3.8 Range Resources

There are five grazing allotments within the Project Area; E. Olsen, G.L. Olsen, Johnson, Quitchupah, and Saleratus. Livestock winter on the lower rangeland slopes adjacent to SR-10 and/or on the nearby irrigated fields, then move up the Quitchupah Creek canyon to a State-owned land section for spring grazing. Quitchupah Creek serves as the source of water for livestock in the winter and spring and again in the fall. In the late spring, livestock are trailed up the creek to summer pasture on the Fishlake National Forest, outside of the Project Area. Cattle return to Quitchupah Creek in the fall and trail down to winter pastures. In order to travel to and from summer pastures, the cattle must cross the Acord Lakes Road in Convulsion Canyon near Broad Hollow. Livestock also graze along this paved road, and an unknown number of cattle are killed each year by coal trucks that travel the Acord Lakes Road to and from the SUFCO mine.

In the Water Hollow Benches area, the G. L. Olsen Allotment is grazed from May 16 to June 30. The cattle are trailed from the early spring pasture to this allotment and then trailed to the summer Quitchupah Allotment.

The livestock movement within each allotment is currently controlled by fences, natural slope and terrain barriers, and the watering sources (i.e. Quitchupah Creek and Water Hollow drainage). Thus, livestock are generally confined to an area within one mile of the creeks during spring and fall grazing seasons. Livestock movements during trailing are generally controlled by the permittees who push the larger herds of cattle along the existing unpaved road adjacent to Quitchupah Creek and Convulsion Canyon. The trailing of livestock in the spring and fall is confined to the existing road and two-track because it is part of a traditional livestock trail, and because the terrain generally confines trailing to the existing road and immediate vicinity. The smaller herds and stragglers move on their own along the creeks until they reach their destination.

The boundary fence running north-south across the Convulsion Canyon bottom on the Fishlake National Forest border prevents livestock from entering the Quitchupah Allotment in the spring until the allotted turn-in date. In the fall, the gate is open to allow livestock to drift down the canyon and off the allotment. The lower fence runs north-south in the middle of Section 15 and along the west boundary of the patent land and the irrigated croplands. This fence is used to prevent livestock from entering the croplands until so desired. The lower fence is also used as a drift fence to hold livestock trailing down the canyon in the fall so they can be corralled and separated for transfer to winter ranges. In the spring, this fence also prevents livestock from drifting off of winter ranges onto spring range until the allotted turn-in date.

A drift fence is also located across lower Water Hollow to keep cattle from drifting down the stream and into Quitchupah Creek. A small corral is located adjacent to this drift fence to aid in the gathering of cattle.

FISHLAKE NATIONAL FOREST

The management prescription for the Forest lands in the Project Area emphasizes livestock grazing via intensive management level D for range resources. One allotment, the Quitchupah Allotment, provides the summer forage for livestock trailing out of Quitchupah Creek to Fishlake National Forest lands. Most of the summer pasture is located on Duncan and Little Duncan mountains, and the Skutumpah basin. The grazing season is from June 11 to September 30 annually for 813 cattle plus calves (4,042 AUMs). The cattle are owned by five permittees who

live or have ranches near the mouth of Quitchupah Creek. Traditionally the ranchers take turns herding their cattle up the Quitchupah Creek drainage to the Convulsion Canyon trail so that mother cows and calves can stay together. It takes one to two weeks of trailing the cattle up the creek to arrive at the higher elevation summer pastures. Cattle take one to two weeks of trailing and drifting to come off the summer pastures in the fall. The off-date, September 30, is the date that cattle are supposed to be completely off the Forest. During the round up, cattle are gathered and herded to Broad Hollow and pushed down Convulsion Canyon to Quitchupah Creek. There will be several large gathers and cattle are headed down the canyon at different times. If cattle are stirred up or winter type weather arrives, cattle may head or drift down the canyon on their own. Cattle may be found drifting down the trail at any time during the grazing season. During trailing the cattle graze along the creek in Convulsion Canyon and along Quitchupah Creek.

BLM PRICE FIELD OFFICE

Four BLM allotments are located in the Quitchupah Creek watershed. The large Saleratus Allotment which includes the valley and benches south of Quitchupah Creek is used as winter range. The Johnson Allotment that includes the benches north of the creek is also used as winter range. The G. L. Olsen Allotment on the Water Hollow Benches is a late spring - early summer allotment. The E. Olsen Allotment is used as spring range. These allotments provide 2,286 AUMs. See **Table 3.8-1** for specific information on each allotment. See **Figure 3-5** for allotment boundaries. Water sources in the allotments include Quitchupah Creek and the stream in Water Hollow.

Table 3.8-1 Grazing Allotment Information

Allotment Name	Permittee	Season of Use (acres per AUM)	Head of Cattle	AUMs*
BLM Allotment				
E. Olsen	Glendon E. Johnson (Castle Valley Ranch)	April 16-June 15 (22.1 acres)	20	20
Saleratus	L.D. Jensen	November 1- March 31 (12.5 acres)	69	308
	Josiah K. Eardley		108	483
	George U. Lewis		28	126
	Glendon E. Johnson		156	698
	J.R. Lawrence		49	219
G.L. Olsen	L.D, Jensen	May 16-June 30 (6.8 acres)	165	250
Johnson	John L. Byars	October 16-December 31 (30.6 acres)	72	182
Forest Service Allotment				
Quitchupah	Castle Valley Ranches, LLC Josiah K. Eardley Gary Petty Morgan Robertson John Sundstrom L.D. Jensen	June 11 – September 30	813	4,042

* An AUM is calculated as the forage needed to sustain one head of cattle for one month.

STATE LANDS
The State lands in Section 16 are used in the spring at the discretion of the permit holder (L.D. Jensen), as part of the Saleratus Allotment. Since the State lands are not fenced separately, they are managed in the same manner as the BLM allotment (Ron Torgeson, SITLA, personal communication 2005).

Potential Impacts To Range

The Environmental Consequences of each Alternative, in regard to range, are discussed below. First, regulatory consequences are described and then potential impacts to the resource itself.

REGULATORY
These allotments are operated under the Utah State open range law, which requires those who wish to exclude livestock from their lands or facilities to fence the livestock out. Although Utah is a fence-out state, it is up to the counties to enforce it. Often ranchers depend on their insurance to cover their livestock losses due to vehicle collision. In order to exclude livestock and minimize the incidence of vehicle-livestock collision, the proposed roadway would be fenced, and a 1.5-mile cattle trail would be constructed along the north side of the westernmost portion of the road. The construction and operation of the road would have no affect on the permits to graze in the respective allotments under provisions of the Federal Land Policy and Management Act.

The applicant committed measure to remove grazing in the riparian zone on public lands would consist of 4.7 miles of fencing of riparian area on BLM, FS, and State lands and would occur through terms and conditions of the Saleratus and E. Olsen allotment permits. As a result of this, there would be a total loss of five AUMs. Trailing permits and fencing would restrict livestock access to the riparian zones on National Forest, State, and public lands. Fenced access points at underpasses on Alternative C would allow livestock access to water in the stream, and access points to water would be located along the 4.7 miles of riparian fencing. Altogether approximately 4.7 miles of stream corridor would be protected from stream grazing.

POTENTIAL IMPACTS
NO ACTION - ALTERNATIVE A
The coal trucks would still use the Acord Lakes Road, I-70, and SR-10 to transport coal to the Hunter Power Plant and Banning loadout. The livestock grazing would continue in traditional ways with generally unrestricted access to most of the Quitchupah Creek area. Livestock trailing between summer and winter pastures would continue in the traditional manner along the creek corridor. Straggling livestock crossing the Acord Lakes Road at Broad Hollow would be at risk of truck-livestock collisions.

QUITCHUPAH CREEK ROAD ALIGNMENT - ALTERNATIVE B
The temporary loss of forage would amount to a total of 8 AUMs in four allotments (Quitchupah, Saleratus, Johnson, and E. Olsen) based on the net disturbance of 92.3 acres due to road construction. Once reclamation was complete and the seeded vegetation has matured, the net loss would be 4 AUMs, due to 45 acres of paved roadbed.

This road alignment would cross 600 feet of cultivated pasture owned by Castle Valley Ranches. Approximately 1.4 acres of pasture, out of approximately 145 acres, would be lost for livestock (and wildlife) winter forage. The construction of the road would require relocating the corrals and portions of the lower drift fence.

Riparian fencing would preclude livestock from in-stream watering along 4.7 miles of Quitchupah Creek on public lands. Livestock would have access to the streams for watering purposes at fenced sites, so livestock grazing along the proposed road would be restricted from accessing the stream corridor except at these fenced points.

The construction and operation of a heavily traveled road over and adjacent to the traditional livestock trail would render most of the trail unusable by cattle. A designated livestock trail along 1.5 miles of the western segment of the road would provide a trailing corridor in the terrain restricted portions of the canyon. Along the remaining portion of the trailing route, livestock would simply trail outside of the fenced road corridor. Holding facilities near Broad Hollow, in Convulsion Canyon, and Quitchupah Creek would keep stragglers off the proposed road. The holding facilities would disturb about one acre total at two sites. Short drift fences in Broad Hollow would guide cattle through a culvert under the Acord Lakes Road; thus, negating the potential for collisions with coal trucks.

ALTERNATE JUNCTION WITH SR-10 AND ALTERNATE DESIGN - ALTERNATIVE C

The Alternate Junction with SR-10 would disturb slightly more land (96.3 acres), but temporarily affect an equivalent amount of AUMs (8), as described for Alternative B, in the four allotments. Once reclamation were complete, the net loss would be 4 AUMs, due to 45 acres of roadbed.

The Alternative design to provide underpasses for wildlife/livestock would significantly reduce the potential for vehicle-wildlife/livestock collisions. The fencing and underpasses would allow livestock to graze freely in the allotments and have access to Quitchupah Creek except for where the cattle would be confined to the cattle trail. The fencing, in a few places, could restrict livestock use of forage located between the proposed road and the plateaus to the north. Riparian fencing would preclude livestock from in-stream watering along 4.7 miles of Quitchupah Creek. Livestock would have access to the streams for watering purposes at fenced sites along that 4.7 miles.

The road alignment across the E. Olsen Allotment would bisect the allotment creating two pastures by blocking access north and south for livestock. An underpass on the west end would alleviate the blocking in that area but not further east, unless the large culverts would serve as underpasses for livestock.

WATER HOLLOW ALTERNATE ALIGNMENT - ALTERNATIVE D

The initial temporary loss of forage would amount to 12 AUMs based on the total disturbance of 146.3 acres due to road construction; approximately 4.5 AUMs (1.8 percent of total allotment) in the G. L. Olsen Allotment and 7.5 AUMs (0.4 percent of total allotment) in the Saleratus Allotment on Water Hollow Bench. Once reclamation is complete and the seeded vegetation has matured, the net loss would be 5 AUMs (less than 1 percent losses of total allotments) due to an unreclaimed area of 55 acres of paved road. Much of the proposed route through the Saleratus Allotment is in rugged terrain where there is little use of forage by cattle, although in the flats adjacent to SR-10 there is considerable grazing in the winter.

Cattle in the G. L. Olsen Allotment water in Water Hollow drainage and trail in and out daily to graze on the benches above the creek. The large fill for the proposed road crossing and fencing would block livestock access to Water Hollow drainage so a water distribution system would be installed and operated during the grazing season.

Fencing the road throughout the G.L. Olsen Allotment would divide the allotment into a two-pasture system. The rotation of grazing between the pastures and the placement of watering troughs in the pastures would promote better distribution of cattle and proper use of the forage. Currently, the seedings are heavily used on the west end because the only source of water is located in that area. With the water distribution system there would be four troughs, two in each pasture, so cattle could potentially graze the seedings (See **Section 3.5** Wildlife) located in the east and northeast portions of the allotment.

Since the seedings within the G.L. Olsen Allotment would be enhanced and expanded to provide forage for wintering big game, additional forage would be produced that would also benefit cattle. The use of forage by cattle would need to be managed to allow sufficient forage to remain for big game use in critical snow years. The forage provided by the seedings would offset the AUMs lost by road construction.

The fencing of the proposed road on the flats in the Saleratus Allotment would keep cattle off the roadway. When cattle need to be moved within the allotment, this would be on a coordinated schedule with the SUFCO Mine.

Movement of livestock would occur as it would under Alternatives B and C using a constructed cattle trail, fencing, and holding facilities.

Riparian fencing would preclude livestock from in-stream watering along 4.7 miles of Quitchupah Creek. Livestock would have access to the streams for watering purposes at fenced sites.

MITIGATION AND MONITORING FOR BUILD ALTERNATIVES

The construction of livestock trail, road fencing, and underpasses along the roadway would mitigate impacts to livestock. Palatable species would be seeded along the underpasses to entice livestock to utilize the underpasses to cross the roadway. A noxious weed control plan would be developed in cooperation with the land management agencies prior to construction and then implemented as necessary.

Monitoring for a minimum of three years, as discussed in the Mitigation and Monitoring Plan, would ensure the stability and operation of the trail, fences, underpasses, seedings, water distribution systems, and reclamation in the Project Area.

The loss of livestock due to vehicle-livestock collisions will likely continue in the future, even with the livestock trail and fencing. Ranchers are compensated for livestock loss through the open-range law, but often depend on insurance to cover livestock losses since collisions are not always reported.

IRREVERSIBLE OR IRRETRIEVABLE COMMITMENT OF RESOURCES AND RESIDUAL ADVERSE IMPACTS

Unreclaimed disturbance from construction and operation of the public road would mean irreversible losses of range forage as follows: Alternative A - 0 AUMs, Alternative B - 4 AUMs, Alternative C - 4 AUMs, and Alternative D - 5 AUMs. Under all build alternatives, an additional 5 AUMs would be lost due to agency commitment not to allow grazing in the riparian zone along 4.7 miles of public lands. For Alternative D the additional forage developed in the seedings for

big game would compensate for loss of AUMs in the G.L. Olsen Allotment.

CUMULATIVE EFFECTS

Past livestock improvements, including the development of a reservoir on Saleratus Bench, have increased water distribution for livestock. The loss of livestock due to vehicle-livestock collisions has been on-going through the past and present, and will likely continue in the future. Ranchers would be compensated for livestock loss through the open-range law; therefore, it is not an undue impact on the rancher. Future vehicle-livestock collisions along the proposed road would be minimized by a designated livestock trail and fencing of the road corridor.

There are eight authorized federal oil and gas leases in the Project Area (see **Section 3.9** Land Use). Gas and oil exploration and drilling could occur and may affect allotment forage. Reclamation would occur on sites that do not enter into production.

The removal of livestock grazing from 4.7 miles of stream corridor would allow those sections of Quitchupah Creek to stabilize over time, thus reducing their current contributions to sediment and salt loading. Livestock would not be able to graze on reclaimed areas until the agencies have accepted reclamation and revegetation as successful.

The proposed fencing and underpasses would control movement of livestock along SR-10 and Acord Lakes Road.