

SUMMARY OF FIELD PROJECTS FOR SUMMER, 1963

N. V. Peterson

Bend - Volcanic features project

May 20, 21 - Reconnaissance of the area with others from DOGAMI and members of the Astro-geology division of the U. S. Geological Survey.
(2 days)

June 3, 4, 5, (tentative) - Complete surface map of the Derrick Cave-- this should complete our part of this project unless North American Aviation requires further assistance with their special studies.
(3 days)

June, July, August, September-Project -- Maar/Tuff Ring, South Central Oregon.

Will hope to complete a reconnaissance of the remainder of the Ft. Rock, Christmas Lake valleys and extend to include the area bounded by Summer Lake, Abert Lake, and Alkali Lake. Will also do selected studies on individual landforms.

Will also hope to continue the reconnaissance of the Yonna, Sprague River, Klamath Falls areas to show distribution of tuff ring features there.

Will also spend some time in the Lakeview area to revisit Drum Hill and Elder Creek occurrences to map the extent of explosion tuffs and do enough detail to classify them. I would also like to visit the Rabbit and Coyote Hills to see if there is any trace of mineralization in the explosion tuffs there.
(30 days)

July, August - Camas Valley, Tyee quadrangle study for Geologic Map series

Will work with Dr. E. M. Baldwin mainly in the Camas Valley area to delineate the pre-Tertiary/Tertiary contact and work out division of the Umpqua formation.
(2 weeks)

Miscellaneous

While in the Lakeview area will check on potential mineral development at: White King, Lucky Lass, Quartz Mountain Cinnabar, Alkali Lake Salines, and Thermal Power project in the Warner Valley.

To accompany the Mineral Resource Potential of Deschutes County Lands

Deschutes Formation

Layered sand, silt, gravel with minor ash flow tuff and intercalated basaltic lava flows. Fine cinders and ash are a major constituent. In most cases only useable for fill material in road building. Gravel lenses within the formation are only occasionally of good enough quality for crushing to make aggregate. Reworking of the Deschutes Fm. by larger streams has created useable gravel deposits in some places.

Rimrock Basalt (Deschutes lava flows)

Dark gray to medium gray basalt and basaltic andesite. Thickness varies depending on the topography over which it flows, generally 10' to 50' in thickness, some outcrops have a pronounced platy jointing developed while others are massive with rough columnar joints. Some of the platy jointed deposits may contain large enough quantities for crushed rock but generally not amenable to a satisfactory crushing operation.

Ash Flow Tuffs

This name includes rocks deposited by violent volcanic eruptions. They range in color from black to pink and buff colors, and from intensely welded and hard, but generally punky, to nearly unconsolidated pumice. Currently the black ash flow deposits are quarried for building stone and the pink ash flows have been used extensively in the past. The white pumice ash flow deposits represent an important mineral resource to Deschutes County.

Badlands Lava

These medium gray to black, young lava flows cover large areas in the central part of the County. They are jointed both horizontally and vertically with the joints closer together near the surface of the flows. This easily available rock has been used extensively as a building (rubble) stone in the past and will continue to be used. It is not easily crushable and the porous texture lowers its useability for road building. Generally does not represent a useable mineral resource.

Quaternary Alluvium

Includes silt, sand, and gravel deposited by the present streams and former shallow ponds and lakes. Includes most of the best quality sand and gravel deposits.

Glacial Moraines and Outwash

Broad fan shaped; sometimes crudely layered, sand and gravel deposited by streams flowing from former large mountain glaciers. There will be large quantities of sand and gravel suitable for crushing in the morainal and outwash deposits.

RESOURCE POTENTIAL OF LAND OWNED BY DESCHUTES COUNTY

T. 14 S., R. 11 E.

Tax Lot No.	Quadrangle	Location Sec. $\frac{1}{4}$ Sec.	Underlying Rocks	Mineral resource potential
1000	Squaw Back Ridge	6 NE $\frac{1}{4}$ NE $\frac{1}{4}$	Deschutes fm.	None indicated
1400	Henkle Butte	7 NW $\frac{1}{4}$ SE $\frac{1}{4}$	Deschutes fm.	None indicated
1700	Squaw Back Ridge & Henkle Butte	8 W $\frac{1}{2}$ NE $\frac{1}{4}$ and N $\frac{1}{2}$ SE $\frac{1}{4}$	Deschutes fm. plus Rimrock Basalt	None indicated
3200	Cline Falls	13 SW $\frac{1}{4}$ NE $\frac{1}{4}$ and NW $\frac{1}{4}$ SE $\frac{1}{4}$	Deschutes sediments/Ash flow tuff	Possibility of minor sand & gravel
3300	Cline Falls	13 NE $\frac{1}{4}$ NW $\frac{1}{4}$	Deschutes sediments/Ash flow tuff	Possibility of minor sand & gravel
3600	Cline Falls	24 S $\frac{1}{2}$ NE $\frac{1}{4}$ and S $\frac{1}{2}$ NW $\frac{1}{4}$ and W $\frac{1}{2}$ SW $\frac{1}{4}$ and NW $\frac{1}{4}$ NW $\frac{1}{4}$	Deschutes lavas, Deschutes sediments	Between Deep & McKenzie Canyons No mineral resource indicated
3700	Cline Falls	24 E $\frac{1}{2}$ SE $\frac{1}{4}$	Rimrock lava flows, Deschutes ash flow	No resource indicated
5200	Henkle Butte	31 SE $\frac{1}{4}$ NW $\frac{1}{4}$	QTmv - vents of mafic lavas	Possible cinder source, should be checked
5700	Henkle Butte	32 W $\frac{1}{2}$ SE $\frac{1}{4}$	Rimrock lavas	Negative
6301	Cline Falls	36 S $\frac{1}{2}$	Rimrock lava, Deschutes seds.	No resource indicated
6400	Cline Falls	25 E $\frac{1}{2}$ SW $\frac{1}{4}$	Deschutes fm. lavas & seds.	Check for gravel in Deep Canyon.
100	Henkle Butte	31 E $\frac{1}{2}$ SW $\frac{1}{4}$	Vent for Deschutes Lavas	Should be checked for cinder source

T. 14 S., R. 12 E.

600	Cline Falls	7 SE $\frac{1}{4}$ NE $\frac{1}{4}$	Deschutes fm/Ash flow tuff	No mineral resource indicated
2000	Cline Falls	18 NE $\frac{1}{4}$	LaFollette Butte - Ba cap	No mineral resource indicated
2300	Cline Falls	19 NW $\frac{1}{4}$ NW $\frac{1}{4}$	Deschutes fm. - Lava cap	No mineral resource indicated
2400	Cline Falls	19 SW $\frac{1}{4}$ NW $\frac{1}{4}$	Deschutes fm. - Seds	No mineral resource indicated
3201	Cline Falls	30 SW $\frac{1}{4}$ NW $\frac{1}{4}$	Deschutes fm. - Seds	No mineral resource indicated
3400	Cline Falls	30 S $\frac{1}{2}$ NE $\frac{1}{4}$	Deschutes fm. - Seds	Should be checked for S & G potential
3502	Cline Falls	30 NW $\frac{1}{4}$ SW $\frac{1}{4}$	Deschutes fm. - Seds	No mineral resource indicated
4510, 4511	Redmond	36 E $\frac{1}{2}$	Quaternary alluvium(?)	2 small tracts along Deschutes River near Tetherow Bridge - may have S & G potential.

RESOURCE POTENTIAL OF LAND OWNED BY DESCHUTES COUNTY (continued)

T. 14 S., R. 13 E.

Tax Lot No.	Quadrangle	Location Sec. $\frac{1}{4}$ Sec.	Underlying rocks	Mineral resource potential
7600	Redmond	22 NE $\frac{1}{4}$ SE $\frac{1}{4}$	Badlands lava	No apparent resource
*3500	Redmond	16 NE $\frac{1}{4}$ SW $\frac{1}{4}$	Young basalt flows	1 small lot - Terrebonne - none
*400,500,700	Redmond	16 NW $\frac{1}{4}$ SW $\frac{1}{4}$	Young basalt flows	3 small lots - Terrebonne - none
*500	Redmond	16 NE $\frac{1}{4}$ SE $\frac{1}{4}$	Young basalt flows	Tract along R. R. Right of way - none
*600	Redmond	16 NW $\frac{1}{4}$ SE $\frac{1}{4}$	Young basalt flows	1 lot - Terrebonne - none
*400,2800	Redmond	16 SW $\frac{1}{4}$ SE $\frac{1}{4}$	Young basalt flows	2small lots - Terrebonne - none
1200	Redmond	28 SE $\frac{1}{4}$ NE $\frac{1}{4}$ and NE $\frac{1}{4}$ SE $\frac{1}{4}$	Badlands lavas Deschutes fm	No apparent resource value No apparent resource value

* not plotted on map

T. 15 S., 10 E.

2100	Henkle Butte	12 SE $\frac{1}{4}$ NE $\frac{1}{4}$ and E $\frac{1}{2}$ SW $\frac{1}{4}$	QTmv	Check for possible scoria or cinder source
*2401	Henkle Butte	13 Small tract in SW $\frac{1}{4}$ NW $\frac{1}{4}$	Qal or Qg Rimrock basalt	Possible sand and gravel, small quantity Poor quality
* 99	Sisters 15'	2 Strip-road R/W SW $\frac{1}{4}$ SE $\frac{1}{4}$	Lava	None indicated
800	Tumalo Dam	36 NW $\frac{1}{4}$ and N $\frac{1}{2}$ SW $\frac{1}{4}$	Outwash sand & gravel, old lava flows	Check for sand & gravel potential

* not plotted on quad because of small size

T. 15 S., 11 E.

500	Cline Falls	1 SE $\frac{1}{4}$ SW $\frac{1}{4}$	Deschutes Fm, Rimrock basalt	No mineral resource indicated
802	Henkle Butte	17 E $\frac{1}{2}$ NE $\frac{1}{4}$	Rimrock basalt	No mineral resource indicated
2400	Henkle Butte	16 S $\frac{1}{2}$ NW $\frac{1}{4}$	Sand & gravel/Deschutes fm. tuffs (Refuse pit)	Some useable sand & gravel present here
3100	Henkle Butte	17 SE $\frac{1}{4}$	Lava flows of Rimrock basalt, Fryear Butte basalt	None indicated - crushing rock perhaps?
200	Henkle Butte	5 NW $\frac{1}{4}$ NE $\frac{1}{4}$	Rimrock basalt	None indicated

RESOURCE POTENTIAL OF LAND OWNED BY DESCHUTES COUNTY (continued)

Tax Lot No.	Quadrangle	Location Sec. $\frac{1}{4}$ Sec.	Underlying Rocks	Mineral resource potential
<u>T. 15 S., R. 12 E.</u>				
401	Redmond	1 SW $\frac{1}{4}$ ($\frac{1}{2}$ of SW $\frac{1}{4}$)	Rimrock basalt & Deschutes Seds.	Should be checked for S & G potential
8200	Tumalo	32 N $\frac{1}{2}$ NE $\frac{1}{4}$	Rimrock basalt	No resource potential
100	Cline Falls	11 SE $\frac{1}{4}$ NE $\frac{1}{4}$ and $\frac{1}{2}$ of NE $\frac{1}{4}$ NE $\frac{1}{4}$	Deschutes Seds	Check as it has potential for some sand and gravel.
100	Redmond	12 NW $\frac{1}{4}$ (most of the $\frac{1}{4}$)		Should be checked for its S & G potential
200	Redmond	13 SE/NE (small tract east of Hwy)	Deschutes lava flows	None
3700	Forked Horn	36 NW $\frac{1}{4}$ NW $\frac{1}{4}$	Rimrock basalt	No potential
<u>T. 15 S., R. 13 E.</u>				
103	Redmond	2 All	Badlands lava	No surface mineral resource indicated on this large block of land (1,520 acres)
103	Redmond	11 All	Badlands lava	
103	Redmond	10 E $\frac{1}{2}$ NE $\frac{1}{4}$ and SE $\frac{1}{4}$	Badlands lava	
104	Forked Horn Butte	28 Essentially all of		" " " " "
104	Forked Horn Butte	27 S $\frac{1}{2}$	Badlands lava	"No surface mineral resource apparent
104	Redmond & Forked Horn Butte	21 SE $\frac{1}{4}$	Badlands lava	No surface mineral resource apparent
* 113		?		
*2806	Redmond	9 SW $\frac{1}{4}$ NE $\frac{1}{4}$	Badlands lava	Lot in city of Redmond
* 401,504	Redmond	9 NW $\frac{1}{4}$ NW $\frac{1}{4}$	Badlands lava	Very narrow right of way strip
*2100	Redmond	9 SE $\frac{1}{4}$ SE $\frac{1}{4}$	Badlands lava	Lot in Redmond
*4200,6000,	Redmond	16 NE $\frac{1}{4}$ NE $\frac{1}{4}$	Badlands lava	Lots in Redmond
* 10900	Redmond	16 NE $\frac{1}{4}$ NE $\frac{1}{4}$	Badlands lava	Lot in Redmond
*7200,9200	Redmond	16 SW $\frac{1}{4}$ NE $\frac{1}{4}$	Badlands lava	Lots in Redmond
*6899	Redmond	16 NE $\frac{1}{4}$ NW $\frac{1}{4}$	Badlands lava	Small lot
*6400,6500,10200	Redmond	16 NE $\frac{1}{4}$ SE $\frac{1}{4}$	Badlands lava	Lots in Redmond
* 99	Redmond	16 SW $\frac{1}{4}$ SE $\frac{1}{4}$	Badlands lava	Part of street
* 900,1601	Redmond	16 NW $\frac{1}{4}$ SE $\frac{1}{4}$	Badlands lava	Lots near Fairgrounds, Redmond
3800	Redmond	20 SW $\frac{1}{4}$ (part of)	Andesite vitrophyre & Deschutes Seds.	No surface resource apparent
2701	Forked Horn Butte	21 SE $\frac{1}{4}$ SW $\frac{1}{4}$	Badlands lava	Strip R/W- No mineral resource apparent
100,200,300,		?		
800,900,204	Forked Horn Butte	28 goes with 104 above	Badlands lavas	Little or no resource potential
204	Forked Horn Butte	31 S $\frac{1}{2}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$	Deschutes Fm	Sand & gravel possible - poor quality

RESOURCE POTENTIAL OF LAND OWNED BY DESCHUTES COUNTY (continued)

Tax Lot No.	Quadrangle	Location Sec. ¼ Sec.	Underlying Rocks	Mineral Resource potential
900	Tumalo Dam	13 NW¼ NE¼	<u>T. 16 S., R. 10 E.</u> Qg gravels/High Cascades Lava	Possible sand and gravel
			<u>T. 16 S., R. 11 E.</u>	
400	Tumalo	1 S½ SW¼	Deschutes basalt	Rock or cinder source? Check
700	Tumalo & Tumalo Dam	11 NW¼	Deschutes Lavas(?)	Possible cinder source? Check
1200	Tumalo Dam	5 SE¼ SE¼	Deschutes Lava	Rock source - possible
1400	Tumalo Dam	7 All except the NE¼ and the NE¼ SE¼	This large block of land is underlain mainly by faulted basaltic lava flows, with some of the area underlain by ash flow tuff and alluvium.	The basaltic lava flows generally do not represent mineral resource potential. Some have the platy jointing that makes them amenable to crushing. Some sand & gravel is indicated in the W ½ of sec. 18 and the NW of sec. 19. The SW¼ of sec. 7 appears to be favorable for sand & gravel.
"	"	8 S½ SW¼		
"	"	16 SW¼ NW¼. All of SW¼ except NE¼		
"	"	17 All except NW¼ NE¼		
"	"	18 All except NE¼ NW¼ and SE¼ NW¼		
"	"	19 All except NW¼ SW¼		
"	"	20 All except SE¼ and SE¼ NW¼		
"	"	30 NE¼ except the SE¼		
"	"	30 SE¼ NW¼		
1500	Tumalo Dam	18 SE¼ NW¼	Lava flows, ash flow tuff and alluvium	Should be checked for S & G potential
1700	"	8 NE¼ except NW¼ NE¼ SE¼	" " " " " " " "	" " " " " " " "
1800	"	9 W½ NW¼ and NW¼ SW¼	" " " " " " " "	" " " " " " " "
2001	"	8 S½ SE¼	Lava flows	No surface resource indicated
2700	Tumalo	11 NE¼ NE¼	Rimrock basalt & alluvium	No surface resource apparent
300	Tumalo Dan	23 SW¼ NW¼ plus a small tract in SW/NE	Ash flow tuff with alluvium " " " " "	Possible sand & gravel source Possible sand & gravel source
1200	Tumalo	25 S¼ SW¼	Laidlow Butte Complex	Possible cinder-rock-pumice. This may even have some sand & gravel.

RESOURCE POTENTIAL OF LAND OWNED BY DESCHUTES COUNTY (continued)

Tax Lot No.	Quadrangle	Location Sec.	$\frac{1}{4}$ Sec.	Underlying rocks	Mineral resource potential
<u>T. 16 S., R. 12 E.</u>					
2000	Tumalo	7	SE $\frac{1}{4}$ NW $\frac{1}{4}$	Rimrock Basalt	No apparent mineral resource
2200	Tumalo	7	NW $\frac{1}{4}$ SW $\frac{1}{4}$	Rimrock Basalt	No apparent mineral resource
12000, 12001,					
12002	Forked Horn Butte	24	W $\frac{1}{2}$ SW $\frac{1}{4}$	Badlands lava	No resource indicated
4900	Forked Horn Butte and Tumalo	14	N $\frac{1}{2}$ SW $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$ and SE $\frac{1}{4}$ NE $\frac{1}{4}$	Long Butte lava flows/ Badlands lava/Deschutes seds/	No resource indicated
12201	Forked Horn Butte	25	NW $\frac{1}{4}$ NW $\frac{1}{4}$	Badlands lava	No resource indicated
13401	Tumalo	34	S $\frac{1}{2}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ except SE $\frac{1}{4}$	Deschutes seds	None indicated
13402	Tumalo & Forked Horn Butte	35	N $\frac{1}{2}$ NE $\frac{1}{4}$	Badlands lava	None indicated
13900	Tumalo	35	SE $\frac{1}{4}$ SW $\frac{1}{4}$	Badlands lava	None indicated
201	Tumalo	11	NE $\frac{1}{4}$ NW $\frac{1}{4}$	Deschutes lava	None indicated
500	Forked Horn Butte	12	SW $\frac{1}{4}$ SW $\frac{1}{4}$	Badlands lava	
502	Forked Horn Butte	12	NW $\frac{1}{4}$ SW $\frac{1}{4}$	Strip on north part - Badlands lava	None indicated
300	Forked Horn Butte	13	NE $\frac{1}{4}$ NW $\frac{1}{4}$ (most of)	Badlands lava	None indicated
	Forked Horn Butte	18	NW $\frac{1}{4}$ NW $\frac{1}{4}$ (16S, 13E)	Badlands lava	None indicated
*	Tumalo	21	Small Δ between Hunnel Rd & old Hwy 97		
2800	Tumalo	22	W $\frac{1}{2}$ NE $\frac{1}{4}$	Long Butte Vent	Cinder source probable
100	Tumalo	22	NE $\frac{1}{4}$ NW $\frac{1}{4}$	Long Butte Vent	Cinder source probable
200	Tumalo	23	SE $\frac{1}{4}$ NW $\frac{1}{4}$	Long Butte flanks	Possible cinder or rock source
200?	Tumalo	31	S $\frac{1}{2}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$	Tumalo area	Pumice, etc. will need to evaluate
99	Tumalo	31	Center NE $\frac{1}{4}$	Small tract on island in Deschutes River	Sand & gravel present

* not plotted on map

<u>T. 17 S., R. 11 E.</u>					
400, 500, 501	Tumalo	1	SW $\frac{1}{4}$	Ash flow tuff, S & G etc., some basalt	Should be looked at for pumice, S & G, etc.
800	Tumalo	2	S $\frac{1}{2}$ NE $\frac{1}{4}$	Same as above	Same as above
3400	Bend	12	NE $\frac{1}{4}$ NE $\frac{1}{4}$	S & G and Ash Flow tuff	Pumice, sand & gravel potential
4700	Bend	23	SW $\frac{1}{4}$ SE $\frac{1}{4}$	Basalt flows/Ash Flow tuff	Low potential for mineral resources
6000	Bend & Shevlin Park	26	All SW $\frac{1}{4}$ except the NW $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$	Ba flows & black & pink ash flow tuff	Building stone, pumice potential
6000	Bend & Shevlin Park	35	N $\frac{1}{2}$	Ba flows & black and pink ash flow tuff	Building stone & pumice potential

RESOURCE POTENTIAL OF LAND OWNED BY DESCHUTES COUNTY (continued)

Tax Lot No.	Quadrangle	Location Sec. $\frac{1}{4}$ Sec.	Underlying Rocks	Mineral resource potential
<u>T. 17 S., R. 12 E.</u>				
301	Tumalo	2	E $\frac{1}{2}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ Badlands lava	No resource indicated
700	Tumalo	3	NW $\frac{1}{4}$ NW $\frac{1}{4}$ Badlands lava	No resource indicated
100	Tumalo	4	NE $\frac{1}{4}$ NE $\frac{1}{4}$ Badlands lava	No resource indicated
400	Tumalo & Bend	4	SE $\frac{1}{4}$ SW $\frac{1}{4}$ Badlands lava	No resource indicated
700	Tumalo & Bend	6	SW $\frac{1}{4}$ SW $\frac{1}{4}$ except Pink ash flow tuff for part NW of Johnson Road	Building stone, pumice present. Also some sand & gravel.
707	Tumalo	6	N $\frac{1}{2}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ only the part north of Mkt Road	Pumice present.
308(?)	Can not locate			
1200	Bend	9	Part of NE $\frac{1}{4}$ SW $\frac{1}{4}$ Badlands lava	No resource value
* 400, 402, 406	Bend Airport	12	SW $\frac{1}{4}$ SW $\frac{1}{4}$ Badlands lava	25' strip right of way. No importance.
100	Bend Airport	14	NE $\frac{1}{4}$ NE $\frac{1}{4}$ Badlands lava	No mineral resource potential
200	Bend	15	SE $\frac{1}{4}$ NE $\frac{1}{4}$ Badlands lavas	No mineral resource value
402	Bend	15	W $\frac{1}{2}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$ Badlands lavas	No apparent mineral resource value
800	Bend	16	NW $\frac{1}{4}$ strip 300' wide Badlands lavas	No apparent mineral resource value
1004	Bend	20	Strip 60' wide, 450' long, NE $\frac{1}{4}$ Badlands lavas	No apparent mineral resource value
1700	Bend Airport	23	SE $\frac{1}{4}$ SE $\frac{1}{4}$ (?) Badlands lavas	No apparent mineral resource
200	Bend Airport	24	S $\frac{1}{2}$ NE $\frac{1}{4}$ Badlands lavas	No apparent mineral resource
200	Bend Airport	25	W $\frac{1}{2}$ NE $\frac{1}{4}$ Badlands lavas	No apparent mineral resource
* 1100	Bend	28	Lot in SW $\frac{1}{4}$ NE $\frac{1}{4}$ Badlands lavas	
* 100	Bend	28	Strip 50'x400' in SW $\frac{1}{4}$ NW $\frac{1}{4}$ Badlands lavas	No apparent mineral resource
* 4400	Bend	28	Lot in SW $\frac{1}{4}$ SW $\frac{1}{4}$ Badlands lavas	No apparent mineral resource
* 2299	Bend	29	Small strip not locatable by $\frac{1}{4}$ sec. Badlands lavas	No apparent mineral resource
* 200, 201	Bend	30	Lots in S $\frac{1}{2}$ NW $\frac{1}{4}$ Aubrey Butte lavas	No apparent mineral resource
* 1901	Bend	31	Small lot in NE $\frac{1}{4}$ NE $\frac{1}{4}$ Aubrey Butte lavas	No apparent mineral resource
* 8000, 8100, 8500	Bend	31	3 lots in NW $\frac{1}{4}$ NE $\frac{1}{4}$ Aubrey Butte lavas	Small tracts. No potential
* 15000	Bend	31	Lot in SW $\frac{1}{4}$ SE $\frac{1}{4}$ Aubrey Butte lavas	No potential
* 100, 200, 500, 700, 800, 2100, 2200, 2300, 2400, 2900, 3000, 4100, 4200, 5400, 5500	Bend	32	Lots in NE $\frac{1}{4}$ NE $\frac{1}{4}$ Includes Courthouse, County shops, etc.	No mineral resource potential

* Not plotted. Too small a parcel.

RESOURCE POTENTIAL OF LAND OWNED BY DESCHUTES COUNTY (continued)

Tax Lot No.	Quadrangle	Location Sec. $\frac{1}{4}$ Sec.	Underlying rocks	Mineral resource potential
<u>T. 17 S., R. 12 E. (continued)</u>				
*499,700,2400,	Bend	Parcels & lots in		All small parcels and have no
*2500,2600,2700,	"	32 SW $\frac{1}{4}$ NE $\frac{1}{4}$	City of Bend	apparent mineral resource potential.
*3100,3200,3300,	"	" " "	" "	" " " "
*3400,3600,3800,	"	" " "	" "	" " " "
*3900,3901,4100.	"	" " "	" "	" " " "
*7300,13800,15-500	"	32 3 lots in SE $\frac{1}{2}$ SW $\frac{1}{4}$	" "	
*600A	"	32 Small parcel in NE $\frac{1}{4}$ SE $\frac{1}{4}$	" "	
*3100	"	32 Small \triangle lot SE $\frac{1}{4}$ SE $\frac{1}{4}$	" "	
* 300	"	33 Small \triangle lot SE $\frac{1}{4}$ NE $\frac{1}{4}$	" "	
		10 acres just north of Greenwood Cemetary	Cinders of Pilot Butte	No mineral resource potential.

* Not plotted on map.

T. 17 S., R. 13 E.

101,900	Bend Airport	17 All except the SW $\frac{1}{4}$	Badlands lava	No apparent mineral resource potential
102	" "	21 E $\frac{1}{2}$	" "	" " " " "
2600	" "	21 SE $\frac{1}{4}$ NW $\frac{1}{4}$	" "	" " " " "
6500	" "	32 SE $\frac{1}{4}$	" "	" " " " "

T. 17 S., R. 14 E.

900,1000	Alfalfa	15 W $\frac{1}{2}$ SE $\frac{1}{4}$	Badlands lava and Qal	Small area of fine sand & gravel
*3100,4600,10600	Alfalfa	20 3 lots in Sec. 20	Badlands lava	No mineral resource potential

* Not plotted on map

RESOURCE POTENTIAL OF LAND OWNED BY DESCHUTES COUNTY (continued)

Tax Lot No.	Quadrangle	Location Sec. $\frac{1}{4}$ Sec.	Underlying rocks	Mineral resource potential
<u>T. 18 S., R. 11 E.</u>				
800	Bend	12 About all of SW $\frac{1}{4}$	Qb lava/pink ash flow tuff	Building stone/pumice potential
*2700,2800	Lava Butte	25 2 lots in SE $\frac{1}{4}$	Black welded tuff	Small tracts.No mineral resource potential.
*9200	" "	36 Small lot in NE $\frac{1}{4}$	Black welded tuff	" " " " " "
<u>T. 18 S., R. 12 E.</u>				
*1100	Bend	4 1 lot in NE $\frac{1}{4}$ NW $\frac{1}{4}$	Badlands lavas	Small tracts have no mineral resource potential.
*6700	"	4 1 lot in NW $\frac{1}{4}$ NW $\frac{1}{4}$	" "	" " " " " "
* 800	"	4 5 acres in NW $\frac{1}{4}$ SE $\frac{1}{4}$	" "	" " " " " "
*3300,5000	"	5 2 lots in NW $\frac{1}{4}$ SE $\frac{1}{4}$	" "	" " " " " "
300	"	6 NW $\frac{1}{4}$ SW $\frac{1}{4}$	Pink ash flow tuff	Pumice. Some old pits present
*719	"	6 1 acre in SW $\frac{1}{4}$ NE $\frac{1}{4}$	Pink ash flow tuff	No mineral resource potential
302,400	"	7 NW $\frac{1}{4}$ NW $\frac{1}{4}$	Qb lava flow/pink ash flow tuff.	Should be checked for pumice potential
*2290	"	8 Strip adjacent to B/S Road ** in SW $\frac{1}{4}$ NW $\frac{1}{4}$	Badlands lavas/ Pink ash flow tuff	Small tracts.No mineral resource potential
*1601,1701	"	8 2 small strips in SE $\frac{1}{4}$ adj. to Hwy 97.	Badlands lava	" " " " " "
*2400	"	10 50' strip in SW $\frac{1}{4}$	Badlands lava	" " " " " "
*100-500	"	14 Am't not known in S $\frac{1}{2}$	Tuffaceous sediments	County dump. Known sedimentary fill.
200	"	15 SE $\frac{1}{4}$ NE $\frac{1}{4}$	May be tuffaceous seds.	Fine sand & gravel fill possible.
*300	"	15 5 Acres in NE $\frac{1}{4}$ NE $\frac{1}{4}$	May be tuffaceous seds.	" " " " " "
*100	"	23 ?		?
*2200	Lava Butte	30 Am't not known NW $\frac{1}{4}$ NW $\frac{1}{4}$	Qb - Newberry lavas	No mineral resource apparent.

* Not plotted on map

** Brooks Scanlon Road

RESOURCE POTENTIAL OF LAND OWNED BY DESCHUTES COUNTY (continued)

Tax Lot No.	Quadrangle	Location Sec. ¼Sec.	Underlying rocks	Mineral resource potential
<u>T. 18 S., R. 13 E.</u>				
500	Bend Airport	3 S½ SW¼	Badlands lavas	No apparent mineral resource
1100	" "	6 All the SW¼ except the NE¼	" "	" " " "
1800		?		
2700	" "	7 All the NE¼ except the SW¼	" "	" " " "
3100	" "	8 All the SW¼ except the NW¼	" "	" " " "
3500	" "	10 SW¼ & SW¼ SE¼	" "	" " " "
4500	" "	15 E½	" "	" " " "
4600	" "	15 W½	" "	" " " "
5100		?		
4-300	" "	4 All the SE¼ except the SW¼	" "	" " " "
14-800 (?)		?		
<u>T. 19 S., R. 11 E.</u>				
1000	Benham Falls	22 SW¼ NE¼	Qb of Newberry and Holocene lava butte flows	No indicated mineral resource potential
1100	" "	22 NE¼ SE¼	Same as above	" " " " "
<u>T. 19 S., R. 12 E.</u>				
200	Kelsey Butte	1 SW¼ NW¼ and NW¼ SW¼	Newberry Lavas & ½ of Cabin Butte	This is a source of cinders.
<u>T. 19 S., R. 14 E.</u>				
300	Horse Ridge	4 S½ SW¼	Fluvial lacustrine seds.	Poor quality sand & gravel present.
2100	" " & Millican	25 Almost all of S½ SW¼	Lacustrine seds	" " " " "
*800, 1800, 2200	Horse Ridge	5 3 tracts in NE¼	Badlands lava	No mineral resource apparent
2901	Horse Ridge	35 2 tracts in SW¼ SW¼	Lacustrine seds	" " " "
<u>T. 19 S., R. 15 E.</u>				
1600	Millican & Pine Mt.	35 S½	Lacustrine seds & Qb basalt	Poor quality sand & gravel (fill)

* Not plotted on map

RESOURCE POTENTIAL OF LAND OWNED BY DESCHUTES COUNTY (continued)

Tax Lot No.	Quadrangle	Location Sec. ¼Sec.	Underlying rocks	Mineral resources potential
<u>T. 19 S., R. 16 E.</u>				
1600	West Butte	22 SE¼	Bear Creek Butte lavas	No mineral resources indicated
1800	West Butte	14 S¼	" " " "	" " " "
	West Butte	15 S½SE¼	" " " "	" " " "
	West Butte	23 NE¼	" " " "	" " " "
<u>T. 20 S., R. 10 E.</u>				
* 505	Anns Butte	1 1 lot in NW¼ SE¼	Near head of Spring River/Basalt	" " "
<u>T. 20 S., R. 11 E.</u>				
*2600	Anns Butte	31 1 lot in SW¼ NE¼	Newberry lavas/outwash	Poor quality layered sand & gravel
*3200, 3900	Anns Butte	31 2 lots in SW¼	Newberry lavas/outwash	" " " " "
<u>T. 20 S., R. 15 E.</u>				
1400	Pine Mountain	16 NW¼ NE¼	Pine Mt. Rhyolite	Check for crushing rock (?)
<u>T. 20 S., R. 16 E.</u>				
1600	Millican SE	16 Almost all of sec. 16	Tob basalt	Possible but questionable road rock

* Not plotted on map

RESOURCE POTENTIAL OF LAND OWNED BY DESCHUTES COUNTY (continued)

Tax Lot No.	Quadrangle	Location Sec. ¼Sec.	Underlying rocks	Mineral Resource potential
<u>T. 20 S., R. 17 E.</u>				
520	Brothers SW	4 NW¼SW¼NW¼	Basalt	No mineral resource indicated
1201	Brothers SW	14 NE¼SE¼ NE¼	Basalt	No mineral resource indicated
106	Brothers SW	9 SE¼ SE¼ NW¼	Basalt	No mineral resource indicated
200,700,1000,1300	Brothers SW	16 N½	Basalt & lacustrine sed's	Poor quality sand & gravel
<u>T. 20 S., R. 18 E.</u>				
600	Brothers	5 N½	Qb basalt	No indicated mineral resource
1500	Brothers	11 NW¼ SW¼	Thin basalt/stream sediments	Possible fair-quality sand & gravel
400,500,3300,5800,6400,		4 W½	Qb	No indicated mineral resource
7100,7200,7500,7600,8000,		" "	" "	" " " "
8100,8200,8300,8400,8500,8900		" "	" "	" " " "
9200,9800,10100,10500.	Brothers	" "	" "	" " " "
<u>T. 21 S., R. 10 E.</u>				
1701	Anns Butte	1 Small tract in NW¼	Lacustrine/fluviatile sand & gravel	No mineral resource
1900	Anns Butte	13 Small lot in SW¼	" " "	" " "
<u>T. 21 S., R. 19 E.</u>				
1200	No topog. avail.	16 SW¼ NW¼		
<u>T. 21 S., R. 20 E.</u>				
1802	No topog. avail.	30 3/4 of SE¼		

RESOURCE POTENTIAL OF LAND OWNED BY DESCHUTES COUNTY (continued)

Tax Lot No.	Quadrangle	Location Sec. $\frac{1}{4}$ Sec.	Underlying rocks	Mineral resource potential
<u>T. 22 S., R. 10 E.</u>				
*2600	LaPine	22 Small \triangle tract along Hwy 97 SW $\frac{1}{4}$	Fluviatile sand & gravel	All small tracts with no mineral resource
*100,5301,5600	LaPine	4 3 lots in SW $\frac{1}{4}$	Glacial outwash	" " " " " " "
*800,900,1200,2000				
*2300,5000,6400	LaPine	8 7 lots in SE $\frac{1}{4}$	Glacial outwash	" " " " " " "
*1500,1700,2000,2400,		LaPine Acres.	" "	" " " " " " "
*2600,2800,3200,3400,			" "	" " " " " " "
*3500,3600,3700,4600,			" "	" " " " " " "
*5200,5800,8500,8700,			" "	" " " " " " "
*10100.	LaPine	9 All lots in S $\frac{1}{2}$ SW $\frac{1}{4}$	River sediments/glacial outwash	No potential mineral resource
*408,500A1	LaPine	11 2 tracts in SW $\frac{1}{4}$ SW $\frac{1}{4}$	" " " "	" " " "
*1200	LaPine	14 Small tract in SW $\frac{1}{4}$ NW $\frac{1}{4}$	" " " "	" " " "
*2600 A1	LaPine	14 Lot in LaPine NE $\frac{1}{4}$ SW $\frac{1}{4}$	" " " "	" " " "
*4200	LaPine	16 Strip adj. to Hwy 97 SE $\frac{1}{4}$ NE $\frac{1}{4}$	" " " "	" " " "
*4500,4500,4700,		17 Lot & tracts in NE $\frac{1}{4}$		
*4900,5600,6300,	LaPine	17 All lots in NW $\frac{1}{4}$		
6400,6500,6600,	"	" Deschutes River Acres	Qal (Quaternary alluvium)	No potential mineral resource
7100,9300,9400,	"	" "		
16200,16400,16500,	"	" "		
16600,16700.	"	" "		

T. 22 S., R. 19 E.

1200	No topog. avail.	36 E $\frac{1}{2}$ SE $\frac{1}{4}$ between Brothers & Hampton	Qtb (Basalt flows)	No resource potential
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*Not plotted on map