

Weminuche Landscape

Allotment Histories

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Descriptions of each allotment in this landscape follow, including summaries of past grazing use, in order to put the proposed action in context with the intensity of historical use of the landscape for grazing.

Burnt Timber Allotment (active)

The Burnt Timber allotment is in the Florida River drainage, 17 miles northwest of Bayfield, Colorado. Elevations of this allotment range between 8,600 and 11,000 feet. Currently, this allotment is permitted to be grazed by three bands of sheep in the spring, June 26 through July 6; and in the fall, September 14 through October 1.

The Burnt Timber allotment was first recorded to be grazed by sheep in 1937 for a season of June 16 through October 1 (at this time it was named Long Hollow S&G). Prior to that year, records indicate it was grazed by cattle for the same season (and also called the Young's Canyon C&H). The earliest record of spring and fall use is 1942; 850 sheep were permitted to graze the Long Hollow allotment June 16 through July 15, and October 1 through October 15. In 1949, the fall season changed slightly to September 16 through October 5. In 1959, the numbers increased to 950. The actual use record from 1962 indicated that the band of sheep that were permitted to graze Long Hollow also grazed Virginia Gulch.

Until 1969, actual use records did not distinguish the time spent between Long Hollow and Virginia Gulch. Cattle began to graze Long Hollow again in 1969 for a season of July 1 through October 15. In 1970, sheep were back grazing Long Hollow and West Virginia Gulch. In 1971 and through 1975, 162 cattle grazed Long Hollow from June 16 through October 15. In 1976, the current permittee acquired the permit and for the first time Burnt Timber (along with Long Hollow) appeared on the permit. 500 sheep were permitted to graze Burnt Timber June 25 through October 1 through 1981. There was no record for 1980. In 1981, actual use records indicate that three bands of sheep used Burnt Timber during the spring and then again in the fall. These bands were on their way to Tank Creek S&G, Missouri Gulch-East Silver Mesa S&G, and Virginia Gulch S&G. In 1983 and 1984, two bands used Burnt Timber in the spring and fall. There are no records until 2003.

In 2002 the Missionary Ridge fire burned over the southern half of the allotment.

Annual Operating Instructions show three permitted seasons for three bands of sheep to use Burnt Timber: 6/15-6/25 and 9/24-9/26; 6/21-7/5 and 9/16-10/1; and 6/28-7/8 and 9/18-10/4:

- The Tank Creek band currently uses the south portion of Burnt Timber (Long Hollow south) and does not trail up the Burnt Timber trail. Since 2004, this band has grazed

portions of Elkhorn, Coon Creek, Bear Creek West C&H, and Steven/Shearer allotments. Sheep have been used as a management tool to address larkspur (poisonous to cattle) and aspen re-gen issues on these cattle allotments.

- The Virginia Gulch band trails up the Burnt Timber allotment in the spring and fall.
- The Canyon Creek band stays on the west side of the Burnt Timber allotment to prevent mixing with the Virginia Gulch band.

Trailing - See trailing information for each of the sheep bands.

Improvements - None

Monitoring

There were Paced Transect scorecards completed in 1958 for the then Long Hollow S&G allotment. These observations yielded poor to fair ratings of the forage and vegetation condition class. Soil stabilization ratings were good. No specific plant species or site notes were made.

Observations made by district personnel in the late 1980's – early 1990's have provided an overall “good” rating of the vegetation, soils, riparian areas and water. Paced Transect records from 1990 do not give specific ratings, however vegetation composition and litter amounts reported are characteristic of a healthy range. Primary plant species recorded were *Festuca thurberi*, *Bromus* spp., *Poa* spp., and *Carex* spp. Forbs recorded on the allotment were *Achillea lanulosa*, *Taraxacum officinale*, and *Fragaria ovalis*. Riparian Ecosystem scorecards from Middle Burnt Timber Creek yielded ‘good’ ratings for channel stability and plant community condition. A riparian scorecard from South Burnt Timber rated channel stability ‘fair’ and ‘good’ for plant community.

An RHM and inspection notes from 2003 and 2004 report an increase in noxious weeds (Musk thistle specifically) and ample amounts of bare ground in the Middle Burnt Timber pasture as well as sloughing soils near logging roads and adjacent to bed grounds. A past district Range Con reports of sheep grazing in “close-knit bunches” creating localized but significant impacts to the vegetation and soils. In 2003, analysis of one of the primary bed grounds deemed the site ‘at risk’ due to excessive trailing and overgrazing. Recommendations here were to rest this bed ground and run sheep in smaller bunches, not allowing them to gather in large bands while here.

Canyon Creek Allotment (active)

The Canyon Creek C&H allotment is located about twenty miles north and east of Durango, Colorado on Missionary Ridge. Elevations range from about 7000 feet at the Animas River to about 11,500 feet, with the most usable range between 9,800 and 11,500 feet.

Our file records begin in 1930, although it is well known that sheep grazing occurred before the turn of the century on all of Missionary Ridge. The original range analysis of 1934 indicated the capacity of this allotment to be 1800 animal months which translated, at that time, to 400 cow/calf units (c/c) of cattle to graze from 6/16 – 10/31 each season. The standards used to

identify this capacity were very different from today, and it is no wonder why the primary bunchgrass, Thurber fescue, has decreased substantially on this allotment over the years.

For the decade of 1930 – 1940, the average number of permitted c/c units was 276 (with a range of 242 – 336). Between 1940 – 1950, the average number of c/c units permitted was 249 (with a range of 240 – 264). From 1953 – 1957 the permit number remained stable at 245 c/c units, and from 1957 – 1969, 240 head. In 1970 it jumped to 281, then dropped to 269 the next year, and didn't change significantly until 1984, when a temporary permit was issued for 130 units. 1985 was a nonuse year, and 1986 had a 100 head temporary permit. Permits were issued for 269 c/c units in 1987 and 1988, but these were actual nonuse years.

Overgrazing around Crazy Woman Creek and the big parks of the east side of the allotment were a historical and ongoing problem, as well as some losses of cattle due to high elevation lung disease. Later maturation of vegetation at the higher elevation led to a decision to move the start date of grazing from 6/16 to 7/1.

In 1992 a permit was issued for 600 head of ewes with lambs, and although records are missing for 1993 – 2000, it appears that this number has been permitted to the same permittee since 1992 through 2011.

The permittee has stated that they initially ran 600 sheep with an additional 30 head of cattle simultaneously until about 2000-02 when their request to run cattle was denied (due to drought conditions).

The band of sheep enters the allotment from the south and typically works counter-clock wise on the allotment. The permittee also keeps 2 -6 head of horses in the small pasture around the cabin for the grazing season to aid in moving camps. Herder typically moves camp about every 7 days.

The permittee has been talking to the Columbine district about changing the class of livestock to cattle as it was ran in the past. This may be a viable option to reduce risk of domestic sheep - bighorn sheep interactions. If this occurs, the existing pasture fence would need to be brought back up to FS specifications. Likely a second pasture fence would need to be created along with several watering sources (yet to be determined).

Trailing – see below for each class of livestock

Sheep:

Going up to allotment: The band of sheep leaves the permittee's private ground south of Ignacio, Colorado and travels north on County Road (CR) 319 and CR 318 through Ignacio to CR 151 then to CR 521. The sheep typically bed for 1 - 2 nights on private land south of Bayfield, Colorado. The sheep then travel north through Bayfield, across HWY160 and north on CR501 to CR 240. The sheep typically bed for a night on some private land along CR 240 and then travel north to CR 243 end at Transfer Park on Burnt Timber allotment.

The sheep band stays on the west side of the Burnt Timber allotment to prevent mixing with the Virginia Gulch band. Once off Burnt Timber, the band travels across the Bear Creek West cattle allotment near Henderson Lake and then down the Missionary Ridge Road to the allotment. To accomplish this, the sheep use portions of Forest Roads #076, #081, #595, #682.

Coming down from the allotment: The sheep follow the same general route as they did going up. The sheep bed at the same private land along CR 240 and then travel south on CR 501. The sheep then stay one night near the high school in Bayfield on different private land prior to travelling the rest of the way to the permittee's private lands in one day.

Cattle:

In the past the permittee transported the cattle by truck to the base of Missionary Ridge. From this point several methods were employed to get cattle to the allotment. The from here they could be put into smaller trailers and hauled the 25 miles on the Missionary Ridge dirt road (#682) to the allotment. Another option was to drive the cattle up the Missionary Ridge road all the way to the allotment. This would typically take several days to accomplish and go through several other existing cattle allotments that may or may not have cattle already on the allotment. The last most readily used option was to use the stock driveway at the base of Missionary Ridge on the west side of Animas River. This includes a right of way across MacDonald Becket Family Trust properties, and it's successors for access to several cattle allotments on Missionary Ridge (see Fig 1-1).

Improvements – Currently on the allotment there are 8 reservoirs, 1 range cabin, 1 corral, and about two miles of fence creating two pastures and one holding pasture.

Monitoring

Several paced transect records were found for this allotment from 1985. In these notes, 1961 trend data is referenced but was not found in the on-district records. The ratings from the paced transect scorecards from the pine cover type are 'fair' based on site recovery mechanisms such as the increase in native, desirable vegetation (fescues and Poas) and decrease of bare soil. The monitoring data from 1985 indicates that the trend is stable to upward as compared to the conditions in the early 1960's. Abundant plant species reported were *Poa pratensis*, *Festuca thurberi*, *Taraxacum officinale*, *Achillea lanulosa*, and *Lathyrus* spp.

In July of 2010, the Columbine district ID Team conducted five rangeland health evaluations in various areas of the allotment. Four of those evaluations yielded a "Healthy" site rating. The other evaluation (CC RHM #5) rated as "at risk" based on historical use on the allotment. The notes reflect the presence of the noxious weed, toadflax, and some forbs (yarrow and golden banner) are present in higher than normal amounts on portions of the allotment. Bunchgrasses, mostly *Festuca* spp., identified were reported in high vigor. Riparian evaluation using the Lotic Checklist, which is the preferred method of riparian area evaluation in the region, yielded "PFC" or Proper Functioning Condition ratings of reaches within both Canyon Creek and an unnamed tributary to Canyon Creek

Cave Basin Allotment (vacant)

Cave Basin (information on this allotment is mainly from an environmental analysis dated 1990. Most information on other allotments historical use is from the environmental analysis of 1969. This is mostly relevant because of changing knowledge about domestic and bighorn sheep interactions/issues.)

The Cave Basin S&G allotment is located about 20 miles northeast of Bayfield, Colorado. Elevations on the allotment vary from 8,400 to 13,600 feet. Of the 22,452 acres within the allotment, approximately 5,858 acres (26%) have been deemed suitable for grazing (based on vegetation, slope and rock outcrops). More than half of the allotment is too steep or produces too little forage to be suitable for grazing. Most of the suitable area is in the south end of the allotment and above 10,500 feet in elevation. The major vegetative type in suitable range is alpine tundra. This zone above timberline has a high percentage of forbs, a smaller percentage of alpine grasses, and has willow along creeks and in wetter areas. Spruce occupies the areas just below timberline and a mixture of aspen and fir dominates the lower elevations.

The decision notice for this allotment, based on the 1990 environmental analysis was to adopt Alternative C – leave allotment vacant until research is complete – based on the perceived threat to bighorn sheep populations. Alternative C was favored in case contact with domestic sheep would be proven non-harmful to bighorn sheep sometime in the future.

The allotment is currently composed of four historic allotments: Cave Basin West, Cave Basin East, Emerald Lakes, and Porcupine. The allotment was split into Cave Basin East and West in 1933. Sometime between 1934 and 1942, the East and West allotments were again combined. In 1949, apparently the Porcupine and Emerald Lakes allotments were added to form the present Cave Basin allotment. Sometime between 1970 and 1990, a portion of the Emerald Lakes allotment was added to Flint Creek allotment including the east side of Lake Creek drainage and Emerald Lake. The grazing season has been 7/1 – 9/15 since 1934.

From 1928 – 1931, 1,400 head of sheep grazed the allotment. In 1932 that number was decreased to 1,100 head. When split into East and West Cave Basin in 1933, each allotment carried 650 head. During this same period, the Emerald Lake and Porcupine allotments carried from 1,200 – 1,600 head. From 1942 until combined with Cave Basin in 1949, Emerald Lake and Porcupine each carried 700 head. When all four allotments were combined in 1949, the permitted number was set at 1,100 head, a reduction from the approximately 2,700 head permitted across the four historic allotments. In 1978, 850 head were permitted, and then in 1981 the current term permit was written for 750 head.

In 1990, permittee Richard E. Parry waived his term grazing permit back to the US, and there has been no permit in effect for grazing privileges on this allotment since then. An infestation of sneezeweed occupying the southern end of the suitable range limited the estimated capacity to 550 ewes with lambs as of 1990. This allotment was in nonuse from 1972 – 79, in 1983, from 1985 – 86, and again in 1989.

Bighorn sheep regularly use portions of the allotment for lambing, summer range, seasonal movements, and winter range. It is important to note that domestic sheep have been on this

allotment since 1928 and bighorn have been reported there since at least the 1940s (first reference in District records). In 1988, 20 translocated bighorn sheep were released near the allotment by the Colorado Division of Wildlife. In August of that year, transplanted bighorns were observed intermixing with domestic sheep on the allotment (*Colorado Parks and Wildlife 2011*). By September of that year, all but one of the transplanted bighorn sheep was dead. Disease transmitted from domestic sheep was suspected as having caused the bighorn die-off. No direct interaction between the transplanted bighorns and native bighorn herd was observed, and the native herd continued to show normal population performance suggesting that disease had not been spread from transplanted bighorns to the native herd.

Trailing - Historically, the sheep would trail up CR 501 to Middle Mountain Road (#724) and then go up Cave Basin Trail (#530) or come over the mountain on the Pine – Piedra Stock Driveway.

Improvements - None

East Silver Mesa Allotment (active)

The E. Silver Mesa S&G allotment is located about 17 miles north of Bayfield, Colorado. It is in the Florida River watershed and consists primarily of the McClure Canyon, Stump Canyon, and numerous unnamed drainages on the east side of the headwaters of the Florida River. Elevations on the allotment vary from 9,200 to 13,000 feet. About 50% of the allotment is either too steep or produces too little forage to be suitable for grazing. Most of the suitable range is located at the higher elevations near or above timberline.

This allotment was included in the Virginia Gulch allotment during early years, then became part of the Florida allotment (no longer exists) and then records show that it was not considered a separate allotment until 1974. Early records state that from 1932 – 1943, 700 head were grazed on the E. Silver Mesa area. In 1942 that number was increased to 850, and maintained until 1955, when it was reduced to 288. It was increased to 388 head in 1959, and remained the same through 1969. In 1962 East Silver Mesa was combined with Johnson Creek, but permit numbers were not increased. However, it is important to note that it is rarely clear what allotment boundaries or allotment combinations these early permit numbers were really for.

In 1974, 1,000 head of sheep were permitted to graze in Missouri Gulch and Endlich Mesa south to the edge of the Reservoir Grant. Then in 1976, the permit was changed to run 1,050 ewes on the Virginia Gulch and E. Silver Mesa S&G allotments combined. The boundary was changed in 1986 to its present configuration and the permit number for E. Silver Mesa was set at 850. Actual use numbers for the last decade hover around 700. In 2008 the allowed grazing season was from 7/1 – 10/4, which is the same given for 1986 and onward in the Environmental Assessment of 1992.

The band of sheep typically uses the allotment in a two year rotation pattern: clock-wise rotation in year one and a counter clock-wise rotation in year two. Herder camps are typically used every year and bedgrounds are also supposed to be used every other year to allow for recovery. The permittee typically moves camp about every 7 days.

Trailing - Going up to allotment: The band of sheep leaves the permittee's private ground south of Ignacio, Colorado and travels north on CR 319 and CR 318 through Ignacio to CR 151 to CR 521. The sheep typically bed for 1 - 2 nights on private land south of Bayfield, Colorado. The sheep then travel north through Bayfield, across HWY160 and north on CR501 to CR 240. The sheep typically bed for a night on some private land along CR 240 and then travel north to CR 243 and at the north end of Lemon Reservoir the sheep go up through Wilderness Lakes subdivision and end up on the East Silver Mesa allotment. The sheep do use portions of the Endlich Mesa Road (#597) throughout the allotment.

Coming down from the allotment: The sheep follow the same general route as they did going up. The sheep bed at the same private land along CR 240 and then travel south on CR 501. The sheep then stay one night near the high school in Bayfield on different private land prior to travelling the rest of the way to the permittee's private lands in one day.

Improvements – None

Monitoring

Paced transect records from 1991 taken in the alpine cover type listed the following primary forage species: *Carex* spp., *Phleum alpinum*, *D. caespitosa*, *R. alismifolius*, and *Trifolium* spp. Allotment inspection notes describe the forage on the allotment as good to excellent for abundance and vigor. Riparian Ecosystem scorecards from 1991 were completed for riparian areas in Stump Creek, Florida River – Crystal Valley, and Endlich Mesa (no specific tributary name). All three evaluations yielded a 'Good' rating for bank/channel stability and two 'Excellent' and a 'Good' rating (Stump Creek) for plant community condition. Field notes discussed the presence of unstable, highly granitic soils throughout the allotment although soil condition ratings found were generally good.

The district ID Team monitored the allotment in 2010 and recorded five Rangeland Health Matrices, two of which were taken in sheep bed grounds, and one Lotic Checklist taken in the Florida watershed. Each RHM had a 'Healthy' rating although concerns were expressed about the willow communities due to lack of regeneration and evidence of moderate sheep and elk browse. The riparian evaluation yielded a 'PFC' rating.

Fall Creek Allotment (vacant)

The Fall Creek allotment includes most of the D Creek drainage, Weasel Skin Creek drainage, Fall Creek, Taylor Creek and Sheep Draw, 17 miles northeast of Bayfield, Colorado. Elevations of this allotment range between 8,500 and 13,000 feet. Of the 10,939 acres within the allotment, approximately 1,081 acres (10%) have been deemed suitable for grazing (based on vegetation, slope and rock outcrops). This allotment was historically grazed by 1,000 sheep in the summer between July and September.

The last permit for this area was held for the 1974 season, authorizing 40 head of cattle. Actual use reported was 138, and a note says that the cattle were in the McClure unit, which used to be the Florida S&G. A handwritten memo dated April, 1970 states that Fall Creek was in the

process of being combined with Florida S&G allotment. It also indicates that the southern portion of this allotment near Red Creek was being used as a temporary cattle conversion. This allotment was in nonuse for S&G since 1968.

From 1965 – 1968 permit numbers were 1,000 head. From 1949 to 1964 the amount of sheep allowed was 750. A 1960 grazing analysis showed that 3,397 acres were in fair condition, and 2,650 were in poor. No portion of the allotment's vegetation was considered in good or excellent condition classes.

Trailing - Historically, the sheep would trail up CR 501 to Vallecito Creek Trail (#529) or come over the mountain on the Pine – Piedra Stock Driveway.

Improvements - None

Flint Creek Allotment (vacant)

The Flint Creek allotment includes most of the Flint Creek drainage south from the Continental Divide to the Pine River, including Emerald Lake and portions of the Lake Creek drainage, 21 miles northeast of Bayfield, Colorado. Elevations of this allotment range between 9,200 and 13,000 feet. Of the 16,359 acres within the allotment, approximately 3,647 acres (22%) have been deemed suitable for grazing (based on vegetation, slope and rock outcrops). This allotment was historically grazed by 950 sheep in the summer between July and September.

The exclusions in 1969 were 169 acres around Flint Lake and the recreation horse allotments along lower middle and lower Flint Creek. This allotment was originally the Flint Creek and Flint Lakes allotment. Sometime between 1938 and 1943 the allotments were combined to form the present Flint Creek allotment. The 169 acres around Flint Lakes remained closed. During the 1948-1950 seasons the allotment was grazed alternately with the upper and lower Pope-Paso allotments (currently part of the Pine River allotment). From 1928 until about 1943 there were 2,200 sheep grazing on the allotment. In 1943 the preference was reduced to 850 head. The obligation was increased to the current (1969) 950 head in 1951. **Although primary game use of the allotment is by elk, the southwest portion (the Lower Flint-Rincon section) contains one of the few bighorn sheep ranges on the District. Estimated use by bighorn sheep of this allotment is 75 bighorn sheep months (1969).**

Inspections cited in the 1969 management plan state that overgrazing in the northeast part of the allotment was a problem leading to erosion and a 50 acre area being closed. The reason given for the erosion was lack of herder knowledge and failure to graze according to the prescribed system. In addition to the closures, the high areas in the Basin-Hole and Blue Lake-Bench sections were scheduled for light use.

The last grazing permit on file was a nonuse permit issued in 1974, for 950 head. The last time this allotment was grazed was in 1972, at which time the permit number was 950, and the actual use number 650. The permittee association waived all grazing permits to the San Juan National Forest in 1975.

Trailing - Historically, the sheep would trail up CR 501 to Pine River Trail (#682) or come over the mountain on the Pine – Piedra Stock Driveway.

Improvements - None

Johnson Creek Allotment (vacant)

The Johnson Creek allotment includes all of the drainages of Grizzly Gulch and Johnson Creek and a portion of Vallecito Creek, 23 miles north of Bayfield, Colorado. Elevations of this allotment range between 9,000 and 14,000 feet. Of the 9,456 acres within the allotment, approximately 1,066 acres (11%) have been deemed suitable for grazing (based on vegetation, slope and rock outcrops).

Actual use data for the Johnson Creek allotment is absent until 1962, when it was grazed in conjunction with the E. Silver Mesa. The grazing season lasted from 7/16 to 9/15. In 1959 the preference for E. Silver Mesa was 388 head, which remained stable through 1969. When E. Silver Mesa and Johnson Creek were joined, this number was not increased. From comparing the map of current allotment boundaries with the Johnson Creek boundary in the folder, it seems that what was then considered part of E. Silver Mesa was actually current-day Virginia Gulch. There are no numbers for separate use of Johnson Creek, and there are no records for Needle Creek, which is what this allotment was called until being renamed to Johnson Creek in 1962.

An application for grazing permit dated 1967 indicates that the permit number of 388 for the E. Silver Mesa and Johnson Creek allotments was contingent on permittee's use of leased land in the Durango Reservoir Grant. Notations on permits from other years also seem to stipulate that this extra land was considered part of the grazing unit for which 388 sheep were permitted. In several places, the records state that the permit numbers are based on a land area that is 48.5% national forest land (at least as of 1969).

A color-coded vegetation map from 1962 showed approximately 20-25% percent of Johnson Creek was grassland in fair condition, and an additional 10% was conifer with forage in excellent condition. The remainder was considered "rock".

In 1968 this allotment area was transferred from the Fergusons to Montrose Production Credit Association. Nonuse for the E. Silver Mesa – Johnson Creek allotment was approved for 1969 and 1970. Invoices to the permittee from 1969 and 1970 show that this permittee failed to use any of their S&G allotments, and only used their C&H allotments.

Prior permittees were Homer Ferguson, and Homer Ferguson Jr. Their records show that they ran the permitted amount of sheep on the allotment, and held the lease to the Durango Reservoir Grant grazing permit (which is currently part of East Silver Mesa and Virginia Gulch allotments).

Trailing - Historically, the sheep would trail up CR 501 to Vallecito Creek Trail (#529) or come over the mountain on the Pine – Piedra Stock Driveway.

Improvements – None

Leviathan Allotment (vacant)

The Leviathan allotment includes all of the drainages of Leviathan and Sunlight Creeks to their confluence with Vallecito Creek, 27 miles north of Bayfield, Colorado. Elevations of this allotment range between 9,500 and 14,000 feet. Of the 6,530 acres within the allotment, approximately 824 acres (13%) have been deemed suitable for grazing (based on vegetation, slope and rock outcrops).

The Leviathan allotment used to be grazed together with the Rock Creek allotment, and was separated into its current boundaries in 1932. In 1933, 900 sheep were permitted for this area, which was lowered to 850 head in 1947, 750 head in 1948, and reduced again to 500 head in 1956, when Evan Parry became an individual permittee for this area. It was raised in 1961 to 582 head, and remained at that limit until the allotment became vacant in 1975.

Transects done in 1960 indicated that the major part of the allotment was in poor condition due to heavy use. The estimated grazing capacity was subsequently suggested to be changed from 1106 sheep months to 482. In the same report, it states that the allotment was currently used in excess of 200% capacity.

The earliest permit was issued in 1956 (following the dissolution of Parry's partnership with Payne and Jones), for 560 sheep, from 7/1 – 9/15. A memo dated March of 1961 lists five years of permit number limits for Parry, as follows: 1956 – 60 head, 1957 – 50, 1958 – 50, 1959 – 100, 1960 – 150. However I found an actual use record in another file for 1960 that said 650 head were permitted, and 635 actually grazed. There is some confusion in the records obviously, and the partnership dissolution of 1956 left Parry with 500 sheep—which means that if the 1956 – 1959 numbers are accurate, he must have been grazing the remainder of his herd on another allotment. Parry applied for 250 head in 1956, but was only permitted 60.

A memo in 1961 suggests that Parry's temporary permit would be converted to a preference permit for 82 head of sheep, which was his five year above permitted average from 1956 – 1960. This must not have been done since the year after that memo was issued Parry grazed 593 head on Leviathan. There are no numbers in the files for 1950 to 1955.

Actual use for the 1960s (1961 – 1966) was at or above the 582 head limit. Requests for nonuse were approved for three consecutive years beginning in 1967. Records show that the allotment was grazed in 1970 by 582 sheep, but was followed by three more years of nonuse.

The last letter in this file indicates that after four years of nonuse by 1974, this allotment permit was relinquished in 1975, and was administratively closed. Some of the reasons for closure, listed in a letter dated 1974, included the importance of recreation use in the area, and the limited amount of usable range, which risked damage if used annually, as well as the difficulty in accessing the area due to the long driveway. No environmental analysis has been written for the closure of this allotment; therefore, the current status of the allotment is vacant.

Trailing - Historically, the sheep would trail up CR 501 to Vallecito Creek Trail (#529) or come over the mountain on the Pine – Piedra Stock Driveway, and then over to the Vallecito Creek Trail to the allotment.

Improvements – None

Pine River Allotment (vacant)

The Pine River allotment includes most of the Pine River drainage, and all of Rincon La Osa, North Fork, Rincon La Vaca, Canon Paso, South Canyon, Pope Creek, Sierra Vandera, Blue Spruce Canyon, and Lost Canyon drainages, 19 miles northeast of Bayfield, Colorado. Elevations of this allotment range between 8,500 and 13,600 feet. Of the 38,843 acres within the allotment, approximately 14,512 acres (37%) have been deemed suitable for grazing (based on vegetation, slope and rock outcrops).

This allotment is made up of several old allotments that changed names and boundaries multiple times. Summaries of the main allotments can be found below. To briefly state the history of this allotment, it originally carried 2,850- 3,600 head annually from 7/1- 9/30 until 1932, when the season was reduced to the present 7/1 – 9/15 season. From 1932 to 1969 the obligation ranged from 3,600 head to 1,000 head.

In 1978 the La Osa, Snowslide-La Vaca, and Divide Paso S&G allotments were combined to form the Pine River allotment. This was done to enable a portion of this area to rest from grazing every year, in order to accommodate increasing recreation demands. The 1978 Analysis and Plans memo states that if available forage were the only consideration, this allotment had the capacity to graze twice the number of sheep actually suggested. Heavy recreation use was the limiting factor. This plan also seems to be closing most of the allotment to grazing, with the exception of the La Osa area. The La Osa permit numbers prior to the allotment combination was 800 head, and the sole permit issued for the “Pine River” allotment created in 1978 was for 850 head. It’s really not clear what areas were really closed to grazing, or if all areas were used when the whole or portions of the La Osa section were being rested.

Divide Paso

This allotment made up the bulk of the combined Pine River allotment. It went from just north of Blue Spruce Canyon to just north of Canyon Paso. Presumably for this reason the permit numbers in the record for this allotment are the same as stated in the Pine River file—“From 1932 to 1969 the obligation ranged from 3,600 head to 1,000 head.”

Historical use for the Divide-Paso area was by the Southern Ute Sheep Association (since 1949), with a permit generally around 1,000 head. The last permitted use for this allotment was in 1974, with a limit of 500 head – though the permittee took non-use.

Snowslide – La Vaca

Prior to 1948, the area constituting this allotment carried 2,000 head. From 1948 – 1950 it was reduced to 850, but increased to 1,050 in 1951, and remained at that number until its consolidation into the Pine River allotment.

The Southern Ute Sheep Assn. was also the last known permittee for the Snowslide – La Vaca area. The last permitted use was again in 1974, for 1,050 head of sheep, though only 700 were actually used. This permittee and permit number goes back to 1958. The earliest record for this portion of the allotment is for the same permittee, but 850 head rather than 1,050 (1949).

La Osa

This was one of the oldest sheep allotments on the district, and grazing use predates the creation of the Forest by several years. From 1928 – 1931 the allotment was grazed by 1,800 head of ewes and lambs from 7/1 – 9/30. In 1932, the season was shortened to 7/1 – 9/15. Use was still excessive and in 1935 the preference was reduced to 1,000 head. Use of the allotment remained the same until 1951, when the preference was reduced to 800 head, which remained the same until the consolidation of this allotment into Pine River.

The last issued permit for the La Osa portion of the Pine River was for 800 head, issued to Manuel Pacheco and Sons in 1973. This permittee filed for nonuse in 1973 and 1972, following use of the region at capacity (800 head) since 1949.

In 1978 the whole Pine River allotment was permitted for 850 sheep to graze from 7/1 – 9/15 (term permit). In 1984, after three nonuse years beginning in 1981, permittee waived their grazing permit back to the government, and no permits have been issued for this area since then.

In summary, around 1973, the entire allotment was permitted for a total of 2,850 head of sheep, which was then reduced in 1978 to 850 head. The main reason indicated for this reduction was conflict with recreation use of this area. Nonuse by permittees was a common issue. Since the records end before the discovery of the effects of domestic sheep on bighorn sheep populations, no mention was made of any problems in these files.

Trailing - Historically, the sheep would trail up CR 501 to Pine River Trail (#682) or come over the mountain on the Pine – Piedra Stock Driveway. Other options included to come over from Rio Grande Reservoir from the north or to come over from Poison Park trailhead near Pagosa Springs, Colorado.

Improvements – None

Rock Creek Allotment (vacant)

The Rock Creek allotment includes the head waters of Vallecito Creek and all of the drainages of Rock Creek to their confluence with Vallecito Creek, 28 miles north of Bayfield, Colorado. This allotment contains approximately 10,880 acres, of which 3,188 acres (29%) have been deemed suitable for grazing. The elevation of this allotment ranges from 10,500 to 13,600 feet. For the most part it is steep and rocky. An assessment in 1969 indicated that heavily timbered areas existed and were suitable for grazing, but those may be covered and too shaded for forage now. Grazing was being used to maintain these forage areas. Shallow unstable soils are a general rule over most of the allotment.

This allotment originally included the current Leviathan allotment, but was separated from it in 1932. At that time a third allotment, known as Vallecito, was divided into east and west and shared by Rock Creek and Leviathan. In 1947 both sides of the Vallecito allotment were incorporated into Rock Creek. From 1928 – 1930, 1,300 head were grazed on the Rock Creek – Leviathan allotments. In 1931 this was increased to 1,500 head. When the allotments were divided in 1932, the Rock Creek obligation was reduced to 600 head. During the same period (1928 – 1930), the Vallecito allotment had from 1,000 – 1,200 head. Numbers for Rock Creek and Vallecito remained the same until they were joined in 1947, and combined total was reduced to 850 head. This number remained stable until 1971. The combining of Rock Creek and Vallecito allotments, with reduced numbers, was to combat overuse due to herders' negligence in moving animals and following the management plan. The areas mentioned in inspection reports as overused were still in a poor condition class in 1960. Overall however the allotment was being used under capacity (66%), with only specific areas being overused.

On March 23, 1971, a new permittee applied for a permit to graze 850 sheep on a term permit, from 7/1 to 9/15. A memo dated July 8, 1971 states that the transfer of the allotment to the new permittee was successful, and that the "Rock Creek S&G allotment is now an open one, and Mr. Brown's sheep will now graze on the Animas district." However, approval was given for the number and dates, but the allotment on the approval section was changed to West Virginia and Missouri Gulch.

In another file (with the same name), there is a memo in the correspondence section (on top) stating that sheep grazing in Rock Creek were moved to the Florida drainage in 1971 to avoid conflicts with recreational use of the Rock Creek area. The last permitted use for Rock Creek was in 1970 for 850 head of sheep. In 1972, the Brown's did not apply for use of Rock Creek, but for the West Virginia and Missouri Gulch allotments.

The allotment was grazed at capacity (850 head) continuously until 1967, when it fell into nonuse until 1970, the last year it was grazed. In that season it was grazed by 868 sheep. The 1969 range management plan for the Rock Creek compartment says there are possibly bighorn sheep in this area. Reduced use in the Rocky Benches and Hunchback units was suggested to protect the area for bighorn sheep and mountain goat use.

Trailing - Historically, the sheep would trail up CR 501 to Vallecito Creek Trail (#529) or come over the mountain on the Pine – Piedra Stock Driveway. The other option was to come from the north near Silverton on the Colorado Trail and Continental Divide Trail through Cunningham Gulch and Highland Mary Lakes area.

Improvements – None

Spring Gulch Allotment (active)

The Spring Gulch allotment is in the Pine and Florida River drainages, 7 miles north of Bayfield, Colorado. Elevations on this allotment vary between 7,400 and 10,000 feet. The suitable areas for grazing are rolling hills to moderately steep slopes, while the unsuitable areas have too little forage or are too steep. The major vegetative communities are ponderosa pine with Gambel oak

in the understory. As the elevation increases fir and aspen dominate. The dominant grass species is Kentucky bluegrass.

This allotment was administered by the Bureau of Land Management until 1984, when the land and allotment administration were transferred to Forest Service control. The BLM permittee was given 5 years to conform to the Forest Service rules and regulations.

The term grazing permit issued by the BLM prior to 1984 was for 58 cow/calf pairs of cattle from June 1 to October 30. In 1985, a new term grazing permit was issued for 35 cow/calf pairs to graze a season of June 1 through October 30. The allotment was made up of 70% public land and 30% private land that was adjacent to the south of the Forest System land within the allotment. A range analysis was completed in 1986. The use was determined to be 50 head of cattle for a season of June 1 through October 15 when the private land was used. If the private land was not part of the rotation 35 cow/calf pairs were to graze a season of June 11 through October 15.

During the years of 1987-1989 and 1994-1996 non-use was taken. In 1997 the permit was waived back to the Forest Service. Sheep began trailing through the leased private land and the Spring Gulch allotment in 2004. After the 2005 grazing season, a recommendation was made by the range personnel to allow sheep to use Spring Gulch no earlier than June 15th for no longer than 10 days in the spring and no more than 6 days in the fall. There has been no interest in stocking the Spring Gulch allotment with cattle. There is no fence separating the Forest System lands and the private land. The current sheep permittee leases the private land within the Spring Gulch allotment.

In 2002 the Missionary Ridge fire burned all of the allotment.

The Tank Creek band of sheep use this allotment as they trail north off of private lands onto National Forest lands. Sheep use since 2004 includes 700 ewes with a range in season of use from 6/15 to 6/30 (for 10 days) and from 9/22 to 10/5 (for 6-7 days). The recent plan has been to use the allotment for around 16 days.

Trailing - See trailing info for Tank Creek Band.

Improvements – Currently on the allotment there are two spring developments and three water reservoirs. There is no fencing on the allotment. All water developments need some maintenance and cleaning due to silting problems linked to Missionary Ridge Fire in 2002.

Monitoring

Key areas were selected within the allotment. Key areas are defined as a portion of the range, which, because of its location, grazing or browsing value, and/or use, serves as an indicative sample of range conditions, trend, or degree of use seasonally. A key area guides the general management of the entire area of which it is part. Key areas are selected for monitoring studies to determine if management objectives are being met. Inventory methods utilized were Ocular

Plant Composition and Rangeland health matrix. A Range inspection was conducted in 2005, which documented proper use was occurring.

Tank Creek Allotment (active)

The Tank Creek S&G allotment is located about 23 miles northwest of Bayfield, Colorado. It is in the Animas river watershed and consists primarily of the Tank Creek, Canyon Creek, Grasshopper Creek, and Crazy Woman Gulch drainages. Elevations on the allotment vary from 7,500 to 12,800 feet. About 62% of the allotment is either too steep or produces too little forage to be suitable for grazing. Most of the suitable range is located at the higher elevations near or above timberline.

Data on grazing use is available beginning in the early 1930s. In that decade, records indicate that 1,000 head of sheep were grazed from 6/20 – 10/1 each year. In the 1940s that was lowered to 750 head, raised to 800 in the 1950s, and increased again to 850 from the early 1960s to 1970s. Then in the mid-1970s, Tank Creek was combined with the West Virginia and Virginia Gulch areas and 1,200 sheep were grazed on the expanded allotment. In 1986 the original boundaries were revived, and 850 ewes with lambs were set as the permitted number. A range analysis in 1991 indicated that Tank Creek was being overgrazed in some areas, while others were seeing no impact. In 1992 the permit number was set to 700 as it remains currently. The grazing season for the past few years has been from roughly mid-July to mid-September.

The band of sheep enters the allotment from the south and uses the allotment in a two year rotation pattern: clock-wise rotation in year one and a counter clock-wise rotation in year two. Herder camps are typically used every year and bedgrounds are also supposed to be used every other year to allow for recovery. Herder typically moves camp about every 7 days. The permittee also typically uses one ATV to aid in moving camps. All but one camp is adjacent to existing or old logging roads.

Trailing - Going up to allotment: Approximately 200-400 ewes plus lambs travel east on CR 523 until they cross Crowbar drainage. From here they travel across private lands. The sheep bed near a windmill on the private land. The sheep typically stay on private for about a week. From here they travel west on Road #755 to Pole Reservoir. The sheep overnight in this area and then travel on Forest Road #755 and CR 527 to private lands. The sheep stay on private lands for about 4-7 days before travel back to the permittee's private land. The sheep follow the same route and timeframes as they did going up.

The whole sheep band leaves the permittee's private grounds southeast of Bayfield, Colorado and travels north along CR521 to the middle Bayfield, Colorado. From there they travel on HWY 160 for about a mile and then north on CR502. Along this road the sheep typically bed for up to a week each at two different parcels of private land. The band then travels to CR501 and then north for about 1 mile and then they turn west on CR 240 for about a mile. The sheep camp on private land for a day or so before travelling across the road onto the Spring Gulch allotment. The sheep cross a designated easement along old logging roads through private lands to get to

the Spring Gulch allotment. The sheep spend about 10 days on the Spring Gulch allotment (varies depending upon water availability).

From Spring Gulch allotment, the sheep trail north to Burnt Timber allotment along CR 243 to Transfer Station camp ground. Sheep bed on the west side of Transfer Park. This area is part of the old Burnt Timber Stock Driveway trail. From here the sheep stay for about a week on Burnt Timber and then spend a week to two weeks traveling through cattle allotments till they get onto Tank Creek allotment. The sheep have several routes through the cattle allotments depending upon vegetation management needs for the year. Several recent options have been to travel south along Burnt Timber allotment till the sheep get to Young's Canyon trail (#546). From here the sheep can travel further south to Stevens-Shearer allotment and then back north to the allotment or travel north along the Red Rim roads (#595 and #076) which is part of the Missionary Ridge Stock Driveway. Another option is to travel west across Burnt Timber and then come out on Coon Creek or Bear Creek West cattle allotments. Either option allows the sheep to end up near the Lime Mesa Trailhead (#676).

Going down from allotment: The sheep follow the same general path through Burnt Timber (about a week) to Spring Gulch allotment. Sheep spend about 4-6 days Spring Gulch. From this point the sheep get on CR 501 and then travel all the way back on county roads to the permittee's private land in one day.

Improvements – None

Monitoring

Grazing inspection notes, paced transect forms and Riparian Ecosystem scorecards were found for the late 1980's – 1991. Notes discuss lower forage and soil ratings due to the rocky, highly-erosive soils which persist though most of the suitable range on the allotment. There is also mention of heavy willow browsing occurring in Tank and Canyon Creeks. Paced transect records from 1991 taken in the alpine cover type rate forage and soil conditions as 'fair'. Primary species recorded were *Carex* spp., *D. caespitosa*, *Phleum* spp., and *R. alismifolius*. Riparian scorecards completed for Grasshopper and Canyon Creeks rated bank/channel stability as 'Fair' and plant community condition 'Good' for Grasshopper Creek and 'Fair' for Canyon Creek. Additional notes state that Canyon Creek is in high alpine and that steep, erosive banks contributed to the 'Fair' evaluation of the riparian area.

Six sites within the allotment were evaluated in 2010 by the district ID Team. Five out of six Rangeland Health Matrices rated the sites as 'Healthy'. The evaluations also make note of the granitic, rocky soils that are prevalent in the allotment. One 'at risk' rating (RHM #7) was stated to be due to degraded soils and past logging operations in the area. Rills, gullies and some sedimentation were present here in association with many old logging roads and trails. *Cirsium arvense*, *Chamerion angustifolium*, and *Achillea* spp. were abundant noxious and undesirable plant species. 2010 Lotic Checklists of Grasshopper and Tank Creek yield a rating of "Proper Functioning Condition" for specific reaches of those riparian areas.

Virginia Gulch Allotment (active)

The Virginia Gulch S&G allotment is located about 22 miles north of Bayfield. Elevations on the allotment vary from 9,400 feet to 13,300 feet. About 35% of the allotment is either too steep or produces too little forage to be suitable for grazing. Most of the suitable grazing area is above timberline. This allotment area was once at least four allotments, and wasn't divided into Virginia Gulch, Tank Creek, and E. Silver Mesa until 1974. Early data for these three allotments may overlap as a result. Grazing by domestic sheep took place on this allotment before it became part of national forest.

Earliest data on grazing use is from 1926. Grazing use was 900-1,000 head for a season of 7/1 – 9/30 each year. In 1962, Missouri Gulch was combined with Virginia Gulch, and in 1966 W. Virginia Gulch was also included. The numbers of sheep on the combined allotments fell, mostly due to the declining sheep industry. In 1967 there were 950 head on the three combined allotments, and 1968 – 70 were nonuse years. From 1971-74 740 head were grazed in this area, and then a new management plan separated the allotment into three (Virginia Gulch, Tank Creek, and E. Silver Mesa). Two of the three allotments were grazed with a band of 1,025 head each year, while the third rested. This policy was continued until 1986 when Virginia Gulch permits were reduced to 850 head. The allotment boundaries and permitted number have remained the same since then, though actual use for the past few years has been closer to 750. The current season runs from early July to mid-September (generally 7/7 – 9/15). The band of sheep typically uses the allotment in a two year rotation pattern: clock-wise rotation in year one and a counter clock-wise rotation in year two. Herder camps are typically used every year and bedgrounds are also supposed to be used every other year to allow for recovery. Herder typically moves camp about every 7 days.

Trailing - Going up to allotment: The band of sheep leaves the permittee's private ground south of Ignacio, Colorado and travels north on CR 319 and CR 318 through Ignacio to CR 151 to CR 521. The sheep typically bed for 1 - 2 nights on private land south of Bayfield, Colorado. The sheep then travel north through Bayfield, across HWY160 and north on CR501 to CR 240. The sheep typically bed for a night on some private land along CR 240 and then travel north to CR 243 end at Transfer Park on Burnt Timber allotment.

The sheep band stays on the east side of the Burnt Timber allotment to prevent mixing with the Canyon Creek and Tank Creek sheep bands. The sheep spend about two weeks going up to the Virginia Gulch allotment. The sheep band does cross the Burnt Timber trail several times, but does not use the trail as the main travel route. This trail is the old Burnt Timber Stock Driveway created to move sheep up into the allotments. At the top end of Burnt Timber, the sheep stay west of Lime Mesa Trail (#676) and use portions of the City Reservoir Trail (part of the old Silver Mesa Stock Driveway) as they go through the Virginia Gulch allotment.

Coming down from the allotment: The sheep follow the same general route as they did going up. However, on FS lands, bedgrounds used going up are to be skipped going back down. Once they leave Burnt Timber allotment, the sheep bed at the same private land along CR240 and then travel south on CR 501. The sheep then stay one night near high school in Bayfield on different private land prior to travelling the rest of the way to the private lands in one day.

Improvements – None

Monitoring

Grazing inspection notes, paced transect record forms and Riparian Ecosystem Scorecards were found from the 1980's for the Virginia Gulch allotment. The allotment inspection notes reflected a healthy ecosystem with a few comments pertaining to areas with more than average bare ground and many comments about willow browse, particularly in Missouri Gulch and Virginia Gulch. There were also several comments of heavy elk use in the Oliver Lakes area and elk browse on willow stands in the aforementioned areas. Paced transect records were taken in the alpine cover type with the following primary plant species reported: *Carex* spp., *Deschampsia caespitosa*, *Ranunculus alismifolius*, *Phleum alpinum*, *Pseudocymopterus montanus*, *Stipa* spp., and *Erigeron* spp. No condition classes were reported. Riparian Ecosystem Scorecards were done for West Virginia Creek, Missouri Gulch and Virginia Creek. All three riparian areas yielded a ranking of 'Good' for the evaluation of numeric and bank/channel stability and a ranking of 'Excellent' for the evaluation of numeric and plant community condition.

The district ID Team conducted field analysis of the allotment in July of 2010. Eleven rangeland health monitoring sites were chosen yielding ten 'Healthy' site determinations and one 'at risk' rating based on the over-use of a bed ground and the abundance of bare ground present at that site. A common trend in these monitoring notes was the use of the willow communities on the allotment by both elk and domestic sheep. Hedging was present in most evaluated areas with some willow die-off reported. Lotic evaluations of the riparian areas in Virginia Gulch, Missouri Gulch and West Virginia Gulch yielded PFC ratings. Evaluation of an unnamed tributary to Missouri Gulch yielded an "At Risk" rating based on vertical and horizontal instability of the banks and the low condition and quality of streamside vegetation.