

Direct Disturbance				
Federal and State Highways	Within Occupied Range		Intersect: Breeding Distribution	
Management Zone	Acres	%	Acres	%
MZ I	23,462	0.05	2,703	0.03
MZ II	26,317	0.07	6,962	0.06
MZ II	14,142	0.05	5,534	0.07
MZ IV	17,535	0.05	4,499	0.04
MZ V	10,021	0.05	612	0.02
MZ VI	2,450	0.09	856	0.08
MZ VII	0	0.0	0	0.0
Range wide ¹	93,927	0.054	21,166	0.0

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



Indirect Disturbance¹				
Federal and State Highways	Within Occupied Range		Intersect: Breeding Distribution	
Management Zone	Acres	%	Acres	%
MZ I	5,812,988	12.6	710,754	6.9
MZ II	6,374,926	17.2	1,793,002	15.1
MZ III	3,477,026	12.1	1,342,671	15.8
MZ IV	4,434,105	11.5	1,187,110	10.3
MZ V	2,437,598	12.6	241,312	7.0
MZ VI	666,803	24.2	238,940	21.7
MZ VII	0	0.0	0	0.0
Range wide ²	23,203,448	13.3	5,513,790	11.7

¹ Indirect 3.3km radius buffer around Federal and State Highways (Patricelli et al. 2013; noise dispersal).

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

OBJECTID	load_Clas	BUFF_DIST	AOI_Code	Mgmt_zones
1	Federal ar		3287.2 Indirect For MZ I	
2	Federal ar		3287.2 Indirect For MZ II	
3	Federal ar		3287.2 Indirect For MZ III	
4	Federal ar		3287.2 Indirect For MZ IV	
5	Federal ar		3287.2 Indirect For MZ V	
6	Federal ar		3287.2 Indirect For MZ VI	

FIRST_MZ_Acres	Shape_Length	Shape_Area
46080299	7896973.244	23524329781
37021278	8614980.52	25798412231
28803339	5635515.736	14071024205
38637313	6590222.225	17944187849
19346653	4505461.528	9864610053
2757910	1234884.688	2698457320

Range_Hectares	ange_Acre	Management_Zone
2352432.978	5812988	MZ I
2579841.223	6374926	MZ II
1407102.421	3477026	MZ III
1794418.785	4434105	MZ IV
986461.0053	2437598	MZ V
269845.732	666803	MZ VI

Current_Range_Acres	it_Range_Percent
5812988.484	12.61491
6374926.495	17.21963
3477025.804	12.07161
4434105.384	11.47623
2437598.23	12.59959
666803.3253	24.17785

OBJECTID	Road_Class	BUFF_DIST	AOI_Code	Mgmt_zones	ST_MZ_Ac
1	Federal and	3287.2	Indirect Footprii	MZ I	10312901
2	Federal and	3287.2	Indirect Footprii	MZ II	11908198
3	Federal and	3287.2	Indirect Footprii	MZ III	8471600
4	Federal and	3287.2	Indirect Footprii	MZ IV	11541296
5	Federal and	3287.2	Indirect Footprii	MZ V	3463986
6	Federal and	3287.2	Indirect Footprii	MZ VI	1102989

Shape_Length	Shape_Area	Distribution_Hectares
3943517.375	2876318653	287631.8653
6804638.346	7256022016	725602.2016
4146546.03	5433597067	543359.7067
4527125.548	4804063873	480406.3873
1776849.613	976556853.4	97655.68534
729913.5071	966957089.9	96695.70899

Distribution_Acres	Management_Zone	ibution_Per
710753.8179 MZ I		6.89189
1793002.088 MZ II		15.05687
1342671.076 MZ III		15.84909
1187110.036 MZ IV		10.28576
241312.4538 MZ V		6.966322
238940.3006 MZ VI		21.66297

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OBJECTID	Road_Class	AOI_Code	gmt_zone	ST_MZ_Ac	shape_Length	shape_Area	range_Hectare	range_Acre
1	Federal and Direct Foot MZ I			46080299	7435717	94947560	9494.756	23462.05
2	Federal and Direct Foot MZ II			37021278	8348707	1.07E+08	10650.01	26316.74
3	Federal and Direct Foot MZ III			28803339	4463900	57231329	5723.133	14142.17
4	Federal and Direct Foot MZ IV			38637313	5545819	70962029	7096.203	17535.1
5	Federal and Direct Foot MZ V			19346653	3166967	40553023	4055.302	10020.87
6	Federal and Direct Foot MZ VI			2757910	784540	9914834	991.4834	2450.009

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MZ I	23462.05	0.050916
MZ II	26316.74	0.071085
MZ III	14142.17	0.049099
MZ IV	17535.1	0.045384
MZ V	10020.87	0.051796
MZ VI	2450.009	0.088836

OBJECTID	Road_Class	AOI_Code	fgmt_zone	ST_MZ_Ac	hape_Leng	hape_Are	tribution_Her	tribution_A
1	Federal and Direct Foot MZ I			10312901	866186.7	10938228	1093.823	2702.895
2	Federal and Direct Foot MZ II			11908198	2216157	28173463	2817.346	6961.814
3	Federal and Direct Foot MZ III			8471600	1755919	22393716	2239.372	5533.608
4	Federal and Direct Foot MZ IV			11541296	1432327	18205596	1820.56	4498.701
5	Federal and Direct Foot MZ V			3463986	196841.2	2478430	247.843	612.4333
6	Federal and Direct Foot MZ VI			1102989	271481.8	3464633	346.4633	856.1295

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MZ I	0.026209
MZ II	0.058462
MZ III	0.06532
MZ IV	0.038979
MZ V	0.01768
MZ VI	0.077619

OBJECTID	gmt_zonen	input_Acre	put_Hectar	hape_Leng	hape_Are	mPopIndx	lutSumPop	PercPopInd
1	MZ I	23462.05	9494.756	7435717	94947559	302415.6	83.62247	0.027652
2	MZ II	26316.74	10650.01	8348707	1.07E+08	519015.6	308.9687	0.05953
3	MZ III	14142.17	5723.133	4463901	57231329	223621.8	108.4348	0.04849
4	MZ IV	17535.1	7096.203	5545819	70962030	368616.1	111.7482	0.030316
5	MZ V	10020.87	4055.302	3166967	40553023	260404.8	66.90143	0.025691
6	MZ VI	2450.009	991.4834	784540.1	9914834	48986.14	19.11205	0.039015

OBJECTID	gmt_zone	input_Acre	input_Hectar	shape_Leng	shape_Are	mPopIndx	lutSumPop	PercPopInd
1	MZ I	5812988	2352433	7896973	2.35E+10	302415.6	21366.67	7.065333
2	MZ II	6374926	2579841	8614981	2.58E+10	519015.6	79715.79	15.35904
3	MZ III	3477026	1407102	5635516	1.41E+10	223621.8	27998.36	12.52041
4	MZ IV	4434105	1794419	6590222	1.79E+10	368616.1	29539.42	8.0136
5	MZ V	2437598	986461	4505462	9.86E+09	260404.8	18654.29	7.163574
6	MZ VI	666803.3	269845.7	1234885	2.7E+09	48986.14	5977.593	12.20262

