

Direct Disturbance				
Wind Turbines	Within Occupied Range		Intersect: Breeding Distribution	
Management Zone	Acres	%	Acres	%
MZ I	1,167	0.003	538	0.005
MZ II	1,407	0.004	605	0.005
MZ II	328	0.001	0	0.000
MZ IV	555	0.001	33	0.000
MZ V	0	0.000	0	0.000
MZ VI	0	0.000	0	0.000
MZ VII	0	0.000	0	0.000
Range wide ¹	3,458	0.0	1,176	0.0

¹ All range wide calculations will not include Bi-State population or the Canadian portion of the range.



Indirect Disturbance¹				
Wind Turbines	Within Occupied Range		Intersect: Breeding Distribution	
Management Zone	Acres	%	Acres	%
MZ I	278,786	0.6	82,890	0.8
MZ II	315,589	0.9	127,202	1.1
MZ III	87,444	0.3	5,702	0.1
MZ IV	123,092	0.3	8,783	0.1
MZ V	3,886	0.0	0	0.0
MZ VI	18,394	0.7	11,056	1.0
MZ VII	0	0.0	0	0.0
Range wide ²	827,192	0.5	235,634	0.5

¹ Indirect 5.0km radius buffer around Turbines (Lebeau et al. 2014).

² All range wide calculations will not include Bi-State population or the Canadian portion of the range.

Intersect: Population Index	
%	
	0.00410
	0.00219
	0.00004
	0.00013
	0.0000
	0.0000
	0.0000



Intersect: Population Index	
%	
	0.904
	0.516
	0.013
	0.029
	0.000
	0.076
	0.000

OBJECTID	Wind_Code	AOI_Code	mgmt_zone	FIRST_MZ_Acres
1	Wind Turb Indirect Footprint		MZ I	46080299
2	Wind Turb Indirect Footprint		MZ II	37021278
3	Wind Turb Indirect Footprint		MZ III	28803339
4	Wind Turb Indirect Footprint		MZ IV	38637313
5	Wind Turb Indirect Footprint		MZ V	19346653
6	Wind Turb Indirect Footprint		MZ VI	2757910

Shape_Length	Shape_Area	Range_Hectares
292595.1931	1128208035	112820.8035
366656.5548	1277142924	127714.2924
129110.4209	353874198.7	35387.41987
213374.6201	498137616	49813.7616
17276.0231	15726366.95	1572.636695
43489.42517	74438000.57	7443.800057

Range_Acres	agement_	Current_Range_Acres
278786.2769	MZ I	278786.2769
315588.8894	MZ II	315588.8894
87444.21886	MZ III	87444.21886
123092.4856	MZ IV	123092.4856
3886.069905	MZ V	3886.069905
18394.03053	MZ VI	18394.03053

Current_Range_Percent

0.605001016

0.852452715

0.303590562

0.318584488

0.020086523

0.666955431

OBJECTID	Wind_Code	AOI_Code	Mgmt_zones	FIRST_MZ_Acres	Shape_Leng
1	Wind Turbi	Indirect For	MZ I	10312900.78	272419.3
2	Wind Turbi	Indirect For	MZ II	11908197.73	436812.7
3	Wind Turbi	Indirect For	MZ III	8471599.596	50663.3
4	Wind Turbi	Indirect For	MZ IV	11541296.05	57894.21
5	Wind Turbi	Indirect For	MZ VI	1102989.484	34611.91

Shape_Area	Distribution_Hectares	Distribution_Acres
335442488.2	33544.24882	82889.64402
514769146.3	51476.91463	127202.2263
23076895.48	2307.689548	5702.425061
35545092.4	3554.50924	8783.383618
44742852.16	4474.285216	11056.19955

Management_Zone	Distribution_Percent
MZ I	0.80374713
MZ II	1.068190411
MZ III	0.067312259
MZ IV	0.076103962
MZ VI	1.002384856

OBJECTID	Wind_Code	AOI_Code	gmt_zone	ST_MZ_Ac	shape_Length	shape_Area	range_Hectare	range_Acre
1	Wind Turbi	Direct Foot	MZ I	46080299	152626.5	4723979	472.3979	1167.321
2	Wind Turbi	Direct Foot	MZ II	37021278	167744.7	5695881	569.5881	1407.483
3	Wind Turbi	Direct Foot	MZ III	28803339	43151.29	1326245	132.6245	327.7223
4	Wind Turbi	Direct Foot	MZ IV	38637313	73137.29	2245948	224.5948	554.9859

agement	znt	Range	it	Range	Percent
MZ I	1167.321	0.002533			
MZ II	1407.483	0.003802			
MZ III	327.7223	0.001138			
MZ IV	554.9859	0.001436			

OBJECTID	Wind_Code	AOI_Code	lgmt_zone	ST_MZ_A	chape_Leng	shape_Are	tribution_Her	tribution_A
1	Wind Turbi	Direct Foot	MZ I	10312901	72324.77	2178733	217.8733	538.3767
2	Wind Turbi	Direct Foot	MZ II	11908198	80665.26	2448005	244.8005	604.9153
3	Wind Turbi	Direct Foot	MZ IV	11541296	4282.886	132560.6	13.25606	32.75645

agement_tribution_Percent

MZ I	0.00522
MZ II	0.00508
MZ IV	0.000284

OBJECTID	Mgmt_zone	input_Acre	input_Hectar	shape_Leng	shape_Are:	mPopIndx	lutSumPop	PercPopInd
1	MZ I	1167.321	472.3979	152626.5	4723979	302415.6	12.38974	0.004097
2	MZ II	1407.483	569.5881	167744.7	5695881	519015.6	11.38665	0.002194
3	MZ III	327.7223	132.6245	43151.29	1326245	223621.8	0.086283	3.86E-05
4	MZ IV	554.9859	224.5948	73137.29	2245948	368616.1	0.46642	0.000127

OBJECTID	gmt_zone	input_Acre	input_Hectar	shape_Leng	shape_Are	mPopIndx	lutSumPop	PercPop	PopInd
1	MZ I	278786.3	112820.8	292595.2	1.13E+09	302415.6	2734.676	0.904277	
2	MZ II	315588.9	127714.3	366656.6	1.28E+09	519015.6	2677.622	0.515904	
3	MZ III	87444.22	35387.42	129110.4	3.54E+08	223621.8	29.58473	0.01323	
4	MZ IV	123092.5	49813.76	213374.6	4.98E+08	368616.1	107.7592	0.029233	
5	MZ V	3886.07	1572.637	17276.02	15726367	260404.8	0	0	
6	MZ VI	18394.03	7443.8	43489.43	74438001	48986.14	37.26783	0.076078	

