
Final Environmental Impact Statement
Thacker Pass Lithium Mine Project

Appendix I

Soils Information

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APPENDIX I. SOILS INFORMATION

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Project Area - Map Units

			Column Labels									
Map Unit Name	MUSYM	Farm Class	PoO Boundary		North Exploration Area		South Exploration Area		Total Acres	Total %		
			Acres	%	Acres	%	Acres	%				
Bliss-Chiara association	161	Not prime farmland	191	1.2%		0.0%		0.0%	191	1.2%		
Boger-Soughe association	340	Not prime farmland	472	2.9%		0.0%	19	0.1%	491	3.0%		
Dewar-Dacker association	1312	Not prime farmland	5,312	32.9%	581	3.6%	4,051	25.1%	9,943	61.5%		
Dewar-Midraw association	727	Not prime farmland		0.0%	368	2.3%		0.0%	368	2.3%		
Enko loamy very fine sand, 0 to 2 percent slopes 1/	501	Farmland of statewide importance	25	0.2%		0.0%		0.0%	25	0.2%		
Flue loam, 0 to 2 percent slopes 1/	217	Farmland of statewide importance		0.0%	250	1.6%		0.0%	250	1.6%		
Kelk silt loam, occasionally flooded, 0 to 2 percent slopes 1/	734	Prime farmland if irrigated and reclaimed of excess salts and sodium	64	0.4%	87	0.5%		0.0%	151	0.9%		
Kingsriver loam, 0 to 2 percent slopes 1/	452	Farmland of statewide importance	4	0.0%		0.0%		0.0%	4	0.0%		
Kingsriver loam, drained, 0 to 2 percent slopes 1/	453	Prime farmland if irrigated and reclaimed of excess salts and sodium	30	0.2%	136	0.8%		0.0%	166	1.0%		
McConnel gravelly fine sandy loam, 2 to 8 percent slopes	331	Farmland of statewide importance	0	0.0%		0.0%		0.0%	0	0.0%		
McConnel very gravelly fine sandy loam, 0 to 2 percent slopes 1/	335	Not prime farmland	1,437	8.9%		0.0%		0.0%	1,437	8.9%		
McConnel-Pumper-Whirlo complex, 2 to 8 percent slopes	338	Farmland of statewide importance	283	1.7%		0.0%		0.0%	283	1.7%		
Needle Peak silt loam 1/	360	Prime farmland if irrigated and reclaimed of excess salts and sodium	64	0.4%		0.0%		0.0%	64	0.4%		
Rio King loam 1/	790	Prime farmland if irrigated		0.0%		0.0%	10	0.1%	10	0.1%		
Rodock loam, 0 to 2 percent slopes 1/	1436	Not prime farmland	213	1.3%		0.0%		0.0%	213	1.3%		
Soughe-Rubble land complex, 30 to 75 percent slopes	946	Not prime farmland	24	0.1%		0.0%		0.0%	24	0.1%		
Trunk-Burrita associaiton	596	Not prime farmland	573	3.5%		0.0%	295	1.8%	868	5.4%		
Zevadez-Vanwyper association	962	Not prime farmland	107	0.7%		0.0%	880	5.4%	987	6.1%		
Zymans-Burrita-Devada association	1470	Not prime farmland	608	3.8%		0.0%	75	0.5%	683	4.2%		
	Grand Total		9,406	58.2%	1,422	8.8%	5,330	33.0%	16,158	100.0%		

Area of Disturbance - Map Units

Project Feature	Map Unit Name	MUSYM	Farm Class	Acres	%
Clay Tailings Filter Stack	Dewar-Dacker association	1312	Not prime farmland	1,049.5	21.5%
Course Gangue Stockpile	Dewar-Dacker association	1312	Not prime farmland	286.5	5.9%
Emergency Pond	Dewar-Dacker association	1312	Not prime farmland	1.0	0.0%
Growth Media Stockpile	Dewar-Dacker association	1312	Not prime farmland	85.6	1.8%
Mine Facilities	Dewar-Dacker association	1312	Not prime farmland	71.5	1.5%
	Trunk-Burrita associaiton	596	Not prime farmland	0.0	0.0%
Pit	Dewar-Dacker association	1312	Not prime farmland	850.0	17.4%
	Trunk-Burrita associaiton	596	Not prime farmland	90.8	1.9%
	Zymans-Burrita-Devada association	1470	Not prime farmland	59.8	1.2%
Reclaim Pond	Dewar-Dacker association	1312	Not prime farmland	44.5	0.9%
ROM Ore Stockpile	Dewar-Dacker association	1312	Not prime farmland	8.8	0.2%
Sediment Pond	Dewar-Dacker association	1312	Not prime farmland	8.7	0.2%
	Trunk-Burrita associaiton	596	Not prime farmland	9.2	0.2%
	Zevadez-Vanwyper association	962	Not prime farmland	1.6	0.0%
Septic System	Dewar-Dacker association	1312	Not prime farmland	0.3	0.0%
Waste Rock Storage Facility	Dewar-Dacker association	1312	Not prime farmland	123.5	2.5%
	Trunk-Burrita associaiton	596	Not prime farmland	113.2	2.3%
	Zevadez-Vanwyper association	962	Not prime farmland	40.4	0.8%
Other Disturbance Area	Bliss-Chiara association	161	Not prime farmland	4.4	0.1%
	Boger-Soughe association	340	Not prime farmland	14.4	0.3%
	Dewar-Dacker association	1312	Not prime farmland	1,470.8	30.1%
	Enko loamy very fine sand, 0 to 2 percent slopes 1/	501	Farmland of statewide importance	2.2	0.0%
	Kingsriver loam, 0 to 2 percent slopes 1/	452	Farmland of statewide importance	0.2	0.0%
	McConnel very gravelly fine sandy loam, 0 to 2 percent slopes 1/	335	Not prime farmland	73.2	1.5%
	McConnel-Pumper-Whirlo complex, 2 to 8 percent slopes	338	Farmland of statewide importance	0.3	0.0%
	Needle Peak silt loam 1/	360	Prime farmland if irrigated and reclaimed of excess salts and sodium	5.4	0.1%
	Rodock loam, 0 to 2 percent slopes 1/	1436	Not prime farmland	141.0	2.9%
	Trunk-Burrita associaiton	596	Not prime farmland	189.1	3.9%
	Zevadez-Vanwyper association	962	Not prime farmland	18.8	0.4%
	Zymans-Burrita-Devada association	1470	Not prime farmland	116.4	2.4%
Grand Total				4,880.9	100.0%

Project Area - ESDs

		Column Labels									
Row Labels	NRCS Rangeland Ecological Classification Name	PoO Boundary		North Exploration Area		South Exploration Area		Total Acres	Total %		
		Acres	%	Acres	%	Acres	%				
R023XY020NV	LOAMY 10-12 P.Z.	250	1.5%		0.0%	31	0.2%	281	1.7%		
R023XY021NV	SCABLAND 10-14 P.Z.	143	0.9%		0.0%	18	0.1%	161	1.0%		
R024XY002NV	LOAMY 5-8 P.Z.	212	1.3%		0.0%	24	0.1%	236	1.5%		
R024XY005NV	LOAMY 8-10 P.Z.	5,206	32.2%	756	4.7%	4,102	25.4%	10,064	62.3%		
R024XY006NV	DRY FLOODPLAIN	128	0.8%	87	0.5%		0.0%	215	1.3%		
R024XY017NV	SANDY 8-10 P.Z.	25	0.2%		0.0%		0.0%	25	0.2%		
R024XY020NV	DROUGHTY LOAM 8-10 P.Z.	1,655	10.2%	281	1.7%		0.0%	1,936	12.0%		
R024XY035NV	SHALLOW LOAM 10-14 P.Z.	13	0.1%		0.0%		0.0%	13	0.1%		
R025XY001NV	MOIST FLOODPLAIN	6	0.0%	7	0.0%		0.0%	12	0.1%		
R025XY003NV	LOAMY BOTTOM 8-14 P.Z.	252	1.6%	123	0.8%	16	0.1%	390	2.4%		
R025XY005NV	WET MEADOW	1	0.0%	7	0.0%	1	0.0%	9	0.1%		
R025XY019NV	LOAMY 8-10 P.Z.	1,475	9.1%	161	1.0%	1,125	7.0%	2,762	17.1%		
Rock/Rubble	Rock/Rubble	39	0.2%		0.0%	15	0.1%	54	0.3%		
Grand Total		9,406	58.2%	1,422	8.8%	5,330	33.0%	16,158	100.0%		

Area of Disturbance - ESDs

Project Feature	NRCS Rangeland Ecological Classification ID	NRCS Rangeland Ecological Classification Name	Acres	%
Clay Tailings Filter Stack	R024XY005NV	LOAMY 8-10 P.Z.	758.0	15.5%
	R025XY019NV	LOAMY 8-10 P.Z.	291.5	6.0%
Course Gangue Stockpile	R024XY005NV	LOAMY 8-10 P.Z.	206.9	4.2%
	R025XY019NV	LOAMY 8-10 P.Z.	79.6	1.6%
Emergency Pond	R024XY005NV	LOAMY 8-10 P.Z.	0.7	0.0%
	R025XY019NV	LOAMY 8-10 P.Z.	0.3	0.0%
Growth Media Stockpile	R024XY005NV	LOAMY 8-10 P.Z.	61.8	1.3%
	R025XY019NV	LOAMY 8-10 P.Z.	23.8	0.5%
Mine Facilities	R024XY002NV	LOAMY 5-8 P.Z.	0.0	0.0%
	R024XY005NV	LOAMY 8-10 P.Z.	51.6	1.1%
	R025XY003NV	LOAMY BOTTOM 8-14 P.Z.	0.0	0.0%
	R025XY019NV	LOAMY 8-10 P.Z.	19.9	0.4%
	Rock/Rubble	Rock/Rubble	0.0	0.0%
Pit	R023XY020NV	LOAMY 10-12 P.Z.	24.6	0.5%
	R023XY021NV	SCABLAND 10-14 P.Z.	14.1	0.3%
	R024XY002NV	LOAMY 5-8 P.Z.	7.3	0.1%
	R024XY005NV	LOAMY 8-10 P.Z.	712.2	14.6%
	R025XY003NV	LOAMY BOTTOM 8-14 P.Z.	1.8	0.0%
	R025XY019NV	LOAMY 8-10 P.Z.	236.1	4.8%
	Rock/Rubble	Rock/Rubble	4.5	0.1%
Reclaim Pond	R024XY005NV	LOAMY 8-10 P.Z.	32.1	0.7%
	R025XY019NV	LOAMY 8-10 P.Z.	12.4	0.3%
ROM Ore Stockpile	R024XY005NV	LOAMY 8-10 P.Z.	6.3	0.1%
	R025XY019NV	LOAMY 8-10 P.Z.	2.4	0.0%
Sediment Pond	R024XY002NV	LOAMY 5-8 P.Z.	0.7	0.0%
	R024XY005NV	LOAMY 8-10 P.Z.	15.6	0.3%
	R025XY003NV	LOAMY BOTTOM 8-14 P.Z.	0.2	0.0%
	R025XY019NV	LOAMY 8-10 P.Z.	2.4	0.0%
	Rock/Rubble	Rock/Rubble	0.5	0.0%
Septic System	R024XY005NV	LOAMY 8-10 P.Z.	0.2	0.0%
	R025XY019NV	LOAMY 8-10 P.Z.	0.1	0.0%
Waste Rock Storage Facility	R024XY002NV	LOAMY 5-8 P.Z.	9.1	0.2%
	R024XY005NV	LOAMY 8-10 P.Z.	225.8	4.6%
	R025XY003NV	LOAMY BOTTOM 8-14 P.Z.	2.3	0.0%
	R025XY019NV	LOAMY 8-10 P.Z.	34.3	0.7%
	Rock/Rubble	Rock/Rubble	5.7	0.1%
Other Disturbance Area	R023XY020NV	LOAMY 10-12 P.Z.	47.9	1.0%
	R023XY021NV	SCABLAND 10-14 P.Z.	27.4	0.6%
	R024XY002NV	LOAMY 5-8 P.Z.	15.3	0.3%
	R024XY005NV	LOAMY 8-10 P.Z.	1,299.3	26.6%
	R024XY006NV	DRY FLOODPLAIN	5.4	0.1%
	R024XY017NV	SANDY 8-10 P.Z.	2.2	0.0%
	R024XY020NV	DROUGHTY LOAM 8-10 P.Z.	75.6	1.5%
	R025XY001NV	MOIST FLOODPLAIN	0.2	0.0%
	R025XY003NV	LOAMY BOTTOM 8-14 P.Z.	144.8	3.0%
	R025XY019NV	LOAMY 8-10 P.Z.	408.6	8.4%
	Rock/Rubble	Rock/Rubble	9.5	0.2%
Grand Total			4,880.9	100.0%

Project Area - Water Erosion

Column Labels								
Water Erosion	PoO Boundary		North Exploration Area		South Exploration Area		Total Acres	Total %
	Acres	%	Acres	%	Acres	%		
Moderate	3,645	22.6%	290	1.8%	2,637	16.3%	6,572	40.7%
Slight	5,722	35.4%	1,132	7.0%	2,678	16.6%	9,532	59.0%
Not rated	39	0.2%		0.0%	15	0.1%	54	0.3%
Grand Total	9,406	58.2%	1,422	8.8%	5,330	33.0%	16,158	100.0%

Area of Disturbance - Water Erosion

Project Feature	Water Erosion	Acres	%
Clay Tailings Filter Stack	Moderate	524.8	10.8%
	Slight	524.8	10.8%
Course Gangue Stockpile	Moderate	143.2	2.9%
	Slight	143.2	2.9%
Emergency Pond	Moderate	0.5	0.0%
	Slight	0.5	0.0%
Growth Media Stockpile	Moderate	42.8	0.9%
	Slight	42.8	0.9%
Mine Facilities	Moderate	35.8	0.7%
	Slight	35.7	0.7%
	Not rated	0.0	0.0%
Pit	Moderate	530.6	10.9%
	Slight	465.5	9.5%
	Not rated	4.5	0.1%
Reclaim Pond	Moderate	22.3	0.5%
	Slight	22.3	0.5%
ROM Ore Stockpile	Moderate	4.4	0.1%
	Slight	4.4	0.1%
Sediment Pond	Moderate	13.4	0.3%
	Slight	5.5	0.1%
	Not rated	0.5	0.0%
Septic System	Moderate	0.2	0.0%
	Slight	0.2	0.0%
Waste Rock Storage Facility	Moderate	181.3	3.7%
	Slight	90.1	1.8%
	Not rated	5.7	0.1%
Other Disturbance Area	Moderate	963.3	19.7%
	Slight	1,063.4	21.8%
	Not rated	9.5	0.2%
Grand Total		4,880.9	100.0%

Project Area - Wind Erosion

Column Labels								
Wind Erosion	PoO Boundary		North Exploration Area		South Exploration Area		Total Ac	Total %
	Ac	%	Ac	%	Ac	%		
Severe	25	0.3%		0.0%		0.0%	25	0.2%
Moderate	5,586	59.4%	667	46.9%	4,051	76.0%	10,304	63.8%
Low	3,756	39.9%	755	53.1%	1,264	23.7%	5,775	35.7%
Not Rated	39	0.4%		0.0%	15	0.3%	54	0.3%
Grand Total	9,406	100.0%	1,422	100.0%	5,330	100.0%	16,158	100.0%

Area of Disturbance - Wind Erosion

Project Feature	Wind Erosion	Acres	%
Clay Tailings Filter Stack	Moderate	1,049.5	21.5%
Course Gangue Stockpile	Moderate	286.5	5.9%
Emergency Pond	Moderate	1.0	0.0%
Growth Media Stockpile	Moderate	85.6	1.8%
Mine Facilities	Moderate	71.5	1.5%
	Low	0.0	0.0%
	Not Rated	0.0	0.0%
Pit	Moderate	850.0	17.4%
	Low	146.1	3.0%
	Not Rated	4.5	0.1%
Reclaim Pond	Moderate	44.5	0.9%
ROM Ore Stockpile	Moderate	8.8	0.2%
Sediment Pond	Moderate	8.7	0.2%
	Low	10.3	0.2%
	Not Rated	0.5	0.0%
Septic System	Moderate	0.3	0.0%
Waste Rock Storage Facility	Moderate	123.5	2.5%
	Low	147.9	3.0%
	Not Rated	5.7	0.1%
Other Disturbance Area	Severe	2.2	0.0%
	Moderate	1,475.3	30.2%
	Low	549.3	11.3%
	Not Rated	9.5	0.2%
Grand Total		4,880.9	100.0%