

Yucca Mountain Transportation Access Issues

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Presentation to

National Academy of Sciences

Board on Radioactive Waste Management

Transportation Research Board

Committee on Nuclear

Waste Transportation

Las Vegas, NV

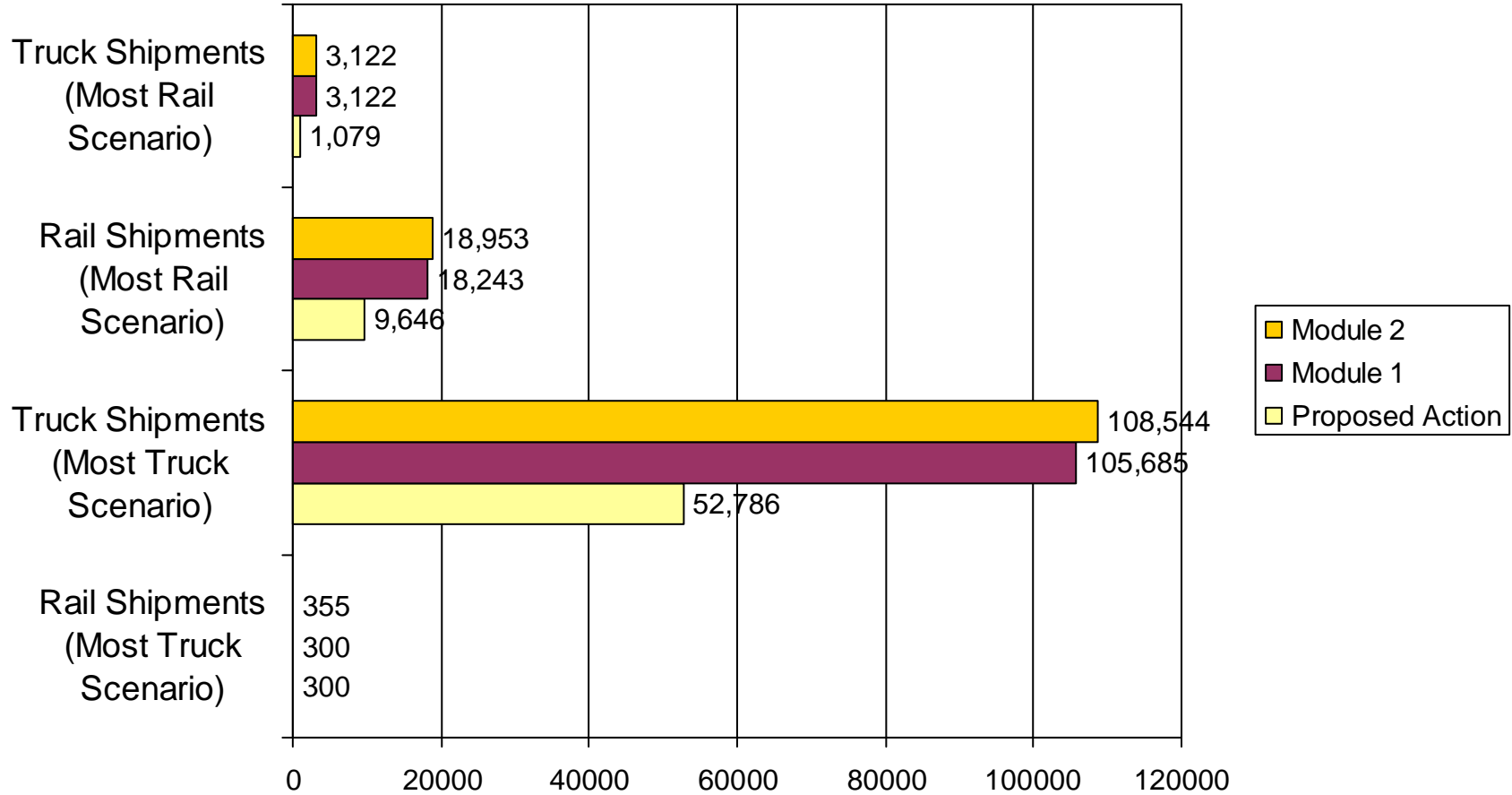
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Yucca Mountain Transportation Access Issues

- Rail Access to Yucca Mountain
- Legal-Weight Truck Access
- Shipment Modes, Numbers, & Routes

Additional documentation available at
www.state.nv.us/nucwaste/trans.htm

Rail Access is Desirable



Consideration of Rail Access in Repository Site Evaluations

- 1980 GEIS assumed rail access
- 1984 Siting guidelines identified proximity to mainline railroads and ease of rail access favorable conditions
- 1986 DOE Env. Assessments evaluated rail access for 5 repository candidate sites
- Yucca Mt had the most difficult rail access

Yucca Mountain Transport Access Compared

Condition	Davis Canyon, Utah	Deaf Smith, Texas	Hanford, Washington	Richton, Mississippi	Yucca Mountain, Nevada
Nearest Mainline railroad (miles)	74	25	51	17	100
Nearest Alternative Rail line	Not identified	40	101	26	265
Rail Access new Construction (miles)	39	26	3	26	100
Rail Access cost (Million 1985 dollars)	142	21	6	16	151
Nearest Interstate Highway (miles)	89	14	28	26	100
Nearest Alternative Interstate (miles)	198	200	72	84	208

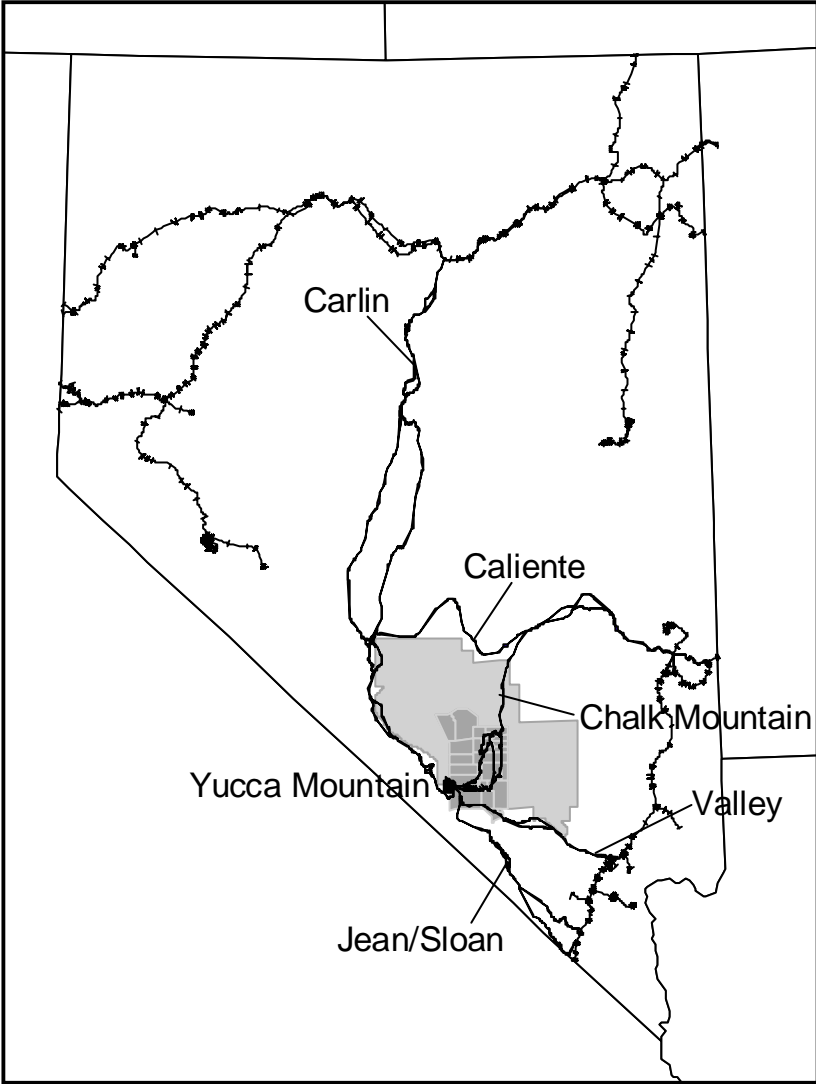
Current DOE Approach to Yucca Mountain Rail Access

- Final EIS: “DOE would prefer to use a branch rail line to ship spent nuclear fuel and high-level radioactive waste to Yucca Mountain.”
- Final EIS identified five potential rail corridors:
Caliente, Carlin, Chalk Mt, Jean, Valley
- DOE has not yet issued a Record of Decision (ROD) formally announcing a preference for rail or a preference between the rail corridors
- DOE is considering delay or deferral of rail spur construction plans (March 27, 2003)

DOE FEIS Rail Corridors Compared

	Caliente	Carlin	Chalk Mountain	Jean	Valley
Cost (Millions of 2001 \$)	\$880	\$821	\$622	\$462	\$283
Length (miles)	319	323	214	114	98
One-way travel time (hrs)	10	9	8	4	3
Disturbed land area (sq mi)	18.3	19.3	12.6	9.2	5
Construction time	46	46	43	43	40
1990 Population	350	3200	589	492	219
Tribal Lands	None	None	None	None	None

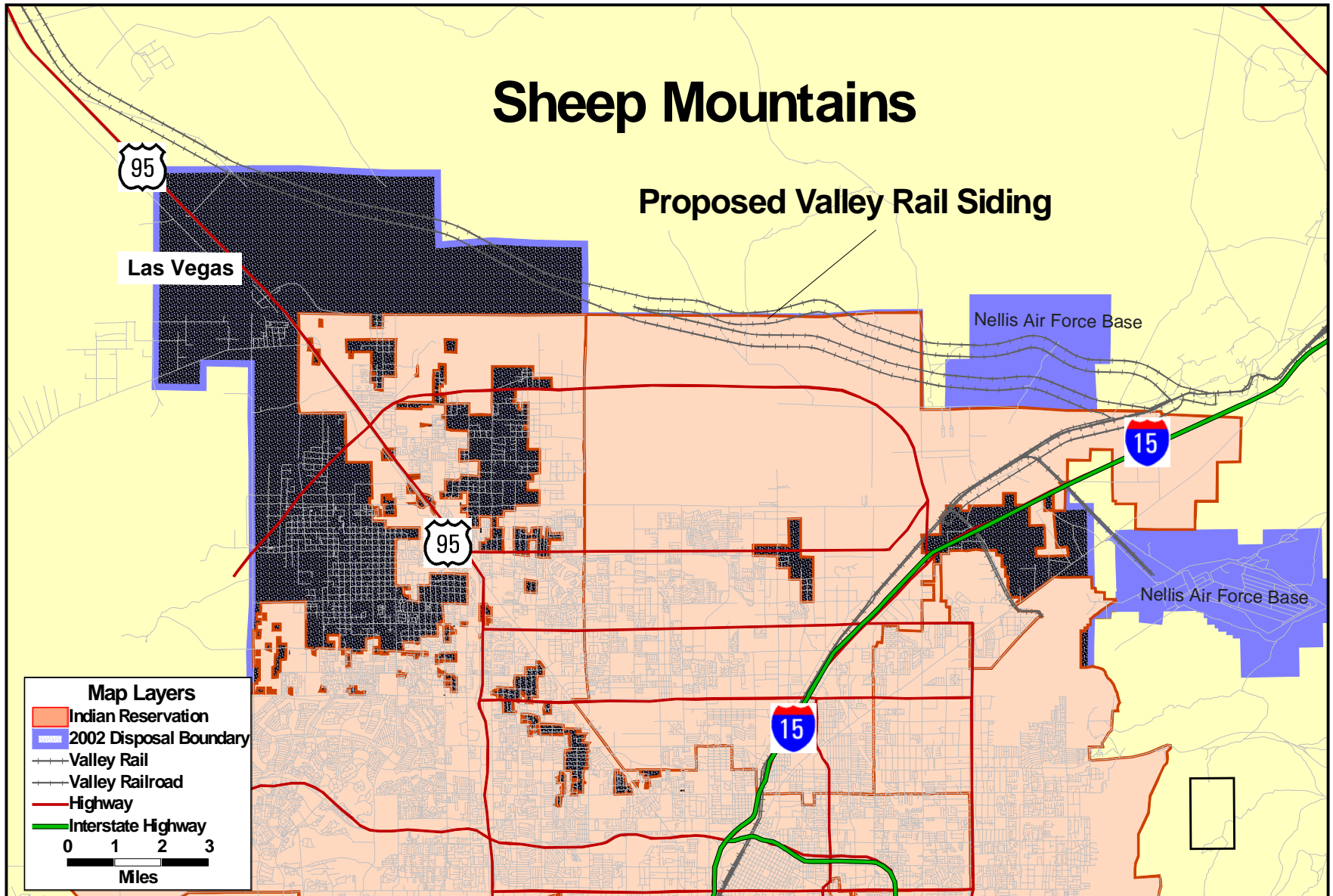
Potential Nevada Rail Routes to Yucca Mt



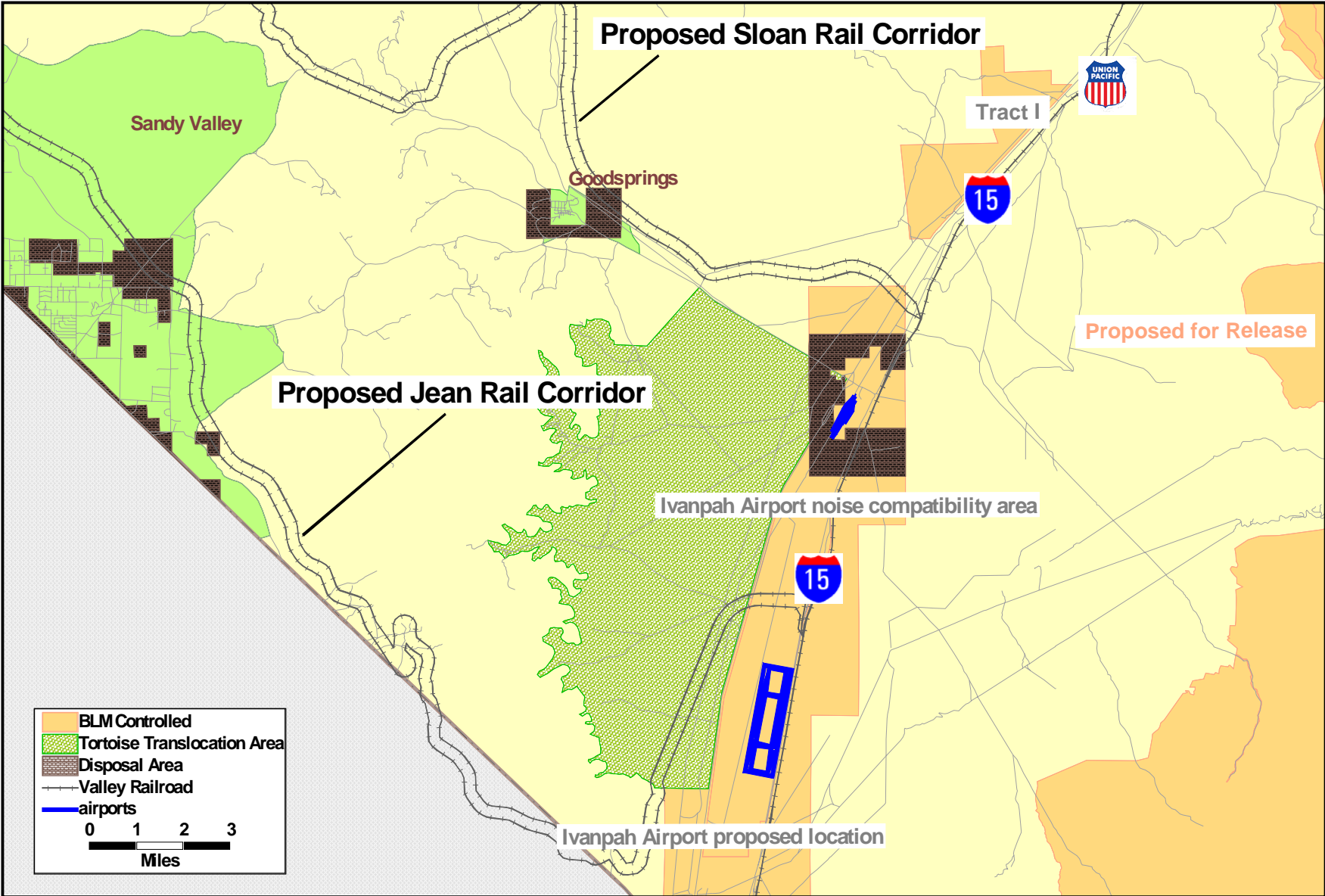
Desert Tortoise



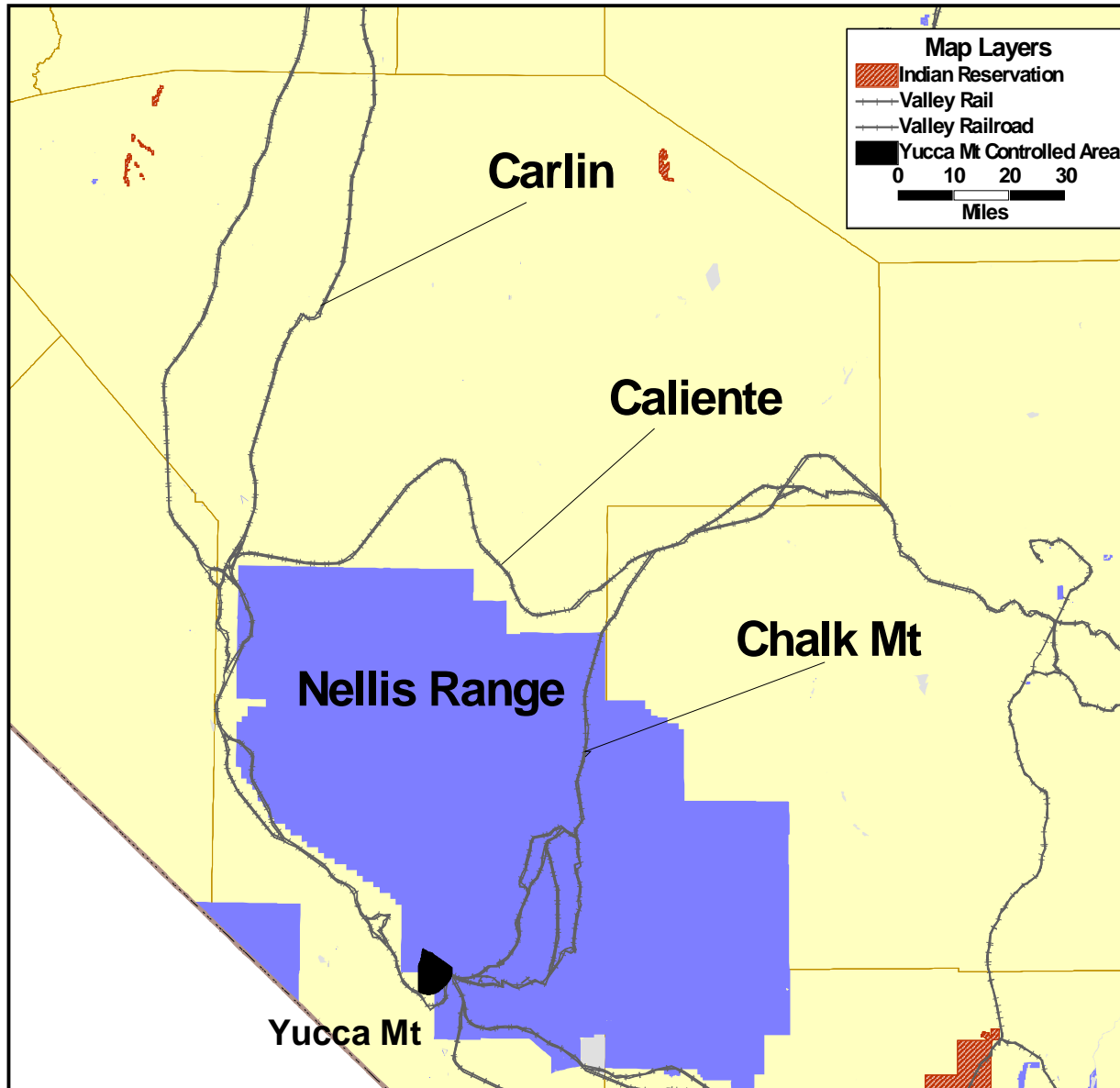
Valley Corridor Land Use Conflicts



Jean/Sloan Land Use Conflicts



Caliente Chalk-Mountain Land Use Conflicts



Hancock Summit

(Original Caliente Rail Route, Current HHT Route)



Crystal Springs

(Original Caliente Rail Route, Current HHT Route)



White River Springfish



Bennett Pass

(Caliente Rail Route)



Timber Mountain Pass

(Caliente Rail Route)



Warm Springs (Caliente Rail Route)

