but Will Not Likely Contribute to a Trend Towards Federal Listing or Loss of Viability to the Population or Species.
Wildlife - Management Indicator Speices	No Impact	May Impact Individuals or Habitat, no effect to population trend.
Wildlife - Migratory Birds	No Impact	May Impact Individuals or Habitat, but Will Not Likely Contribute to a Trend Towards Federal Listing or Loss of Viability to the Population or Species.
Recreation – Cattle/Recreation Conflicts	Cattle/recreation user confilicts would become non-existent after phase out of cattle grazing in two years.	There may still be some level of cattle/recreation user conflicts; however, these conflicts would be reduced through monitoring and adaptive management adjustments.
Wilderness attributes in High Uintas Wilderness Area	No impacts to wilderness attributes.	Desired conditions and management standards of the High Uintas Wilderness Area Management Plan would be met. Minor effect to the Untrammeled and Natural wilderness attributes, but no effects to the rest of the wilderness attributes.

Chapter 3 – Affected Environment and Environmental Consequences

Rangeland Capability and Suitability

The National Forest Management Act requires that rangeland capability and suitability are determined during the forest planning process. This was undertaken as part of the 2003 Forest Plan revision process. A discussion of this effort can be found in the Final Environmental Impact Statement Wasatch-Cache National Forest (USDA Forest Service, 2003b) and is hereby incorporated by reference. Lands included in the Curry allotment are determined to be capable and suitable for livestock grazing. Additionally, an allotment specific capability and suitability analysis was completed for the Curry allotment (Davidson and Percy 2009). The results of this analysis is summarized in Tables 7 - 9 below; the full analysis is documented in the report cited above, and is contained in the project record.

Capability and suitability as defined by the Wasatch-Cache National Forest Plan:

> ***Capability*** *– represents the physical attributes or characteristics of the landscape that are conducive to livestock grazing*.
>
> ***Suitability*** *– defined as those capable National Forest lands that are allocated to grazing use based on decisions related to social, economic, or environmental choices and uses foregone.*

The results of the capability analysis for management of the Curry allotment under the proposed action are summarized in the Table 7 below (acres rounded to the nearest acre). Under this alternative approximately 383 acres would be capable for cattle grazing.

Table 7. Acres Capable for livestock grazing.

ITEM	CRITERIA ACRES	NET ACRES (RUNNING TOTAL)
NFS Acres		941
DEDUCTIONS		
<>Too Steep (> 45% in sheep allotments, > 30% in cattle allotments)	378	563
<>Site Productivity < 200 lbs/acre/yr	180	383
<>Site Productivity – Non-Range Sites	Already excluded	
<>Site Productivity – Rivers and Perennial Streams	Already excluded	
<>Site Productivity - Roads	Already excluded	
<>Noxious Weeds	0	383
<>Unstable - High-Extreme Erosion Hazard	Already excluded	
<>Unstable – Mass Movement	0	383
<>Physically Inaccessible	0	383
<>Lack of Available Water	0	383
TOTAL – Acres Capable for Cattle Grazing		383

The results of this suitability analysis for management for the Curry allotment are summarized in Table 8 (acres are rounded to the nearest acre). Under this alternative approximately 345 acres would be suitable for cattle grazing.

Table 8. Acres Suitable for Livestock Grazing.

CRITERIA	CRITERIA ACRES	NET ACRES (RUNNING TOTAL)
NFS Acres Capable Under this Alternative		**383**
<>Outside Existing Allotment Boundary	0	**383**
<>Developed Recreation and Special Use Sites	0	**383**
<>Research Natural Areas	0	**383**
<>Administrative, Research, or Study Sites	1	**382**
<>Key Wildlife Habitats	0	**382**
<>Important TES Habitats	0	**382**
<> Areas where existing condition or rehabilitation needs preclude grazing	0	**382**
<>Unique Habitats	37	**345**
<>Economics Unfavorable	0	**345**
<>Transitory Range	0	**345**
<>Other	0	**345**
TOTAL – Acres Suitable for Cattle Grazing		**345**

Table 9 depicts estimated forage supply (i.e., grazing capacity). The forage supply analyses provide a general estimation of forage supply, and can be used to determine whether existing permitted livestock use is within the capability of the resource to support it. These numbers are not exact, and have been determined using a variety of information sources. The analysis clearly shows that there is ample forage production available on the allotment under the continuation alternative to meet current and anticipated permit obligations, and that there is a substantial amount of forage remaining available for use by wildlife, and to provide for ecosystem health and function.

Table 9. Estimated Forage Supply.

CURRENT TERM GRAZING PERMIT AUTHORIZATIONS (AUMS)			41
Capacity Estimated Using Soils and Other Production Data	**Current Management**	**Forage Available for Livestock (AUMs)** [1]	248
		Total Forage Available (AUMs) [2]	387

[1]Rounded to nearest AUM

[2]Total Forage within the allotment boundary available for use by Livestock plus wild ungulates. Does not include 50% of growth which is retained for plant health and vigor.

Forage supply was estimated using results from the suitability analysis, vegetation cover type, and soil productivity. The project area is covered by the Wasatch-Cache National Forest LSI soil survey coverage. Acres by vegetation cover type and grazing suitability class (suitable or not suitable) were derived using GIS analysis. This information was used in conjunction with other information from other publications (e.g., Yorks and McMullen 1980) to estimate current and potential forage production.

The estimated capacity under the proposed action is 315 AUMs, which is within the current management AUM estimate and well exceeds the current authorized use of 34 AUMs. Under the proposed action, current livestock grazing use would be well below the estimated capacity derived using either the project-level or the programmatic forest plan suitability analysis.

History of Grazing on the Allotment Including Current Management

Originally the Curry Allotment was part of a larger inter-forest sheep allotment under permit to the Wilcken Family. The Wilcken sheep permit extended up into the primitive areas of the Ashley and Wasatch National Forest. The sheep allotment in general suffered extensively from poor herd management and overstocking.

In 1957 the class of livestock was converted from sheep to cattle. Most of the sheep allotment was eliminated from cattle use by inaccessible terrain and vegetative type. Cattle use is confined to the narrow bottom along the Duchesne River. The suitability of the range in this canyon bottom is very spotty. On August 7, 1976 the cattle permit was transferred from Leslie and Theodore Wilcken to Oran Joe Curry. In 1995 the permit was transferred to Max Fabrizio and reissued in 2006.

The permittee's operation, like most permittees, is based on available forage from federal land, state land, leased private land, and owned private land. The allotments on Forest Service administered land are used for the summer pastures. The cattle on the Curry allotment are trucked to the trail head in the Duchesne River drainage and trailed approximately six miles along the Duchesne River to southern end of the allotment. At the end of the season the cattle are trailed back along the Duchesne River and trucked home. The allotment consists of one unit that is grazed by 20 head of cows with calves from July 6 to August 25. The grazing is managed to meet the standards and guidelines outlined in the Forest Plan.

Preliminary soils reports indicate ground cover is meeting or exceeding Forest Plan standards of 85% of potential on the majority of all of the allotment. A review of the hydrologic and aquatic features during the summer of 2008 indicates that current livestock grazing has had little impact on the water resources within the allotment. No long-term adverse effects to streambanks, water quality, or aquatic habitats were noted during the reviews. A review of range monitoring indicates the apparent rangeland conditions on the majority of each of the allotment is satisfactory as indicated by adequate ground cover and variety in species composition across the allotment.

Livestock operation

The 20 head that graze on the Curry allotment are a portion of the overall operation of the permittee. The permittee's operation is based on available forage from federal land, state land, leased private land, and owned private land. The permittee does not feed his cattle any hay except during extreme weather conditions such as drought and blizzards. The Curry allotment provides forage for a portion of the summer range need for the operation. The cattle on the Curry allotment are trucked to the trail head in the Duchesne River drainage and trailed approximately 6 miles along the Duchesne River to southern end of the allotment. At the end of the season the cattle are trailed back along the Duchesne River and trucked home.

During some grazing seasons the permittee has difficulty with keeping the cattle on the allotment. On those years the cattle would move to the top of the allotment (north end) early in the season. The gate across the trail would be left open by other forest users and the cattle would drift on up the drainage. The permittee would then be notified and would move the cattle back onto the allotment. The permittee has changed his operation to reduce this probability by putting cattle on the allotment that do not know the area. Now instead of the cattle moving quickly to the north end of the allotment they

explore the area more and graze their way to the upper gate. During the 2008 grazing season this strategy work well and no cattle were reported to have been off the allotment. Unit exams conducted in 2008 indicate that the allotment is meeting Forest Plan standards and guidelines associated with grazing and rangelands.

Vegetation

AFFECTED ENVIRONMENT

There is a wide spectrum of vegetation within the analysis area with the Conifer type being the most abundant. A nested frequency study was established in 2008 in one of the open parks. The study indicates that the apparent vegetation trend is improving or stable. Predominant grasses were Kentucky bluegrass (*Pos partensis*) and Smooth Brome (*Bromus inermis*). Predominant forbs are (*Polgyonum polygaloides*), dandelion (*Tarazacum officinale*), and cinquefoil (*Potentilla spp*). Aspen (*Populus tremuloides*) is the predominant overstory vegetation within the study area, with more than 95 percent of the stems in the sprout and seedling age group. The following table shows the approximate acreages of vegetation types.

Table 10. Vegetation types within the allotment

Vegetation type	Acres
Spruce-Fir	357
Lodgepole Pine	67
Sagebrush-Grass	43
Conifer-Aspen	266
Aspen Conifer	138
Aspen	30
Barren	39
TOTAL	940

Wetland and Riparian Areas

Within the allotment, there are small riparian and wet meadow areas where most of the vegetation diversity occurs. These areas are considered to be in good, stable condition, with the vegetation diversity and abundance of native plant species that are expected for the area.

Uplands

The vegetation within the allotment is predominantly a forested type. The open parks on the allotment are small and scattered. In the past when sheep used these parks they were used for extended periods of time which resulted in these parks becoming overgrazed. These parks are believed to have improved but still in poor condition and are now considered to be in stable or improving condition.

Noxious Weeds

There are some non-native plant species that have become established over the years but are not considered noxious weeds. The only Noxious weeds observed in the area were Canada thistle which is considered to be a 3C species in the Wasatch Cache Integrated Weed Management Strategy (USDA

Forest Service 2005) and is not targeted for aggressive treatment. The infestations observed were growing in and around the seeps and wet meadows and almost appeared to be naturalized. Transport by wind, on vehicles, clothing or on animals, wild or domesticated, are all mechanisms for noxious weed dispersal into new habitats. For this reason it is difficult to deduce the exact vector for the Canada thistle infestations.

Emphasis on noxious weeds has increased significantly in recent years, as more people recognize invasive species' effect on all other resource areas. In addition to the national emphasis, locally the Wasatch-Cache Forest Plan provides clear increased direction on noxious weed management. Noxious weed introductions will be treated through an integrated, early detection, rapid response technique.

ENVIRONMENTAL CONSEQUENCES

Alternative 1 - No Action

In the absence of cattle grazing, the stable or improving condition trend of upland vegetation would continue, and plant diversity in the parks would continue to increase. Small meadows in the allotment are currently in stable condition with good vegetation diversity. In the absence of cattle grazing, conditions might improve faster in areas that are currently grazed.

The alternative would remove livestock grazing from the allotment and establish a gap in the permittee's operation. This gap would put the operation out of balance resulting in having to find new summer pasture or reduce the herd size. Reduction in the herd would cause a finical loss to the permittee. Finding another source of summer forage would be difficult and increase operating costs

There are some non native plant species that have become established but these species are not considered noxious weeds. Noxious weeds in the area seem to be limited to Canada thistle. With this alternative the introductions and spread of noxious weeds would be primarily result of human activities. When found noxious weed infections will be treated on an integrated approach through early detection rapid response technique.

Alternative 2 - Proposed Action

The upland parks that have been overgrazed in the past are considered to be in stable or improving condition. It is expected that this trend will continue with this alternative but the improvement will be slower than that of the no grazing alternative. This alternative will maintain the meadow diversity. There would be an increased chance of spreading noxious weeds, or introducing them into new areas if grazing is allowed to continue.

Cumulative Effects

Past, present and foreseeable actions that could contribute to cumulative effects are:

<u>Past actions</u>

- livestock grazing
- road and trail maintenance
- dispersed recreation including camping, horseback riding ATV travel and hunting
- water diversion for irrigation

<u>Ongoing activities</u>

- livestock grazing
- road and trail maintenance
- dispersed recreation including camping, horseback riding ATV travel and hunting
- water diversion for irrigation
- noxious weed control

Anticipated future activities

- livestock grazing
- road and trail maintenance
- dispersed recreation including camping, horseback riding ATV travel and hunting
- water diversion for irrigation
- noxious weed control

The cumulative effects of these activities will be essentially the same for both alternatives. The recreation use in this area is less than most other places on the Heber-Kamas Ranger District. The area is remote; access is limited; and thus fishing levels are low. With the steep terrain and limited access, hunting is anticipated to only slightly increase. Thus, recreation use will continue to increase but at a slower rate than on most other areas of the Heber Ranger-Kamas District. Maintenance of roads and trails will continue at a lower priority than other areas on the District. The only irrigation diversion, Duchesne Tunnel, is a major water diversion which dewaters the river for a short distance. The intake system was reconstructed in 2008, and the diversion of water will continue into the future. Noxious weeds infestations have not become established in the area, but if they do they will be treated as funds are available, using an integrated management approach. As these uses are managed to meet the standards and guidelines outlined in the Forest Plan, the resources of the area will continue to be stable or improve, and cumulative effects will be minimal.

Wildlife

AFFECTED ENVIRONMENT

Elevations in the allotment range from approximately 7,800 feet at the southern allotment boundary to approximately 8,800 feet at the north end of the allotment. Vegetation types include coniferous forest types including spruce, fir, and lodgepole pine, sagebrush, and grass. No wildlife surveys have been completed in the allotment; any species occurrence information is from incidental observation.

Threatened, Endangered, Proposed or Candidate Species

Two wildlife species have been identified as threatened, endangered, or candidate species in Summit County by the Utah Field Office of the U.S. Fish and Wildlife Service, Canada lynx and western yellow-billed cuckoo. A description of the status and biology of each of these species can be found in the Viability Assessment (USDA Forest Service 2003c:Appendix B) of the Environmental Impact Statement (EIS) and the Biological Assessment completed for the 2003 Forest Plan for the Wasatch-Cache National Forest. There are currently no known breeding populations of Canada lynx in Utah, although a number of historical records are known from the Uinta Mountains. Surveys for lynx were conducted on the Uinta National Forest in 1999, 2000, and 2001, but none were detected (USDA Forest Service 2003c:p.F-83). Lynx that were translocated to Colorado have been found in Utah in recent years; two of these individuals traveled through the Uinta National Forest in 2004, and several radio-collared individuals were located in the Uinta Mountains.

There is no suitable habitat for western yellow-billed cuckoo in the analysis area; therefore impacts to this species are not analyzed. There is no listed critical habitat for any threatened or endangered species on Uinta-Wasatch-Cache National Forest.

Forest Service Sensitive Species

There are 14 wildlife species that have been designated as sensitive species by the Intermountain Region Regional Forester, which could occur on the Wasatch-Cache portion of the forest. Ten of these species have the potential to occur in the project area, and been brought forward for effects analysis.

Northern goshawk: Survey results between 1999 and 2005 indicate a static population trend Forest-wide (USDA Forest Service 2007). Within the report "*Assessment of Management Indicator Species Capability and Suitability on the Wasatch-Cache National Forest with the Management and Restoration Direction"* (July 2007), Table 16 displays the number of acres of overlap between capable cattle grazing land acres and forested goshawk habitat within the Curry Allotment: this consists of about 73 acres. Portions of the area that would be used by goshawks are conifer stands, which are not capable acres for livestock grazing.

Spotted Bat: Spotted bats feed on flying insects, often above streams, ponds, wet meadows, and other riparian habitats. The spotted bat typically roosts in rock crevices or under loose rocks or boulders. It occupies a wide variety of habitats from low-elevation deserts to ponderosa pine forests.

Townsend's Big-eared Bat: In Utah, Townsend's big-eared bats are typically found below about 9,000 feet elevation. They roost in rock crevices, tree hollows, buildings and other man-made structures, caves, and mines. They typically hibernate in caves and mines.

Wolverine: No surveys have been conducted for this species within the project area due to the species large home range (39 mi^2 – 233 mi^2) and lack of a recognized protocol.

Bald Eagle: In Utah, the bald eagle is primarily a winter resident, with only one breeding area known to occur on Uinta-Wasatch-Cache National Forest, near Strawberry Reservoir, approximately 37 miles south of the proposed action. In 2008, there was a reported summer observation of a bald eagle at Mirror Lake, approximately six miles north of the project area.

Boreal Owl: Two to three locations of boreal owls have been located on the Forest but none are known to occur in the project area.

Flammulated Owl: Flammulated owls prefer ponderosa pine forests but will also use forests of spruce-fir, Douglas-fir, lodgepole pine, aspen, and pinyon-juniper (Degraaf, et.al 1991). Large diameter (20 inch dbh or greater) dead trees, with cavities at least as large as northern flicker cavities, are important site characteristics. On the Wasatch-Cache National Forest they use aspen more than other vegetation types. None have been identified in the Upper Provo River watershed.

Great Gray Owl: Great gray owl habitat is present in the coniferous stands in the Duchesne River drainage. Great gray owls use mixed coniferous and hardwood forest, usually bordering small openings or meadows. They forage along edges of clearings, and semi-open areas where small rodents are abundant. The species is considered a winter vagrant in Utah. None have been reported or observed in the Duchesne River Drainage.

American Three-toed Woodpecker: Three-toed woodpeckers are primarily associated with conifer forests, and excavate cavities in snags or dead portions of live trees. They forage on bark and wood-boring beetles.

Management Indicator Species

Wildlife Management Indicator Species (MIS) on the Wasatch Planning Area of the Uinta-Wasatch-Cache National Forest include the northern goshawk, snowshoe hare, and American beaver. Northern goshawks are also classified as Forest Service sensitive-species.

Snowshoe hare

On the Wasatch-Cache National Forest, two distinct sub-populations have been identified, as a result of geographic separation. The project area lies within the Uinta Mountains sub-population area. Based on data collected from 2003 - 2006, Uinta Mountains snowshoe hare populations are stable and display little overall change during this period (USDA 2008).

Beaver

Beavers are widely distributed across the Uinta-Wasatch-Cache National Forest in riparian habitats where there is sufficient stream flow and sufficient food resources. However, stream reaches dominated by rocky substrates are not considered desirable beaver habitat (Ministry of Environment, Lands, and Parks 1998). Beaver colony surveys were initiated in 2004 in a grid of systematically sampled sections across the Wasatch Planning Area. Sampling frequency has been approximately every three years, and thus there is not adequate data to determine population trends on the Forest

Within the report "*Assessment of Management Indicator Species Capability and Suitability on the Wasatch-Cache National Forest with the Management and Restoration Direction"* (USDA Forest Service 2007), Table 11 displays the number of acres of overlap between capable cattle grazing land acres and beaver habitat within the Curry Allotment. This consists of about 28 acres.

Migratory Bird Species

The Migratory Bird Treaty Act of 1918 (MBTA) as amended was established to protect migratory birds. This act makes it illegal to pursue, hunt, take, capture, kill, or possess migratory birds or any part, nest, or egg of any such bird (16 U.S.C. 703-7012). In January of 2001 an Executive Order 13186 was issued on the Responsibilities of Federal Agencies to Protect Migratory Birds. It specifies the need to avoid or minimize any adverse impacts on migratory birds. The order addressed the need to restore and enhance the habitat of migratory birds.

Based on habitat classifications found in the Utah Partners in Flight Avian Conservation Strategy, habitat within the project area is classified as mountain riparian forest (Parrish et al. 2002). Of the 24 species identified as Priority Species in the Utah Partners in Flight Avian Conservation Strategy (Parrish et al. 2002), and after reviewing the Fish and Wildlife Service's Birds of Conservation Concern (BCC) list (USDI 2002), the only priority species known to nest in mountain riparian habitat is the broad-tailed hummingbird.

ENVIRONMENTAL CONSEQUENCES

Canada lynx (*Lynx canadensis*) – Threatened

Alternative 1 - No Action

Under the no action alternative, livestock grazing would be phased out within the Curry Cattle Allotment. No direct, indirect, or cumulative effects would be expected to occur under this alternative.

Alternative 2 - Proposed Action

Direct effects are not considered likely since lynx could disperse away from livestock grazing activities, and grazing is not expected to threaten any individual lynx. The proposed action would not be altering primary habitat to the extent that direct effects are expected. Therefore, the proposed action is not expected to have direct effects on Canada lynx because livestock grazing is not expected to remove any animals or its primary habitat, high elevation conifer harvest.

Indirect effects have the potential to occur to denning animals through management of livestock. However, livestock are not typically herded through or grazed within typical denning habitat (old growth conifer) due to barriers to movement and lack of forage. In addition, the date livestock would be entering allotments (June 6th) should be sufficiently late enough in the denning season to allow a female with more mature kits to be able to disperse should a potential disturbance occur. Herding activities and the presence of people in potential habitat areas may discourage use by lynx. It is assumed that the reduced levels of grazing, particularly from the earlier parts of the century, have reduced the potential for human disturbance. Lynx were still known to occur in the area during these times of heavy grazing and human occupation on the landscape, and conditions with respect to amount of disturbance from herding camps and other associated disturbances have been reduced.

Indirect effects to prey habitat may also occur. The project area contains potential suitable habitat for snowshoe hares. The proposed action may have a slightly negative impact on snowshoe hare habitat through livestock grazing impacts on snowshoe hare forage, which includes forbs, grasses, leaves of shrubs and some woody browse (USDA/USDI 2000, p.2-13). In the Lynx Conservation Assessment and Strategy (USDA/USDI 2000, p. 2-14), it is noted that livestock grazing may have the greatest potential to impact snowshoe hare habitat and populations, thus indirectly affecting lynx, in high elevation riparian willow communities. However, these effects are mitigated in part through the application of Forest plan standards and guidelines, and Desired Future Conditions. Since these standards and guidelines provide for adequate levels of forage and other resources for wildlife within these habitat types, and the project scale involves only 940 acres, it is anticipated that effects to prey habitat may occur but are expected to be minimal.

Alternative 1 - No Action

Sensitive, MIS and Migratory Birds

Under the no action alternative, livestock grazing would be phased out within the Curry Cattle Allotments. New term grazing permits would not be issued as current permits expire. Livestock grazing management would continue under current management during the period until all livestock grazing was eliminated. It is expected under this alternative that willow availability for beavers would slightly increase as a result of reduced grazing pressure on riparian vegetation. The increase in riparian vegetation would also be expected to provide slightly greater habitat for shrub-nesting birds, including the broad-tailed hummingbird. No change in forested habitat would be expected since cattle do not have an impact on forested habitat.

Alternative 2 - Proposed Action

Northern Goshawk: The project area contains potential nesting and foraging habitat for goshawks, although there have been no territories identified in the immediate project area. As a result of livestock grazing, there may be a small impact on goshawk prey species, such as small mammals and ground-nesting and shrub-nesting birds. However, the project spatial scale of the project is very small relative to the amount of similar habitat available on the Uinta-Wasatch-Cache National Forest,

involving only 940 acres, or 0.08%, of the approximately 1,013,254 conifer/aspen forested acres on the Uinta-Wasatch-Cache National Forest. While the No Action alternative will lead to greater shrubby vegetation in the action area, the Proposed Action will still lead to the desired future condition if range trend studies confirm the allotment is moving in a positive manner, although shrubby vegetation will increase at a slower pace. Thus the proposed action may have a small negative impact on individuals but is not expected to affect population viability of northern goshawks.

Spotted Bat: The proposed action may affect bat foraging habitat by slightly changing stand structure, which could affect flying insect abundance or distribution. Because the spatial scale of the project is very small relative to the amount of similar habitat available on the Uinta-Wasatch-Cache National Forest, the proposed action may have a small negative impact on individuals but is not expected to affect population viability of spotted bats.

Townsend's Big-eared Bat: The proposed action is not expected to impact large trees which would provide roosting habitat. It may affect bat foraging habitat by slightly changing stand structure, which could affect flying insect abundance or distribution. Because the spatial scale of the project is very small relative to the amount of similar habitat available on the Uinta-Wasatch-Cache National Forest, the proposed action may have a small negative impact on individuals but is not expected to affect population viability of Townsend's big-eared bats.

Wolverine: Habitat in the Curry allotment area is considered marginal due to elevation. Since riparian habitat will not have any harvest, and there is no confirmatory evidence that this species still occurs in the Uinta Mountains, it is expected there will be no impact on wolverines from the proposed action.

Bald Eagle: While there is aquatic habitat in the project area, no bald eagles have been observed at this location. Since riparian habitat will be minimally impacted by approximately twenty head of cattle during a seven week period, and no nesting bald eagles are known to occur in the Upper Provo watershed, it is expected there may be a small negative impact on individuals but is not expected to affect population viability of bald eagles as a result of the proposed action.

Boreal Owl: Since there will be no removal of larger conifers which could provide cavities for nesting owls, it is expected there will be no impact on boreal owls as a result of the proposed action.

Flammulated Owl: Since there will be no removal of larger conifers which could provide cavities for nesting owls, it is expected there will be no impact on flammulated owls as a result of the proposed action.

Great Gray Owl: Since great gray owl nesting habitat does not occur in the project area, and since they are not known to occur here, it is expected the proposed action will have no impact on great gray owls.

American Three-toed Woodpecker: Since the proposed action will not impact large trees, it is expected there will be no impact on three-toed woodpeckers.

Snowshoe Hare: The project area contains potential suitable habitat for snowshoe hares. The proposed action may have a slightly negative impact on snowshoe hare habitat through livestock grazing impacts on snowshoe hare forage, which includes forbs, grasses, leaves of shrubs and some woody browse (USDA/USDI 2000, p.2-13). In the Lynx Conservation Assessment and Strategy (USDA/USDI 2000, p. 2-14), it is noted that livestock grazing may have the greatest potential to impact snowshoe hare habitat and populations, thus indirectly affecting lynx, in high elevation

riparian willow communities. However, since the proposed action involves only 20 head of cattle grazing for seven weeks across a 940 acre allotment, it is expected the proposed action may have a small negative impact on individuals but is not expected to affect population trend.

American Beaver: Since the project area's riparian habitat is dominated by rocky substrate, it may be only marginally suitable for American beavers. Because there are no known beaver colonies in the project area, and the spatial scale of the project is very small relative to the amount of similar habitat available on the Uinta-Wasatch-Cache National Forest, the proposed action may have a small negative impact on individuals but is not expected to affect population trend of American beavers.

Migratory Birds: Since the broad-tailed hummingbird is a tree nester, with nests ranging between 15-30 feet off the ground, it is expected livestock grazing will have no impact on this species. Since other ground-nesting and shrub-nesting birds may be affected by livestock grazing, implementation of the proposed action may have short-term negative effects for bird species that occur in these riparian habitats, but would likely have no effect on population trend or population viability of these species because habitat would be impacted on only 940 acres. Therefore, it is expected the proposed action may have a small negative impact on individuals but is not expected to affect population viability of any migratory bird species.

Wildlife Population Viability

The viability of sensitive species represents the viability of the majority of other wildlife species, and management indicator species are used to determine the effects of the proposed action in respect to other terrestrial wildlife. The following table shows the determinations of the effects as outlined in the Biological Evaluation, Biological Assessment and Wildlife Specialist Report completed for this analysis.

Table 11. Effects determinations for special status wildlife species.

Species	Status	Habitat in Project Area	Determination	Rationale
Western Yellow Billed Cuckoo	Candidate	No	No Effect	None observed and no habitat
Lynx	Threatened	Yes	May affect, but not likely to adversely affect	Minimal effects to prey species
Rocky Mountain Big Horn Sheep	Sensitive	Yes	No Impact	No bighorn sheep in project area; no reintroduction in the Western Uinta Mountains management area
Spotted Bat	Sensitive	Yes	[1]May Impact Individuals …	May affect foraging habitat, but project is small relative to amount of habitat in the area
Townsend's Big-eared Bat	Sensitive	Yes	[1]May Impact Individuals…	May affect foraging habitat, but project ins small relative to amount of habitat in the area
Pygmy Rabbit	Sensitive	No	No Impact	No Habitat
Wolverine	Sensitive	Yes	No Impact	Habitat marginal due to evaluation
Bald Eagle	Sensitive	Yes	[1]May Impact Individuals…	No known nesting eagles, impact to aquatic habitat will be minimal

Species	Status	Habitat in Project Area	Determination	Rationale
Boreal Owl	Sensitive	Yes	No Impact	No habitat alteration
Flammulated Owl	Sensitive	Yes	No Impact	No habitat alteration
Great Gray Owl	Sensitive	Yes	No Impact	No nesting habitat
Northern Goshawk	Sensitive	Yes	[1]May Impact Individuals…	The abundance and vigor of shrubby vegetation is expected to be stable or improve
Peregrine Falcon	Sensitive	No	No Impact	No Habitat
American Three-toed Woodpecker	Sensitive	Yes	No Impact	Large trees will not be impacted
Columbian Sharp-tailed Grouse	Sensitive	No	No Impact	No Habitat
Greater Sage-grouse	Sensitive	No	No Impact	No Habitat
American Beaver	MIS	Yes	No Impact	Negligible impact on habitat, no impact on population trend
Snowshoe Hare	MIS	Yes	No Impact	Negligible impact on habitat, no impact on population trend
Migratory Birds	Executive Order 13186	Yes	No Impact	Negligible to no impact on individuals

[1]May impact individuals or habitat, but will not likely contribute to a trend towards federal listing or loss of viability to the population or species.

Cumulative Effects

Since the project area lies at the bottom of steep canyons along the North Fork of the Duschesne River, cumulative effects are primarily confined to the project area where past, present, or future activities may occur.

Terrestrial habitat and species in this area have been influenced by a range of activities, including past and ongoing management activities such as forest roads, rangeland management, and recreation.

- Historical and current livestock grazing – During the early 1900s, this area was grazed under a sheep allotment. The riparian areas along the river suffered extensively from poor herd management and overstocking. In 1957 the allotment was converted to a cattle allotment and in the decades since the conversion grazing pressure has been reduced, but grazing impacts persisted. In recent years it appears that grazing impacts have been minimal, and riparian areas, riverside meadows, and stream habitats are in a state of passive recovery.

- Past, present and future roads and trails management – Maintenance of road and trails has historically occurred, and will continue at a lower priority than other areas on the District. Erosion can be expected from roads and trails that are not adequately maintained. Roads also provide access, resulting in increased hunting opportunities and additional disturbance to wildlife.

- Dispersed recreation including camping, horseback riding ATV travel and hunting - Due to the difficulty of access and remoteness, the areas outside of Mirror Lake and Murdock Basin receive only limited recreational use. Recreational use is expected to continue to increase, but at a slower rate than most other areas on the Heber Ranger-Kamas District due to the area's remoteness.

Recreation

AFFECTED ENVIRONMENT

This area provides for a variety of recreation use within a small geographic area. The primary use is dispersed recreation activities, including dispersed camping, off-highway vehicle use (OHV), and fishing. The only access point is Forest Road #027 that dead ends at the East Portal Duchesne River Trailhead. The East Portal Duchesne River Trailhead has an informational kiosk and provides non-motorized trail access heading both north and south along the Duchesne River. The area has approximately 25 dispersed campsites that provide as jump off point for OHV activities, fishing, hiking, and several other recreation opportunities. The area has moderate to heavy use throughout the summer months.

The access road is in a deteriorated condition that is generally accessed by 4x4 high clearance vehicles and OHVs. Once the East Portal is reached, there is a relatively large disturbed area as a result of the Central Utah Water Conservancy District pipeline and associated facilities. This provides ample room for off-road style activities that can result in further damage and unauthorized routes.

The Duchesne River Trail #086 follows the Duchesne River both north and south throughout the entire allotment. Use on this trail low to moderate and is generally horse users, hikers, and fisherman. No portion of the trail is in High Uinta Wilderness Area (HUWA).With the change in the permittee's operation the cattle were kept on the allotment during the 2008 grazing season. It is anticipated that this management will continue to reduce the problem of cattle getting off the allotment

ENVIRONMENTAL CONSEQUENCES

Alternative 1 - No Action

The discontinuation of grazing on the Curry Allotment will minimally to moderately increase the recreation experience for visitors to the permitted area and surrounding areas. Recreation visitors in the permitted area should be accustomed to cattle interactions and understand the multiple-use management in this area, particularly outside of the HUWA. However, the removal of cattle may provide a better recreation experience for some visitors.

Human-cattle interactions outside of the permitted area would be reduced to zero, effectively eliminating the problem. This would be important for areas within the HUWA and nearby developed recreation sites.

Alternative 2 - Proposed Action

The continuation of grazing on the Curry Allotment may have an affect on the recreation experience for visitors in the area. Experiences may be affected by continued human-cattle conflicts both on and off the allotment. The conflicts off the allotment in developed recreation sites and the HUWA have been a source of public comment in the past.

Implementation of the proposed action would have the continued historical effect of human-cattle conflicts. The main caveat for these conflicts will be whether or not the cattle are in or out of the

allotment. Human-cattle interactions within the allotment and in all of the ROS classifications are part of the recreation experience and multiple-use management. However, due to the size and shape of the allotment, the cattle stray off the allotment into developed recreation sites and the HUWA.

The desired future condition would be to minimize or reduce to zero the amount of human-cattle conflicts and public comments in developed recreation sites and the HUWA outside of the Curry Allotment.

Cumulative Effects

The cumulative effects have a wider boundary around the allotment and should include the North Fork of Duchesne River watershed. This is needed to show effects to recreation visitors outside of the allotment when cattle stray beyond the allotment boundary.

There are no cumulative effects to the recreation resource in the project area as a result of the proposed action.

Wilderness

AFFECTED ENVIRONMENT

Approximately 325 acres of the 460,000 acre High Uintas Wilderness Area (HUWA) falls within the boundary of the Curry grazing allotment. This is a minute percentage of the entire Wilderness Area. The portion of the HUWA that is located within the Curry allotment is designated as Opportunity Class I in the Forest Plan. The allotment has been in use from the early 1900s to 1957 as a sheep allotment. Cattle have been permitted to graze the areas from 1957 to present. The HUWA was established by Congress in 1984; the High Uintas Wilderness Management Plan was completed in 1997.

As indicated in the technical reports for hydrology, fisheries, rangeland, and soils the bio-physical aspects of the wilderness management plan are being met. Impacts to these resources from cattle grazing are very light.

As stated in the Management Plan for the High Uintas Wilderness (Management Plan), livestock grazing is recognized as an appropriate use of wilderness. Results of livestock grazing should be consistent with desired condition of water, soils, wildlife, and vegetation. Desired conditions in existing Wilderness Opportunity Class I include being characterized by an unmodified natural environment, with temporary and minor human induced change. Outstanding opportunities for solitude and unconfined recreation are desired for visitors, who travel in small groups, practice excellent wilderness ethics and spend extra effort to leave no trace. Encounters with others should be rare.

ENVIRONMENTAL CONSEQUENCES

Alternative 1- No Action

There would be no impacts to wilderness attributes. The HUWA would continue to meet all established management standards and guidelines.

Alternative 2 – Proposed Action

While some evidence of cattle grazing would be apparent, effects to wilderness attributes would be very minor. Cattle numbers are very low (20 cows with calves), and season of use is short. For the approximately six weeks that cattle are turned out on the allotment, effects to the untrammeled and natural wilderness attributes would be minimally affected. There would be no effects to any other wilderness attributes. All bio-physical aspects of the wilderness management plan would continue to be met, and all Forest Plan standards and guidelines would continue to be met. The Curry allotment contains such a tiny portion of the entire HUWA, that it's difficult to measure the impacts of the proposed grazing authorization on the entire wilderness area. Cattle do sometimes trespass outside of the allotment and wander into adjacent areas, including portions of the HUWA. However, when cattle do leave the allotment, they tend to wander north and ultimately end up in the Mirror Lake area, outside the HUWA. Monitoring and permit administration will resolve this issue.

Cumulative Effects

The cumulative effects boundary would be the sliver of wilderness inside the Curry allotment, and outside the allotment on the very western edge that the cattle might walk through to get to Mirror Lake. Other grazing allotments within the HUWA are about 4 miles from the Curry allotment, and would not add to cumulative effects of the Curry grazing authorization. Direct and indirect effects from this grazing authorization would be negligible. No cumulative effects are expected.

WORKSHEET 1 – Wilderness Qualities or Attributes
Evaluating the Effects of Project Activities on Wilderness Attributes

Date:	August 18, 2009
Wilderness Area:	High Uintas

Description of Project Activity or Impact to Roadless Area:
Authorize continued grazing on the Curry cattle allotment. Animal numbers and grazing season are 20 cows with calves from July 6 to August 25. Approximately 385 acres of the 460,000 High Uintas Wilderness Area (HUWA) is within the allotment.

Effect to Wilderness Quality or Attributes			
Wilderness Quality or Attribute	**Is there an effect? Yes or No**	**Is the effect - Improving, Stable or Degrading?**	**Describe the actual effect**
Untrammeled This quality monitors modern human activities that directly control or manipulate the components or processes of ecological systems inside wilderness.	Yes	Stable	Grazing activity in the Curry allotment is not directly controlling or manipulating the components or processes of ecological systems to the extent that it is causing a downward or degrading trend. The bio-physical aspects/ecological processes in the Curry allotment have been investigated by several resource professionals, and are found to be intact and operating. Desired conditions and management standards stated in the HUWA Management Plan are being met.
Natural This quality monitors both intended and unintended effects of modern people on ecological systems inside wilderness since the time the area was designated.	Yes	Stable	The HUWA was established by Congress in 1984. The Curry allotment has been an established grazing allotment since the early 1900s. The bio-physical aspects of the HUWA have not been substantially altered by grazing on the Curry allotment. Cattle grazing is evidence of the effects of modern people inside the wilderness, but the effects to the HUWA of grazing on this allotment are minimal.
Undeveloped This quality monitors the presence of structures, construction, habitations, and other evidence of modern human presence or occupation.	No	N/A	Authorization of continued cattle grazing would not increase structures, or initiate construction of any improvements in the HUWA.

Outstanding opportunities for solitude or a primitive and unconfined type of recreation This quality monitors conditions that affect the opportunity for people to experience solitude or primitive, unconfined recreation in a wilderness setting, rather than monitoring visitor experiences *per se*.	**Solitude -**	No	N/A	Cattle grazing on a tiny portion of the HUWA does not affect the opportunity to experience solitude or isolation from the sights, sounds, and presence of others. The Curry allotment is not easily accessible, and visitors to the HUWA are much less likely to use this tiny portion of the wilderness area compared to the vast remainder of the wilderness area available. The ability of visitors to escape project activities on solitude is considerable.
	Opportunities for Primitive Recreation	No	N/A	Cattle grazing on a very small part of the HUWA does not affect the size of the wilderness area, the types of opportunities available, the level of challenge of the opportunities, and does not add any facilities or other structures.
Special Features (Ecological, Geologic, Scenic or Historical)		No	N/A	There are no special features within the portion of the HUWA that falls within the Curry allotment. Cattle grazing would not affect any special features in the HUWA and outside the allotment.
Manageability (as Wilderness) .		No	N/A	Grazing 20 head of cattle for six weeks in a tiny portion of the wilderness area does not impact the ability to manage the area as wilderness.

Consultation and Coordination

The Forest Service consulted the following individuals, Federal, State, and local agencies, tribes and non-Forest Service persons during the development of this environmental assessment:

ID Team Members:

Bob Davidson	Soil Scientist
Charmaine Thompson	Archeologist
Jim Percy	Range Conservationist/IDT leader
John Campbell	District Recreation Staff Officer
Matt Fairchild	Fisheries Biologist
Michael Bornstein	Wildlife Biologist
Michael Duncan	Botanist
Molly Hanson	Hydrologist
Shelly Dyke	Environmental Coordinator

Federal, State, and Local Agencies:

USDI Fish and Wildlife Service

USDI Bureau of Reclamation

USDI Bureau of Indian Affairs

Utah Division of Water Resources

Utah Department of Public Safety

Utah Division of Wildlife Resources

Wasatch County Public Lands Committee

Tribes:

Ute Indian Tribe

References

Bornstein, Michael. 2009. *Biological Assessment for Curry Allotment Project*. Heber/Kamas Ranger District. Heber, Utah.

Bornstein, Michael. 2009. *Biological Evaluation and Wildlife Report for Curry Allotment Project.* Heber/Kamas Ranger District. Heber, Utah

Chase, P. 2000. *Effects of Cattle Grazing on Riparian Areas and Fish Populations*. Unpublished report for the Wasatch-Cache National Forest. Pp. 11.

Davidson, Robert. 2009. *Soils Specialist Report Curry Allotment EA*. Heber/Kamas Ranger District, Heber, Utah.

Davidson, Robert and Jim Percy. 2009. *Curry Allotment Grazing Capability and Suitability Analysis.* Heber/Kamas Ranger District, Heber, Utah.

DeGraff, R.M., V.E. Scott, R.H. Hamre, L. Ernst, and S. H. Anderson. 1991. *Forest and Rangeland Birds of the United States.* USDA Forest Service Agriculture Handbook 688.

Duncan, Michael. 2009. *Curry Allotment Biological Assessment\Evaluation for Threatened, Endangered and Sensitive Plant Species and Botany Report*. Heber/Kamas Ranger District, Heber, Utah.

Fairchild, Matt. 2009. *Curry Allotment Fisheries and Aquatic Resources Technical Report*. Heber/Kamas Ranger District. Heber, Utah.

Hanson, Molly. 2009. *Curry Allotment Water Resources Technical Report*. Heber/Kamas Ranger District. Heber, Utah.

Ministry of Environment, Lands, and Parks. 1998. *Inventory methods for beaver and muskrat*. Standards for components of British Columbia's biodiversity no. 22. British Columbia, Canada

Parrish, J. R., F. Howe, and R. Norvell. 2002. *Utah Partners in Flight Avian Conservation Strategy Version 2.0.* Utah Partners in Flight Program, Utah Division of Wildlife Resources, Salt Lake City, Utah, UDWR Publication Number 02-27.

Yorks, Terence P. and C. McMullen (ed.). 1981. *The Western Forests*. Natural Resource Ecology Laboratory. Colorado State University, Fort Collins, Colorado.

USDA Forest Service. 2008. *Management Indicator Species of the Wasatch-Cache National Forest Planning Area.* Wasatch-Cache National Forest. Salt Lake City, Utah.

USDA Forest Service. 2007. *Assessment of Management Indicator Species Capability and Suitability on the Wasatch-Cache National Forest With the Management and Restoration Direction.* Wasatch-Cache National Forest. Salt Lake City, Utah.

USDA Forest Service. 2005. *Wasatch-Cache Integrated Weed Management Strategy*. Wasatch-Cache National Forest. Salt Lake City, Utah.

USDA Forest Service. 2003a. *Revised Forest Plan, Wasatch-Cache National Forest.* Wasatch-Cache National Forest, 125 So. State St., Salt Lake City, Utah.

USDA Forest Service. 2003b. *Final Environmental Impact Statement for the 2003 Land and Resource Management Plan*, Wasatch-Cache National Forest. Wasatch-Cache National Forest, 125 So. State St., Salt Lake City, Utah.

USDA Forest Service. 2003c. *Intermountain Region Proposed, Endangered, Threatened, and Sensitive Species (12/03) Known/Suspected Distribution by Forest.* Available from any Forest Service office within the Intermountain Region.

USDA Forest Service. 1996. *Rangeland Health Forest Plan Amendment*. Wasatch-Cache National Forest, 125 So. State Street, Salt Lake City, Utah.

USDI Fish and Wildlife Service. 2002. *Birds of conservation concern*. Arlington, Virginia.