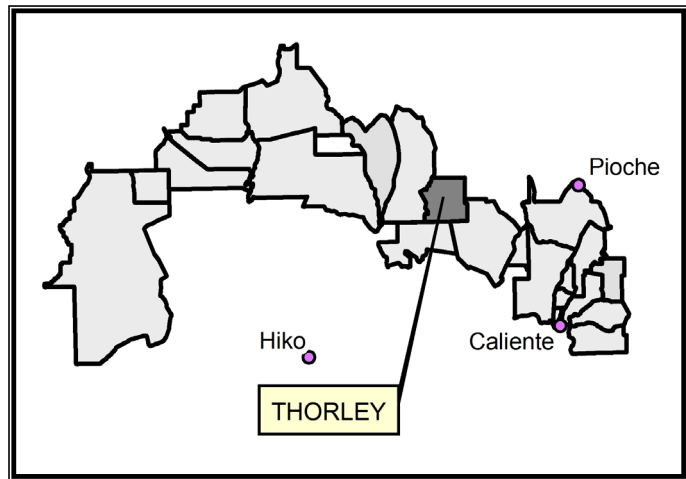


**9.0 THORLEY USE AREA – WILSON CREEK ALLOTMENT**

**Permittee:** Bulloch Bros.  
**Contact:** Matt Bulloch  
**City/State:** West Cedar City, Utah

**Base Property:** Land

*Note: Eligible for reinstatement as partial water-base property under the Ely Special Rule.*



**9.1 ALLOTMENT DESCRIPTION**

The Thorley Use Area is part of the larger Wilson Creek Allotment. The Area is located in the northwest portion of Dry Lake Valley bordered on the west by the North Pahroc Range.

**Table 9.1: Thorley Use Area – Wilson Creek Allotment Details**

ALLOTMENT ACRES		GRAZING PERMIT					
Public	Private	Number/Type of Livestock	Season of Use	AUMs			
				Total	Active	Suspended	
40,519	0	Bulloch Bros. 181 Cattle	03/01 – 05/15 10/15 – 02/28	1,800	1,271	529	

**9.1.1 Grazing System**

The area is used during the winter and spring by cattle as a complete unit. The cattle are allowed to move and graze at will throughout the area. Presently cattle tend to concentrate at or near stockwater sources listed in Section 9.1.2. Drift cattle from surrounding use areas and wild horses are also abundant within the allotment.

**9.1.2 Stockwaters and Water Rights**

A series of five springs provide a good deal of the stockwater within the unit. An unnamed spring along with Black Rock, Deadman, Coal and Hamilton Spring are all used as stockwater sources. Both Black Rock (Map Reference 1) and Deadman Springs (Map Reference 2) have pipelines running to tanks, and are used as water sources for water hauling when needed. A pipeline from Black Rock Spring also feeds a pond several miles to the east (Map Reference 3). A series of ponds are also used for trapping seasonal precipitation and water hauling.

**9.1.3 Existing Fencing**

Those portions of the use area that are passable by cattle have been fenced. There are no interior pasture fences within the allotment.

## **9.2 PROPOSED RAILROAD ALIGNMENT – DOE PROPOSED ROUTE**

The DOE proposed alignment would enter the Thorley Use Area near the mid-point of the southern boundary, and travel northeast exiting the allotment near the mid-point of the eastern boundary.

Rail Length Within Allotment: 6.64 miles  
1,000' Construction Right-of-Way Area: 805 acres

### **9.2.1 Fencing Preference for Proposed Rail Alignment**

The Permittee has indicated a desire not to fence the rail right-of-way (ROW).

### **9.2.2 Impacts and Mitigation**

#### **9.2.2.1 Base Property**

No impacts to the base property are anticipated.

#### **9.2.2.2 Grazing System**

There are no interior pasture fences within the allotment, and cattle distributions are dictated by water distribution. The proposed rail would impact many of the key water sources within the allotment as described in Section 9.2.2.4. The proposed rail would also restrict cattle movement within the allotment.

To mitigate restricted movement within the allotment the Permittee would like to have eight cattle crossings spaced at half-mile intervals between road or trail crossings. Cattle crossing would consist of earth ramps with approaches not to exceed 25 percent grade. The Permittee would request that his input be provided on location of the crossings once the alignment has been staked. Due to potentially significant changes a new Grazing Management Plan may be required by BLM.

#### **9.2.2.3 Existing Fence and Capital Improvements**

The proposed alignment would cross the allotment fence on the southern boundary, and the allotment fence on the western boundary. The rail would also pass immediately next to a corral near the southern entry point (Map Reference 4).

Both fence crossings will require in-rail cattleguards as well as roadway cattleguards on the service road and gates (impacts and mitigation for the southern boundary fence have already been accounted for in the Rattlesnake Allotment analysis). The impacted corral will have to be relocated to the north and approved by the BLM.

#### **9.2.2.4 Stockwaters and Associated Infrastructure**

The proposed alignment would run within 4 miles of 10 stockwaters, and within 1 mile of 6 stockwaters. Two of the critical spring sources, Deadman and Blackrock Springs, would be located within one mile of the proposed alignment, and all four springs would be located within four miles of the proposed alignment. An existing pipeline from Black Rock Spring to a stockwater pond to the east would also be crossed. The Permittee has also expressed concern over blasting for construction of the rail and the potential that blasting could close the aquifer that serves as a source for the springs within the area.

To offset the loss of critical stockwater sources the Permittee had several recommendations. Replace the existing pipeline (Map Reference 5) from Black Rock Springs to the pond east of the spring, and extend two new pipelines beyond the pond to new troughs to the south and east (Map Reference 6 & 7). Install a new pipeline from Deadman Spring to the new pipeline from Black Rock Spring to increase flows to the eastern portion of the use area (Map Reference 8). Improve Coal (Map Reference 9) and Hamilton Springs (Map Reference 10) and pipe water from those two sources to the northeast to provide water to the northern portion of the use area (Map Reference 11 & 12). These improvements will help to more evenly distribute cattle use, and offset lost forage and impacts to the existing critical springs from rail construction and operation. The Permittee also requests that minimal blasting be employed in the area near Deadman and Black Rock Springs.

#### 9.2.2.5 Road and Trails

The proposed alignment would cross three existing roads that are used for water hauling and movement of cattle.

All road crossings will need to be equipped with approach ramps that do not exceed six percent, and allow passage of water trucks and ranch equipment.

#### 9.2.2.6 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. Other mitigation measures to offset the loss of forage are included in Sections 9.2.2.2 and 9.2.2.4.

#### 9.2.2.7 Loss of Livestock

The Permittee expressed concern over the potential loss of livestock due to collisions with trains.

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

#### 9.2.2.8 Other Impacts and Mitigations

None known.

**Table 9.2: Thorley Use Area – Wilson Creek Allotment Impacted Features**

Impacted Features	DOE Proposed Route
Base Property (land)	0
Base Property (water within 4 miles)	10
Base Property (water within 1 mile)	6
Base Property (pipeline crossings)	1
Existing Fencing (ea)	1
Capital Improvements	1
Stockwaters within 4 miles	10
Stockwaters within 1 mile	6
Creeks (ea)	0
Pipelines (ea)	1
Roads (ea)	3
Trails (ea)	0
ROW Acreage	805

**Table 9.3: Thorley Use Area – Wilson Creek Allotment Mitigation Summary**

Proposed Mitigation Units	DOE Proposed Route
Fence Construction (miles)	0
Fence Removal	0
Gates (ea)	1
Railroad Cattleguards (ea)	1
Road Cattleguards (ea)	1
Grazing Management Plan	1
Corral Relocation	1
Chute Relocation	0
Wells (ea)	0
Troughs (ea)	4
Springs (ea)	4
Creek Crossings (ea)	0
Unspecified Stockwaters (ea)	0
Pipeline Crossings (ea)	1
Pipeline Construction (miles)	12.5
Road Crossings (ea)	3
Trail Crossings (ea)	0
Sheep Crossings (ea)	0
Cattle Crossings (ea)	8
Underpasses (ea)	0

**Figure 9.1: Thorley Use Area – Wilson Creek Allotment**

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9.1 Thorley.pdf