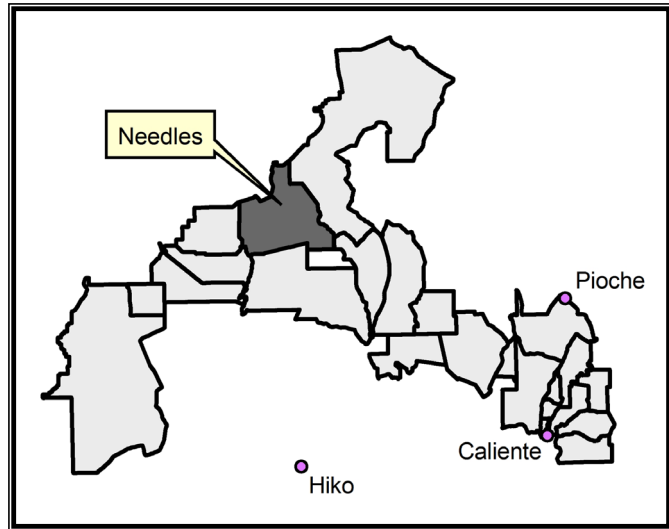


13.0 NEEDLES ALLOTMENT

Permittee: Double U Livestock L.L.C.
Contact: Wade West
City/State: Ely, Nevada

Base Property: Water



13.1 ALLOTMENT DESCRIPTION

The Needles Allotment is located on the north end of Coal Valley to the west of the Seaman Range and Timber Mountain. The allotment stretches east across the Golden Gate Range and into the eastern portion of north Garden Valley.

Table 13.1: Needles Allotment Details

ALLOTMENT ACRES		GRAZING PERMIT					
Public	Private	Number/Type of Livestock		Season of Use	AUMs		
					Total	Active	Suspended
84,567	931	Double U Livestock	1,269 Sheep	10/01 – 02/28	1,644	1,644	0
		Double U Livestock	210 Cattle	03/01 – 04/15			
		Double U Livestock	210 Cattle	10/01 – 02/28	1,043	1,043	0

13.1.1 Grazing System

The allotment is used continuously throughout the winter by cattle and sheep. Lambing also takes place on the allotment in early spring. There are no interior pasture fences within the allotment. Cattle are distributed throughout the allotment using established water sources, water hauling and seasonal moisture. Sheep are herded throughout the allotment. The Double U Livestock “winter camp” is also located within this allotment on a parcel of private property (Map Reference 1).

13.1.2 Stockwaters and Water Rights

The base property classification is 100 percent “Water” under authority of the Taylor Grazing Act. The grazing privileges in this allotment are thus attached to the various privately owned water rights within the allotment. The base property classification adds a level of value and importance to the waters and water rights beyond the level of private property rights under state law. The consequences of adversely affecting the stockwaters is greater than if Double U Livestock (DUL) had only a water right on them. Stockwater is distributed throughout the allotment by a system of wells, tanks, pipelines, troughs and water haul ponds. The stockwaters are all vested, certified or permitted under Nevada State Water Law, and they are considered private property rights.

13.1.3 Existing Fencing

The southern boundary of the allotment is fenced. The only other fencing within the allotment consists of a north-south gap fence located in Water Gap at the southwest corner of the allotment.

13.2 PROPOSED RAILROAD ALIGNMENT – DOE PROPOSED ROUTE – GARDEN VALLEY ALTERNATIVES 1 AND 3

The DOE proposed alignment would enter northeast side of the Needles Allotment, traveling west for approximately two miles, and then turning southwest across Coal Valley. Both the DOE Garden Valley Alternates 1 and 3 would run west from Coal Valley into Garden Valley passing through the Golden Gate Range via Deadman Pass. Only a small portion of the alignment on the extreme western boundary is different for Alternates 1 and 3; therefore, impacts and mitigation for both alignments will be considered to be the same.

Rail Length Within Allotment: 13.46 miles
1,000' Construction Right-of-Way Area: 1,632 acres

13.2.1 Fencing Preference for Proposed Rail Alignment

The Permittee is indifferent on fencing. As such, the default for this analysis is for no fence along the rail.

13.2.2 Impacts and Mitigation

13.2.2.1 Base Property

As stated in Section 13.1.2, the base property for this allotment is water. The water sources that constitute the base property are within 4 miles of the track, and the water distribution pipelines from these sources are directly affected by the alignment.

See Section 13.2.2.4 for proposed mitigation.

13.2.2.2 Grazing System

The allotment does not have any interior pasture fences. Livestock distribution is regulated through the distribution of water or by herding. The proposed alignment would cut across the middle of a significant portion of the allotment resulting in restricted livestock movement, and a change in grazing patterns and habits. Neighboring cattle are also trailed across the Needles Allotment, a practice that would be impacted by the proposed alignment.

Sheep crossings will need to be constructed at 1-mile spacing between road and trail crossings in order to maintain a suitable degree of movement from one side of the track to the other. Crossings should consist of 100; wide earthen ramps not to exceed 25 percent grade. A total of nine sheep crossings would be required.

13.2.2.3 Existing Fence and Capital Improvements

The proposed alignment would not cross any existing fences.

13.2.2.4 Stockwaters and Associated Infrastructure

The proposed alignment would run within four miles of thirteen different stockwaters, including one trough, six tanks with troughs, four wells, one spring and one pond. Of these thirteen stockwaters, four are within one mile of the track including three tanks with troughs,

and one well. These stockwaters are of particular concern due to potential increase for sheep-train collisions. The proposed alignment would also cross one pipeline that terminates at one of the tank-trough locations within one mile of the track.

All four stockwaters within one mile of the track should be moved away from the track to allow for a buffer in excess of one mile. The pipeline that would be crossed by the track would need to be extended to service the re-located tank and trough. The crossing would need to be protected to allow for continuous flow through the duration of construction and operation of the rail.

13.2.2.5 Road and Trails

The proposed alignment would cross roads in four different locations, and five trails. The proposed alignment runs parallel to several other roads and trails, and impacts cannot be determined until the final alignment is staked.

Each road crossing would require an approach with a maximum 6 percent approach. Each trail would require a crossing with a maximum 12 percent approach. Both road and trail crossings should be built wide enough (100') to double for a sheep crossing. One of the trail crossings could be folded into a road crossing as it crosses near an existing intersection. Several crossings may also be eliminated if the road or trail were realigned. As shown, the proposed alignment would require the realignment of approximately 7 miles of road and trail.

13.2.2.6 Vegetation and Forage

A permanent loss of forage will occur within the railway footprint as well as within the fenced right-of-way (ROW). Other concerns include the temporary loss of forage due to construction activities and railway operations. There is also the potential for long-term loss of desirable forage within disturbed areas due to difficulty of rehabilitation, establishment of noxious or invasive weeds, and fires resulting from railway operations.

Mitigation must include compensation for lost AUMs due to construction and/or operation of the railway. This includes deferred or suspend AUMs resulting from wildland fires caused by railway operations. Disturbed areas should be kept to a minimum, successfully revegetated to a predetermined condition, and managed for noxious weeds. It should be the responsibility of the rail operator to control noxious or invasive weed infestations for the life of the rail.

13.2.2.7 Loss of Livestock

The Permittees expressed concern over the potential loss of livestock due to train collisions.

The Permittee should be reimbursed for any loss of livestock due to railway operations.

13.2.2.8 Other Impacts and Mitigations

The proposed alignment would pass approximately 1.5 miles east of an existing residence. The residence looks east across the Coal Valley towards the Seaman Range. The rail would impact the solitude, tranquility, silence, and view from the existing residence, and lower property values.

These values are extremely difficult to quantify or mitigate. The only mitigations the Permittee identified was to increase the amount of irrigated farmland deeded to Double U Livestock. To accomplish this, DUL would be request a professional analysis from an

Agriculture Economist to determine the value of the loss incurred by the rail. That loss would need to be made up for by deeding acreage within the Needles Allotment to DUL, drilling a well or wells to service pivots for irrigated fields.

Any of the routes proposed through the Needles Allotment will have significant impacts on the grazing operations within the allotment. The loss of intrinsic values discussed, in addition to the time and effort required to adjust operations to a new rail will make it very difficult for DUL to continue operations within the Needles Allotment. As such, DUL has offered several mitigation measures:

1. Completely avoid the Needles Allotment. Explore the possibility of a route following Highway 93 from Caliente west to Highway 375, and cut across the Nevada Test and Training Range to Yucca Mountain. That would avoid most of the disruption to grazing allotments, and associated private property rights.
2. DUL would offer to trade their right to the Needles Allotment to the Department of Energy for approximately 50,000 acres within the Boardman Bombing Range near Boardman, Oregon.
3. Provide deeded, irrigated farmlands with pivots to offset the costs incurred by the proposed rail.

13.3 PROPOSED RAILROAD ALIGNMENT – DOE PROPOSED ROUTE – GARDEN VALLEY ALTERNATIVES 2 AND 8

The DOE proposed alignment would enter the Timber Mountain Allotment from the east as it crosses State Route 318. The alignment moves northwest across the northeast corner of the allotment and exits the northern boundary of the allotment.

Rail Length Within Allotment: 13.30 miles
1,000' Construction Right-of-Way Area: 1,612 acres

13.3.1 Fencing Preference for Proposed Rail Alignment

The Permittee is indifferent on fencing. As such, the default for this analysis is for no fence along the rail.

13.3.2 Impacts and Mitigation

13.3.2.1 Base Property

As stated in Section 13.1.2, the base property for this allotment is water. The water sources that constitute the base property are within 4 miles of the track, and the water distribution pipelines from these sources are directly affected by the alignment.

See Section 13.2.2.4 for proposed mitigation.

13.3.2.2 Grazing System

See Section 13.2.2.2 as the same impacts apply.

Sheep crossings will need to be constructed in order to maintain a suitable degree of movement from one side of the track to the other. Crossings should consist of 100' wide earthen ramps not to exceed 25 percent grade spaced at 1-mile intervals between road and trail crossings. A total of five sheep crossings would be required for this alignment.

13.3.2.3 Existing Fence and Capital Improvements

The proposed alignment would cross an existing fence in the area of Water Gap.

The fence crossing would require an in-rail cattleguard, as well as a road cattleguard and gate for the rail service road.

13.3.2.4 Stockwaters and Associated Infrastructure

The proposed alignment would run within four miles of thirteen different stockwaters. Of these, five are within one mile of the track including three tanks with troughs, one well, and one pond. These stockwaters are of particular concern due to potential increase for sheep-train collisions. The proposed alignment would also cross one pipeline.

All five stockwaters within one mile of the track should be move away from the track to allow for a buffer in excess of one mile. The pipeline that would be crossed by the track would need to be extended to service the re-located tank and trough. The crossing would need to be protected to allow for continuous flow through the duration of construction and operation of the rail.

13.3.2.5 Road and Trails

The proposed alignment would cross roads in two different locations, and eight trails. The proposed alignment runs parallel to several other trails, and impacts cannot be determined until the final alignment is staked.

Each road crossing would require an approach with a maximum 6 percent approach. Each trail would require a crossing with a maximum 12 percent approach. Both road and trail crossings should be built wide enough (100') to double for a sheep crossing. Several crossings may also be eliminated if the road or trail were realigned. As shown, the proposed alignment would require the realignment of approximately 9.5 miles of road and trail.

13.3.2.6 Vegetation and Forage

A permanent loss of forage will occur within the railway footprint as well as within the fenced ROW. Other concerns include the temporary loss of forage due to construction activities and railway operations. There is also the potential for long-term loss of desirable forage within disturbed areas due to difficulty of rehabilitation, establishment of noxious or invasive weeds, and fires resulting from railway operations.

Mitigation must include compensation for lost AUMs due to construction and/or operation of the railway. This includes deferred or suspend AUMs resulting from wildland fires caused by railway operations. Disturbed areas should be kept to a minimum, successfully revegetated to a predetermined condition, and managed for noxious weeds. It should be the responsibility of the rail operator to control noxious or invasive weed infestations for the life of the rail.

13.3.2.7 Loss of Livestock

The Permittees expressed concern over the potential loss of livestock due to train collision.

The Permittee should be reimbursed for any loss of livestock due to railway operations.

13.3.2.8 Other Impacts and Mitigations

The proposed alignment would run through Water Gap. Water Gap is a high traffic area, and congested desert intersection. It contains a watercourse, a County Road with heavy vehicle and truck traffic, and is a major corridor for both cattle and sheep trailing. Sheep trailing is the most sensitive issue within Water Gap as it requires a 100' width to accommodate sheep bands. DUL uses the Water Gap Trail frequently with their bands going to and from the Needles Allotment to other allotments in the area.

All of the uses that converge on Water Gap will require thoughtful and critical planning and design. DUL requests that all users be involved in the scoping and planning sessions with design engineers, and conduct an on-site visit to discuss the needs of all users within this critical corridor.

This option is preferred over the Deadman Pass alternatives (Garden Valley Alternatives 1 and 3). However, DUL has also proposed a mitigatory route that more closely follows the County Road in order to avoid as much forage disturbance as possible.

See Section 13.2.2.8 for additional mitigation measures proposed by DUL.

13.4 PROPOSED RAILROAD ALIGNMENT – LINCOLN COUNTY COTTONTAIL PASS ALTERNATIVE

The Lincoln County Cottontail Pass Alternative would follow the Department of Energy Proposed Route – Garden Valley Alternatives 2 and 8 across most of the Needles Allotment. However, rather than running through Water Gap, that alignment would continue south along the west side of Coal Valley bypassing Water Gap. Impacts and mitigation across the Needles Allotment would be the same as for Garden Valley Alternatives 2 and 8, with the exception of having less impacts on the Water Gap area.

Rail Length Within Allotment: 13.66 miles
1,000' Construction Right-of-Way Area: 1,656 acres

Table 13.2: Needles Allotment Impacted Features

Impacted Features	DOE Proposed Route – Garden Valley Alternatives 1 and 3	DOE Proposed Route – Garden Valley Alternatives 2 and 8	Lincoln County Cottontail Pass Alternative	Mitigatory Alignment
Base Property (land)	0	0	0	0
Base Property (water within 4 miles)	8	8	8	8
Base Property (water within 1 mile)	3	3	3	3
Base Property (pipeline crossings)	1	1	1	1
Existing Fencing (ea)	0	1	1	1
Capital Improvements	0	0	0	0
Stockwaters within 4 miles	11	10	10	13
Stockwaters within 1 mile	3	4	4	5
Creeks (ea)	0	0	0	0
Pipelines (ea)	1	1	1	1
Roads (ea)	3	2	2	1
Trails (ea)	8	10	10	6
ROW Acreage	1,632	1,612	1656	

Table 13.3: Needles Allotment Mitigation Summary

Proposed Mitigation Units	DOE Proposed Route – Garden Valley Alternatives 1 and 3	DOE Proposed Route – Garden Valley Alternatives 2 and 8	Lincoln County Cottontail Pass Alternative	Mitigatory Alignment
Fence Construction (miles)	0	0	0	0
Fence Removal	0	0	0	0
Gates (ea)	0	1	1	1
Railroad Cattleguards (ea)	0	1	1	1
Road Cattleguards (ea)	0	1	1	1
Grazing Management Plan	1	1	1	1
Corral Relocation	0	0	0	0
Chute Relocation	0	0	0	0
Wells (ea)	1	1	1	1
Troughs (ea)	3	3	3	3
Springs (ea)	0	0	0	0
Creek Crossings (ea)	0	0	0	0
Unspecified Stockwaters (ea)	3	4	4	3
Pipeline Crossings (ea)	1	1	1	1
Pipeline Construction (miles)	.5	.5	.5	.5
Road Crossings (ea)	3	2	2	1
Trail Crossings (ea)	8	10	10	6
Road / Trail Realignment (mi)	7	9.5	9	11
Sheep Crossings (ea)	9	9	5	6
Cattle Crossings (ea)	0	0	0	0
Underpasses (ea)	0	0	0	0
Other: Water Gap	0	1	0	1

Figure 13.1: Needles Allotment

INSERT 11X17 FIGURE
13.1 Needles.pdf