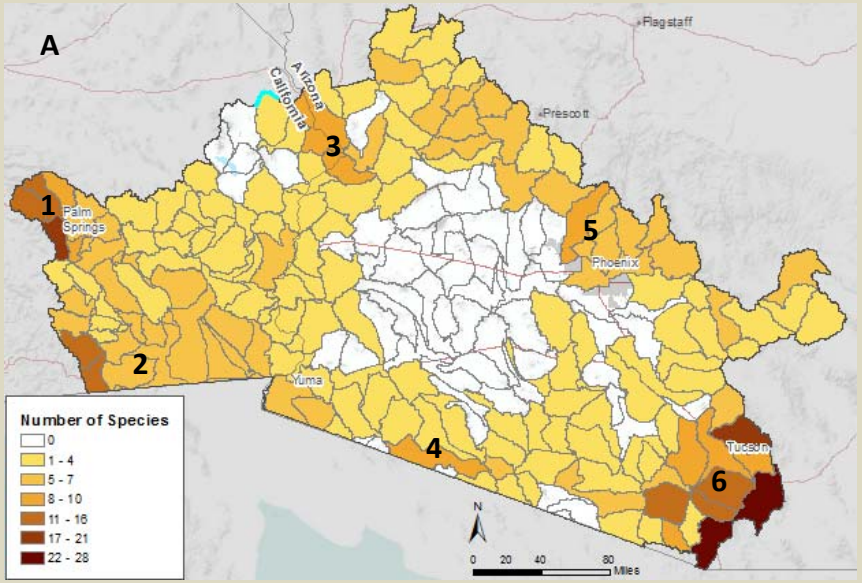
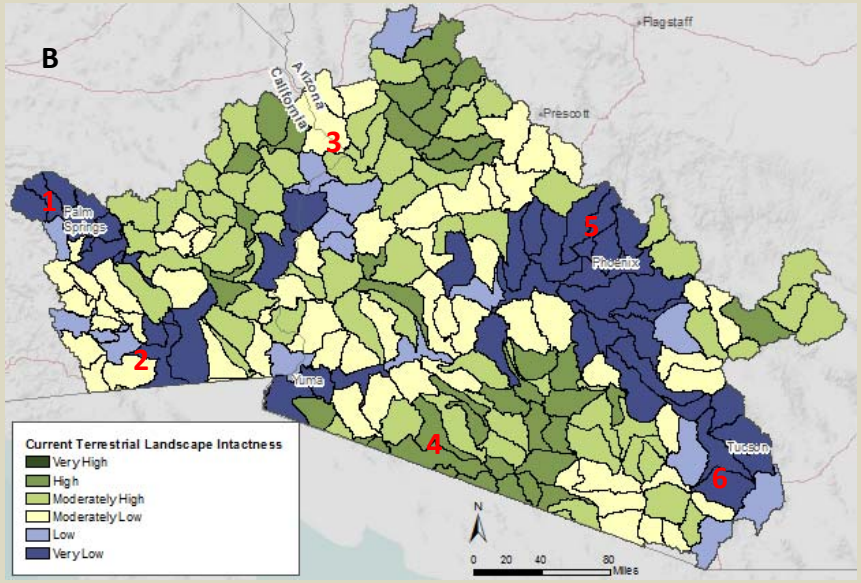
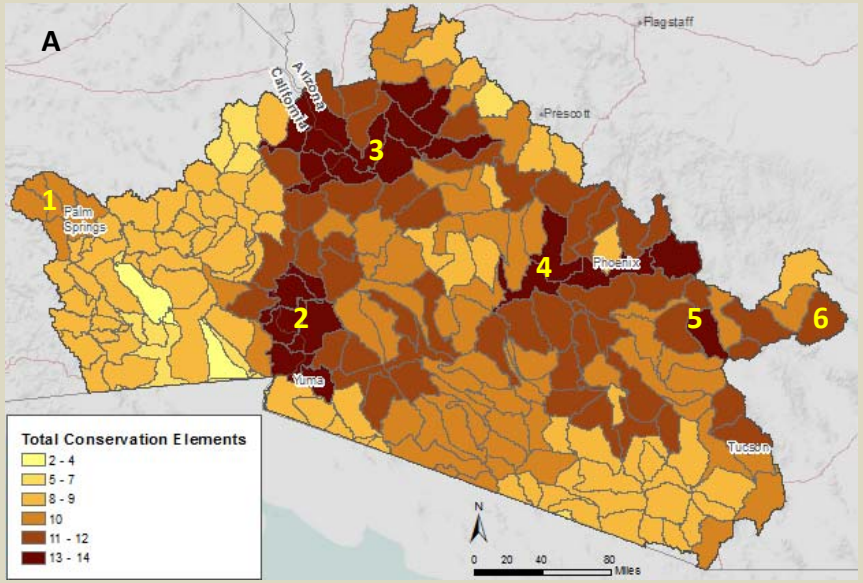
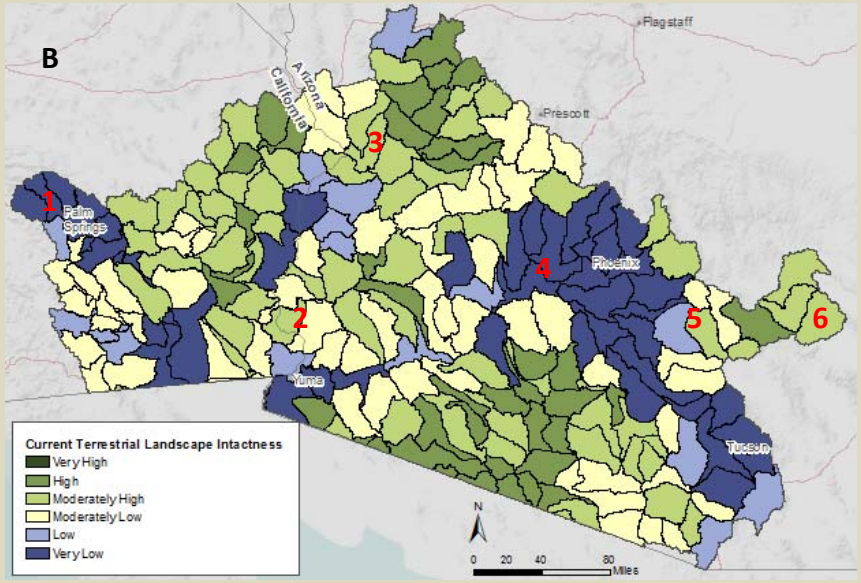
Concentration of Conservation Elements and Intactness



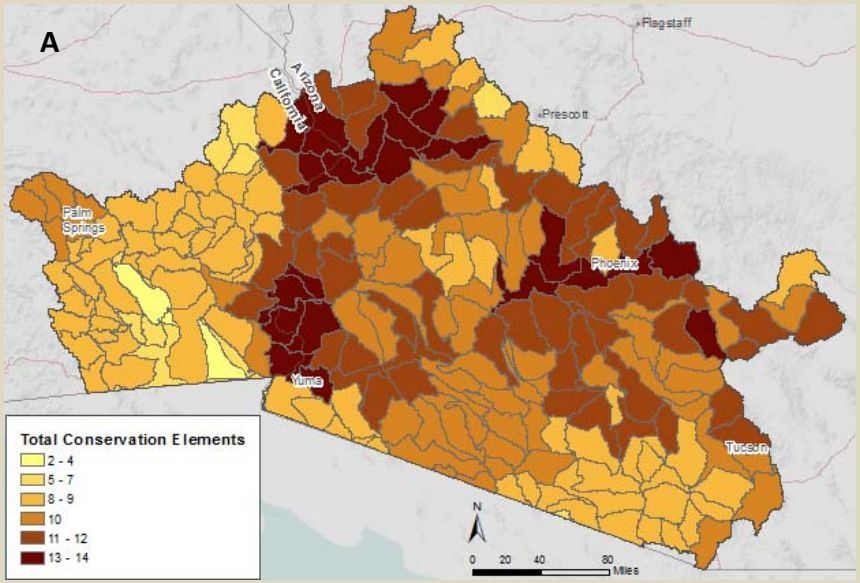


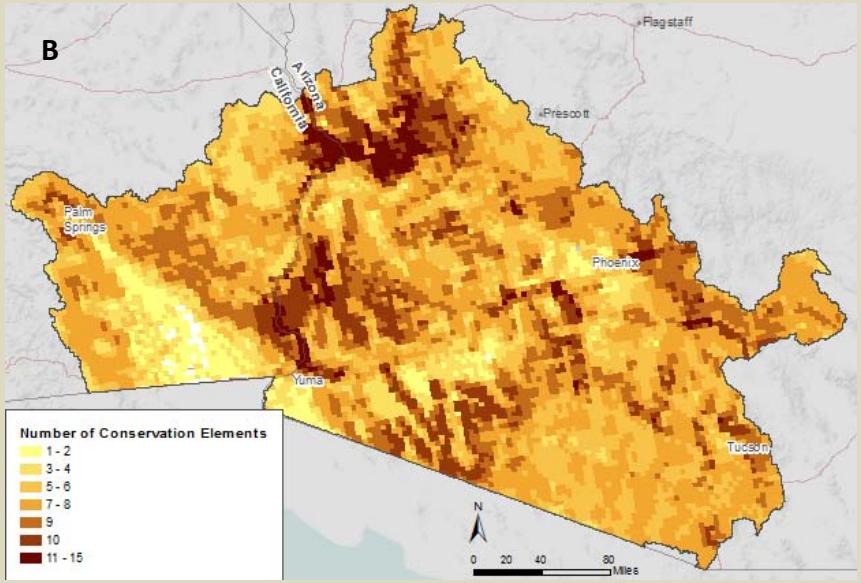
Concentration of Conservation Elements and Intactness



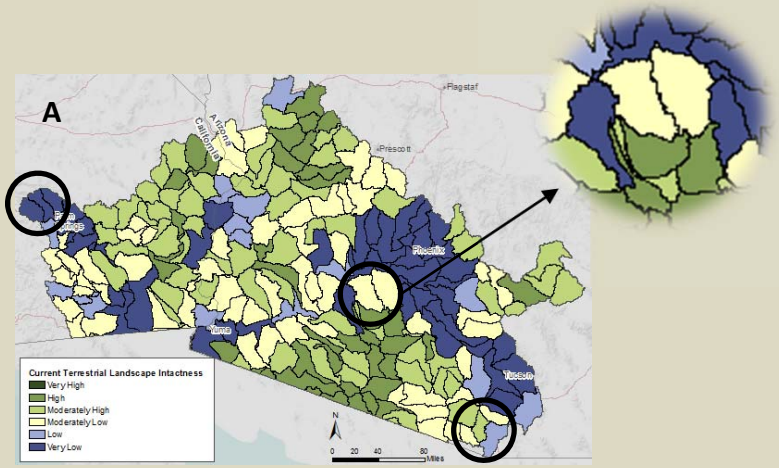


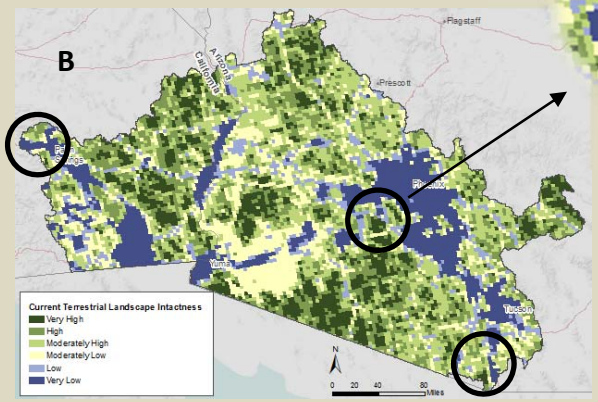
Concentration of Conservation Elements and Intactness

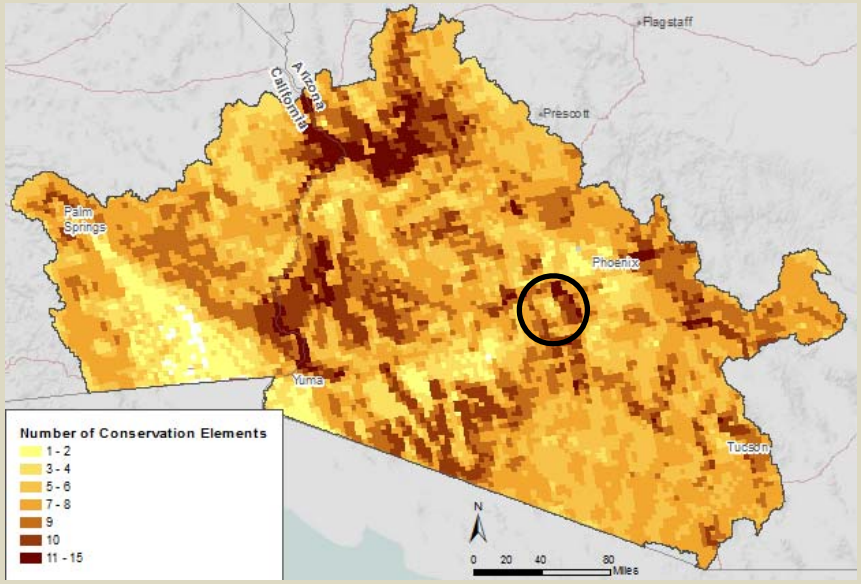




Concentration of Conservation Elements and Intactness



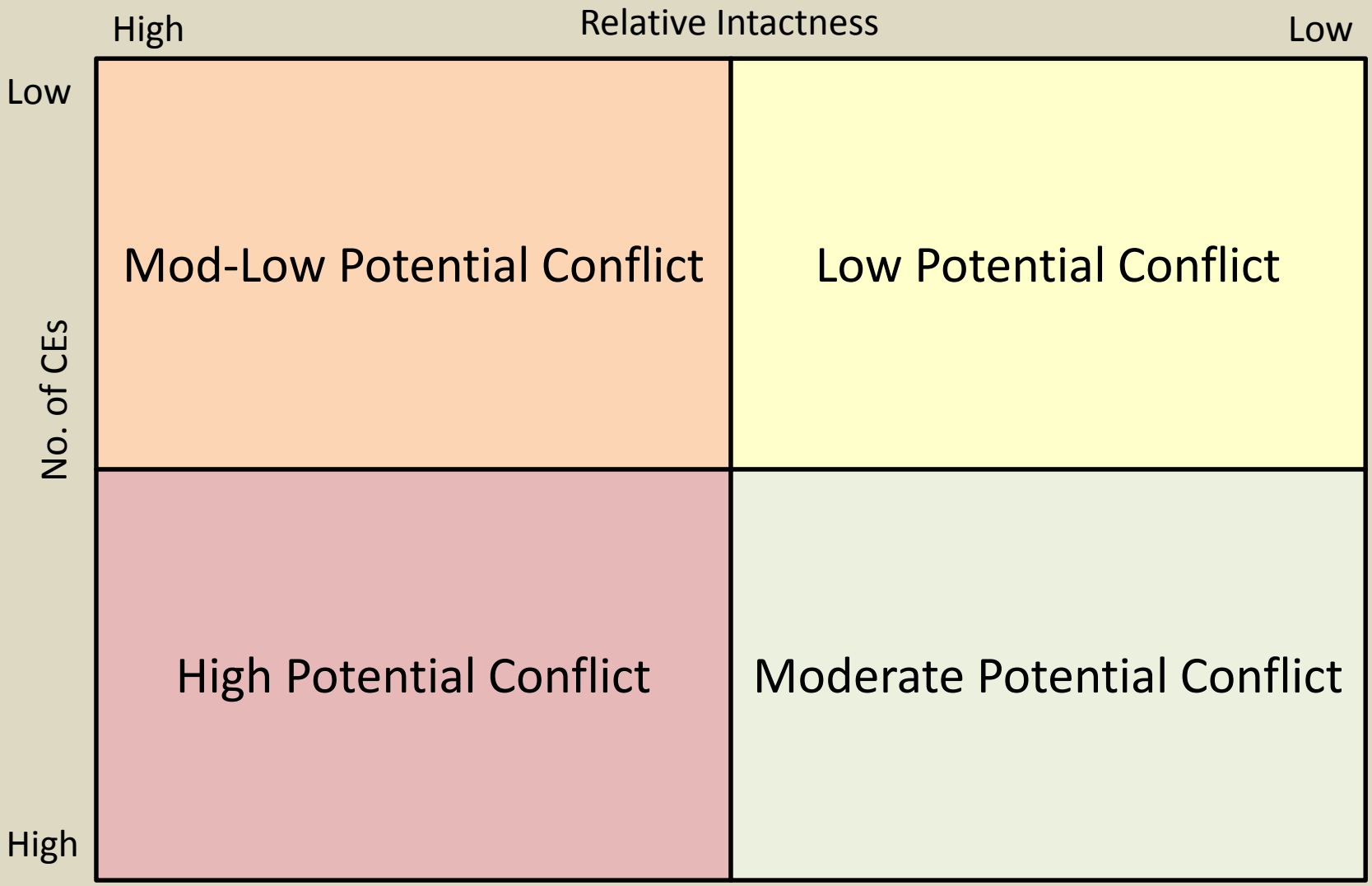




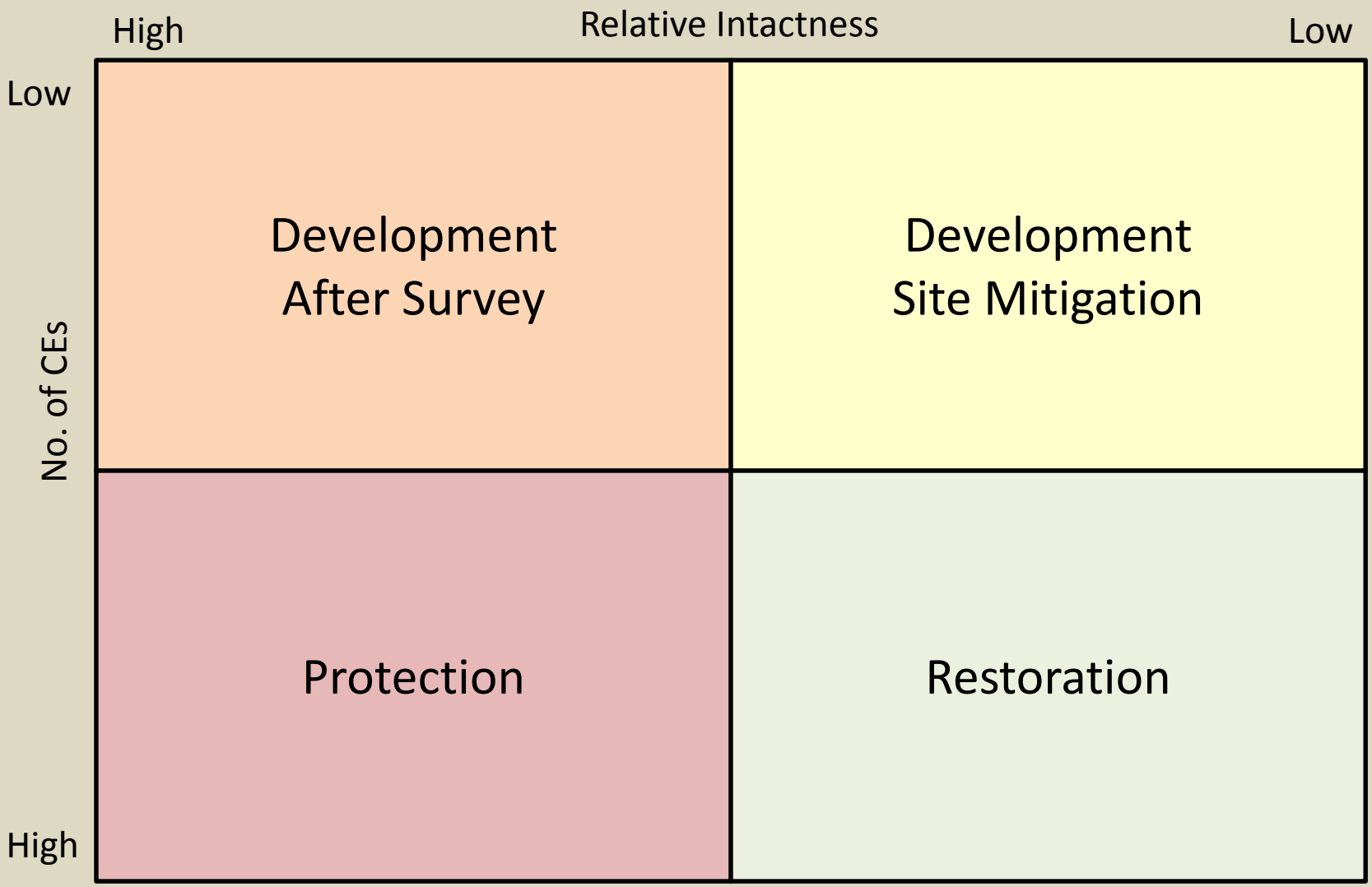
Concentration of Conservation Elements and Intactness

No. of CEs	Very High	High	Moderately High	Moderately Low	Low	Very Low
0	**28.26%**			**25.25%**	11,615	139,321
1	47,334	124,097	100,676	47,443	15,443	209,473
2	83,935	79,102	158,957	115,873	43,143	383,516
3	111,678	106,951	182,244	338,651	102,376	482,626
4	206,988	356,554	429,391	490,433	234,490	545,279
5	303,069	711,776	1,043,486	621,471	303,854	864,320
6	397,828	905,708	1,176,486	725,201	425,894	679,541
7	698,480	1,180,297	1,461,101	893,516	445,625	695,834
8	866,974	1,568,736	1,819,039	1,125,388	494,645	559,752
9	1,191,783	1,339,546	1,576,441	843,879	409,474	319,976
10	761,805	707,706	755,138	466,525	171,261	185,819
11	51,397	157,870	256,984	158,144	45,032	31,629
12	3,954	55,350	55,350	55,350	15,814	19,768
13		35,582	75,118	19,768	3,954	3,954
14		3,954	3,954	7,907	3,954	
15	**32.33%**			**14.17%**	3,954	
	4,725,226	7,333,230	9,094,365	5,909,548	2,730,527	5,120,808

Concentration of Conservation Elements and Intactness



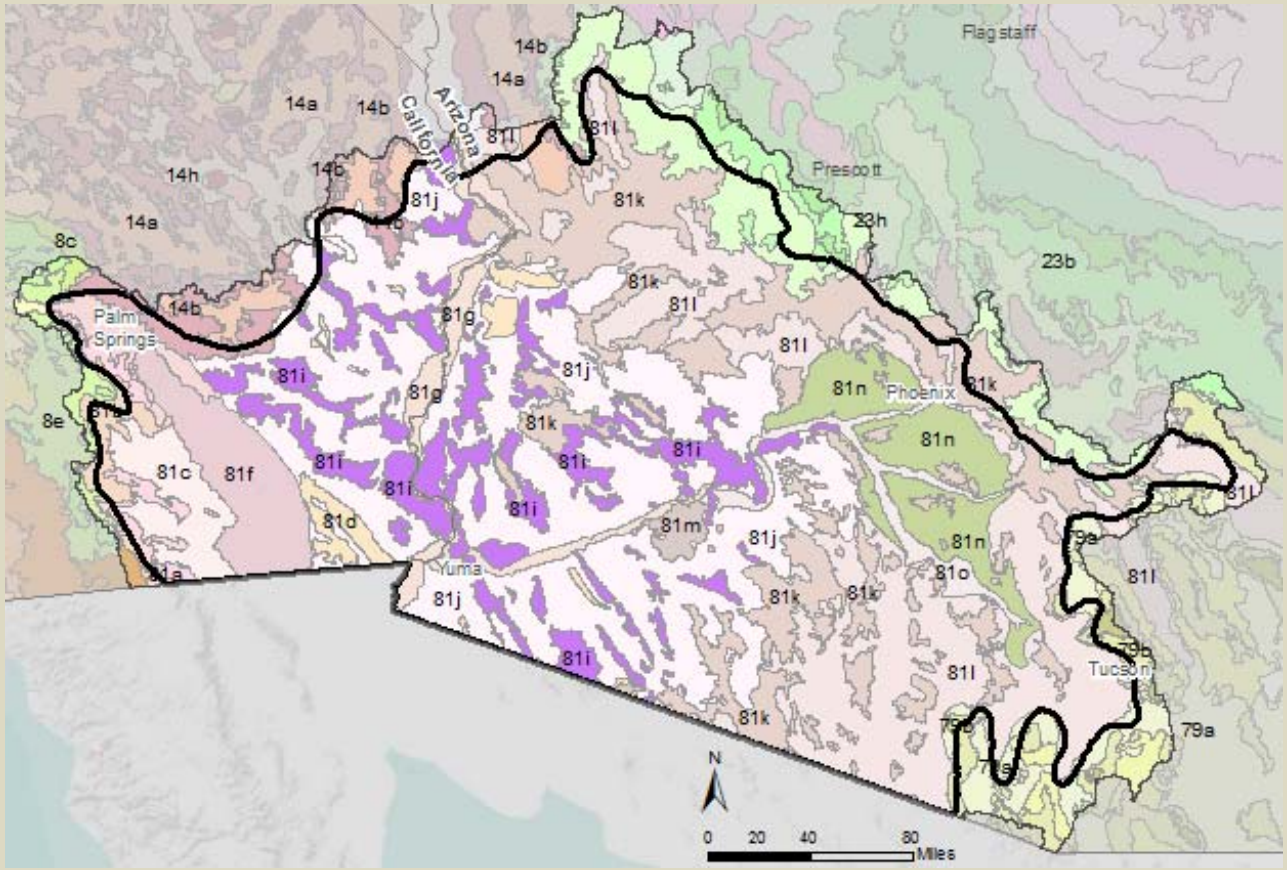
Concentration of Conservation Elements and Intactness



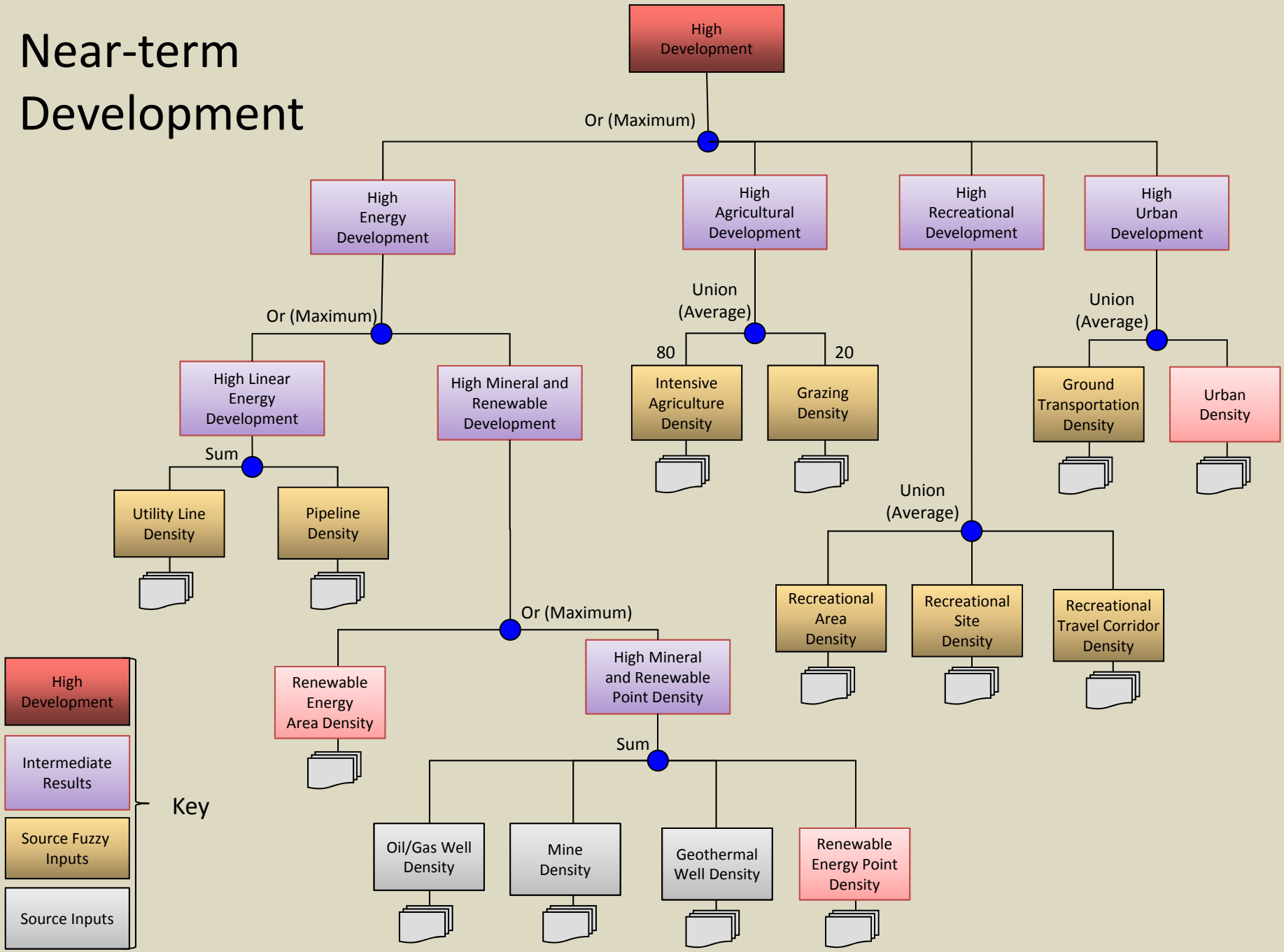
Concentration of Conservation Elements and Intactness

No. of CEs	Very High	High	Moderately High	Moderately Low	Low	Very Low
0	15.2%		22.3%		16.0% 11,615	139,321
1	47,334	124,097	100,676	47,443	15,443	209,473
2	83,935	79,102	158,957	115,873	43,143	383,516
3	111,678	106,951	182,244	338,651	102,376	482,626
4	206,988	356,554	429,391	490,433	234,490	545,279
5	303,069	711,776	1,043,486	621,471	303,854	864,320
6	397,828	905,708	1,176,486	725,201	425,894	679,541
7	698,480	1,180,297	1,461,101	893,516	445,625	695,834
8	866,974	1,568,736	1,819,039	1,125,388	494,645	559,752
9	1,191,783	1,339,546	1,576,441	843,879	409,474	319,976
10	761,805	707,706	755,138	466,525	171,261	185,819
11	51,397	157,870	256,984	158,144	45,032	31,629
12	3,954	55,350	55,350	55,350	15,814	19,768
13		35,582	75,118	19,768	3,954	3,954
14		3,954	3,954	7,907	3,954	
15	19.3%		20.7%		6.5% 3,954	
	4,725,226	7,333,230	9,094,365	5,909,548	2,730,527	5,120,808

Concentration of Conservation Elements and Intactness



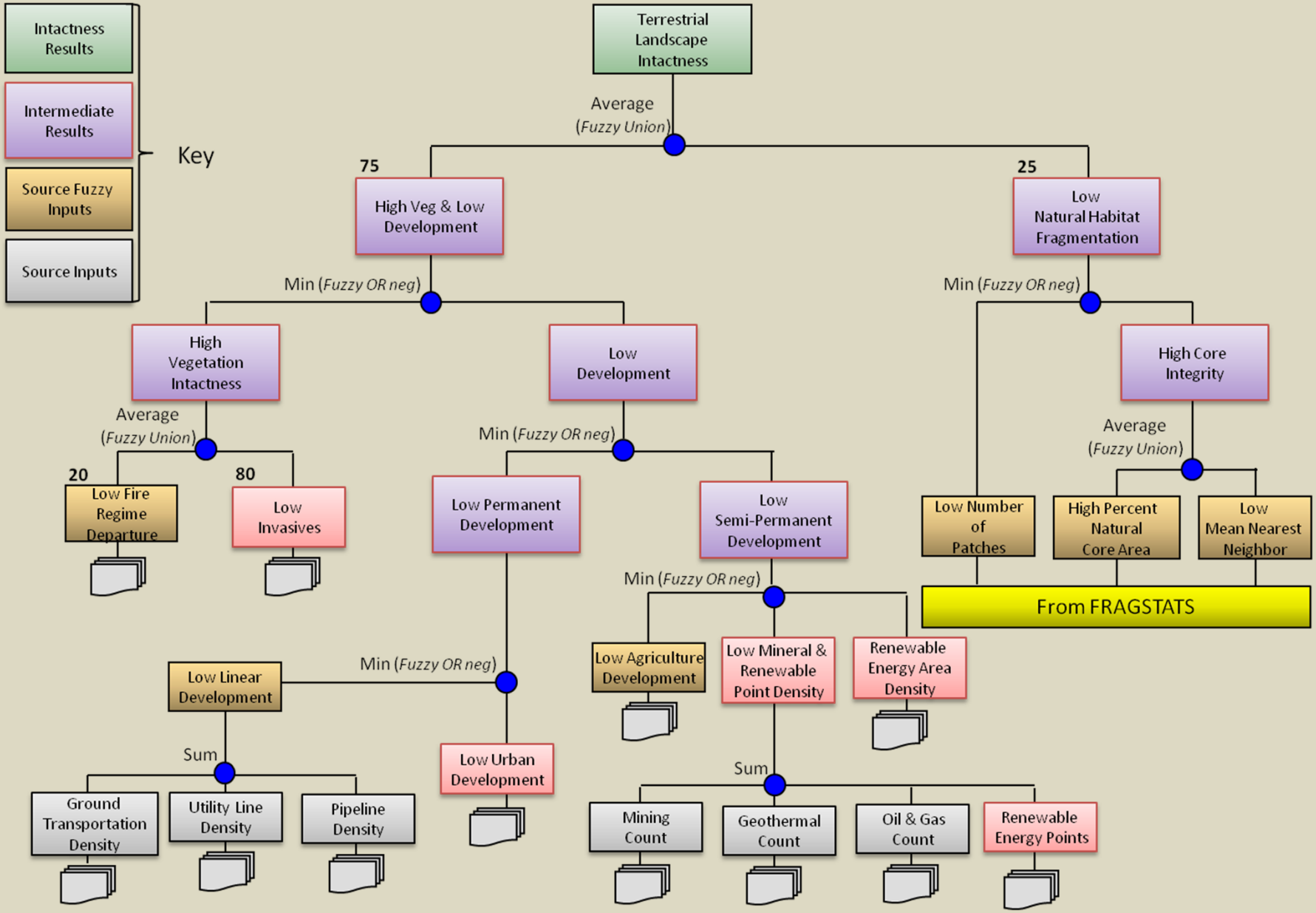
Near-term Development



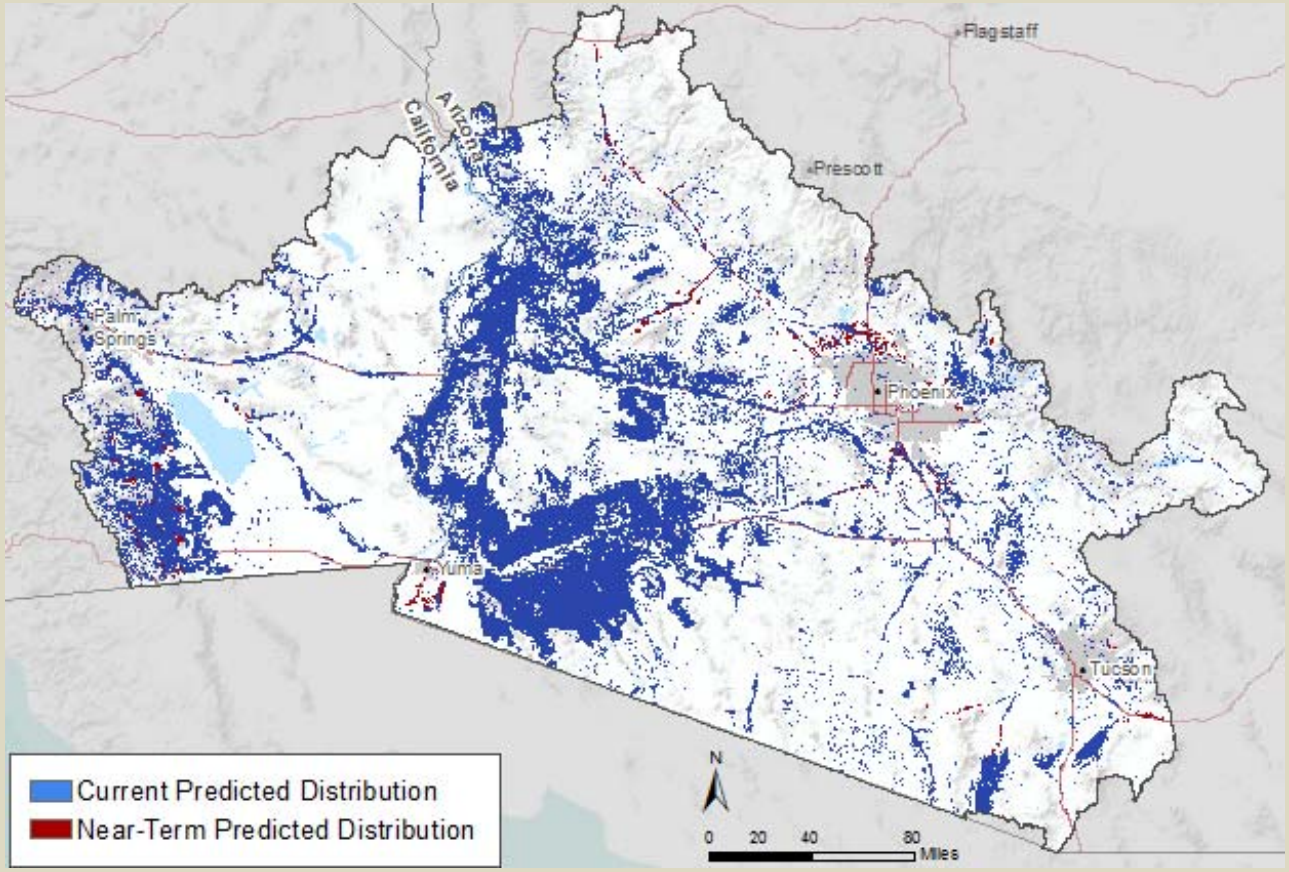
Near-term Development

Category	Current	Percent	Near-term	Percent	Change
Very High	3,995,843	11.44%	4,531,098	12.98%	**+1.53%**
High	2,178,777	6.24%	2,327,833	6.67%	**+0.43%**
Moderately High	2,033,282	5.82%	2,236,379	6.40%	**+0.58%**
Moderately Low	5,652,190	16.19%	5,303,730	15.19%	**-1.00%**
Low	9,229,573	26.43%	8,867,287	25.40%	**-1.04%**
Very Low	11,824,799	33.87%	11,648,137	33.36%	**-0.51%**

Near-term Intactness

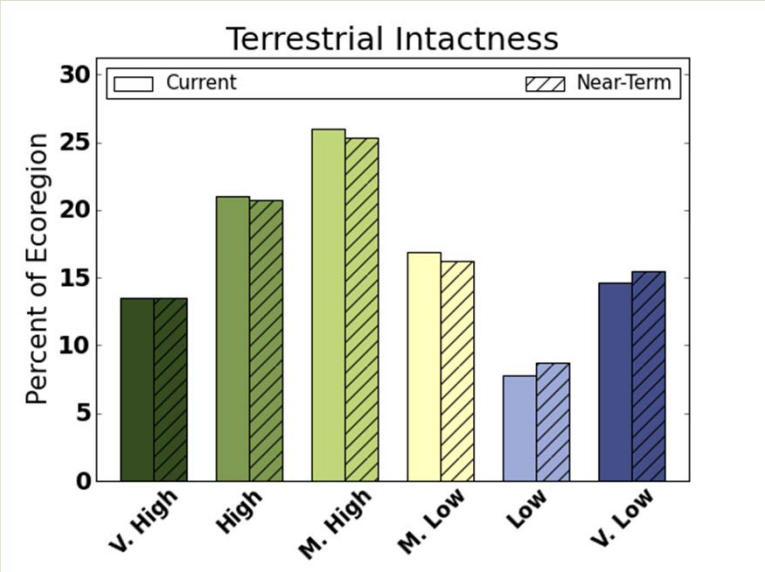


Near-term Intactness



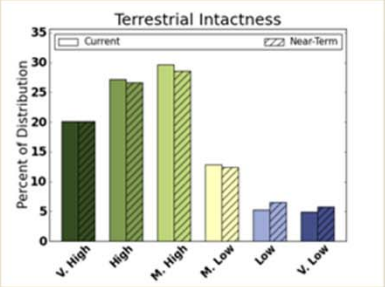
Near-term Intactness

Category	Current	Percent	Near-term	Percent	Change
Very High	4,725,329	13.53%	4,713,467	13.50%	**-0.03%**
High	7,333,389	21.00%	7,234,156	20.72%	**-0.28%**
Moderately High	9,094,563	26.05%	8,839,673	25.32%	**-0.73%**
Moderately Low	5,909,677	16.93%	5,679,133	16.27%	**-0.66%**
Low	2,730,587	7.82%	3,035,611	8.69%	**+0.87%**
Very Low	5,120,919	14.67%	5,412,424	15.50%	**+0.83%**

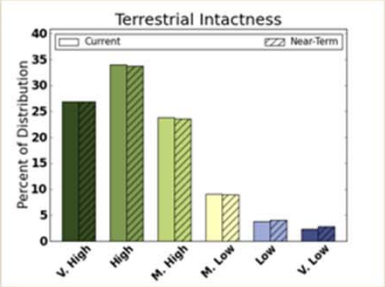


Near-term Status for Species

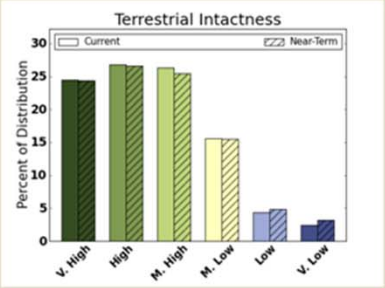
Mountain Lion



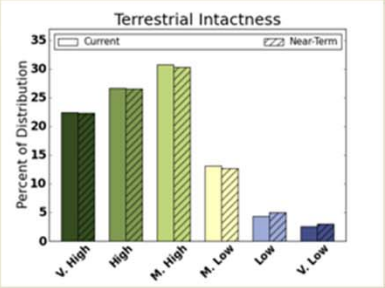
Desert Tortoise (agassizii)



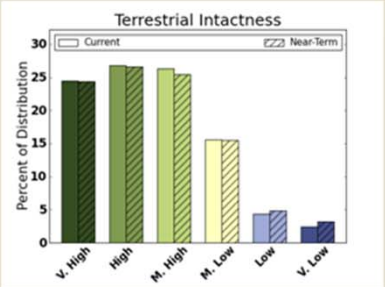
Mule Deer



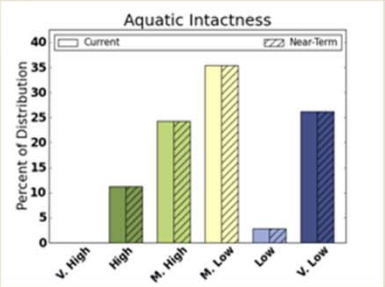
Desert Tortoise (morafkai)



Desert Bighorn Sheep

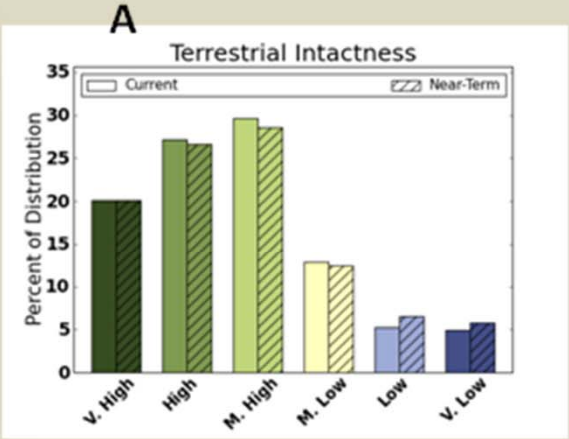


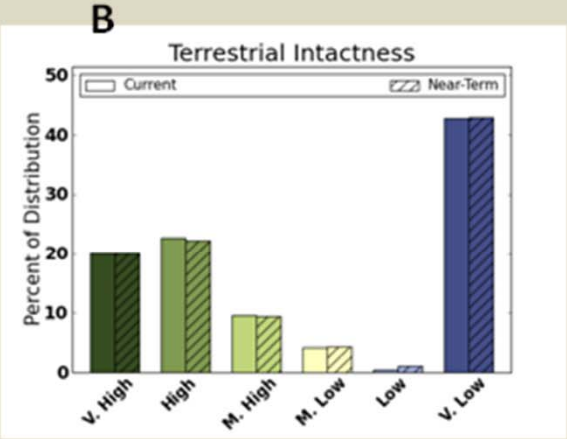
Lowland Leopard Frog



Near-term Status for Species

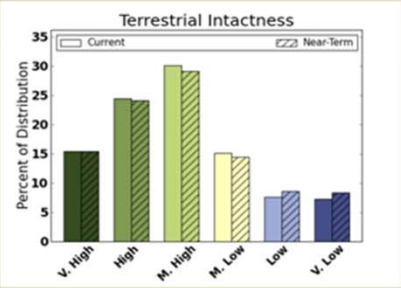
Mountain Lion



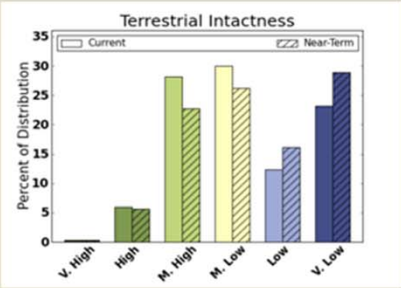


Near-term Status for Species

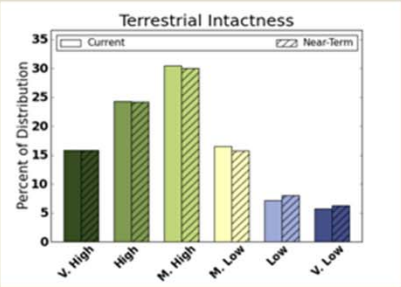
Golden Eagle



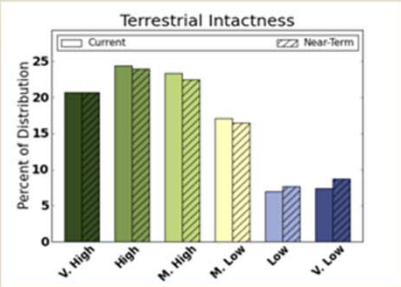
Southwest Willow Flycatcher



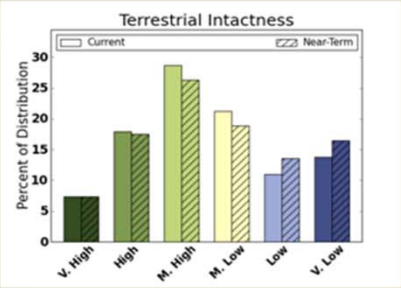
Lucy's Warbler



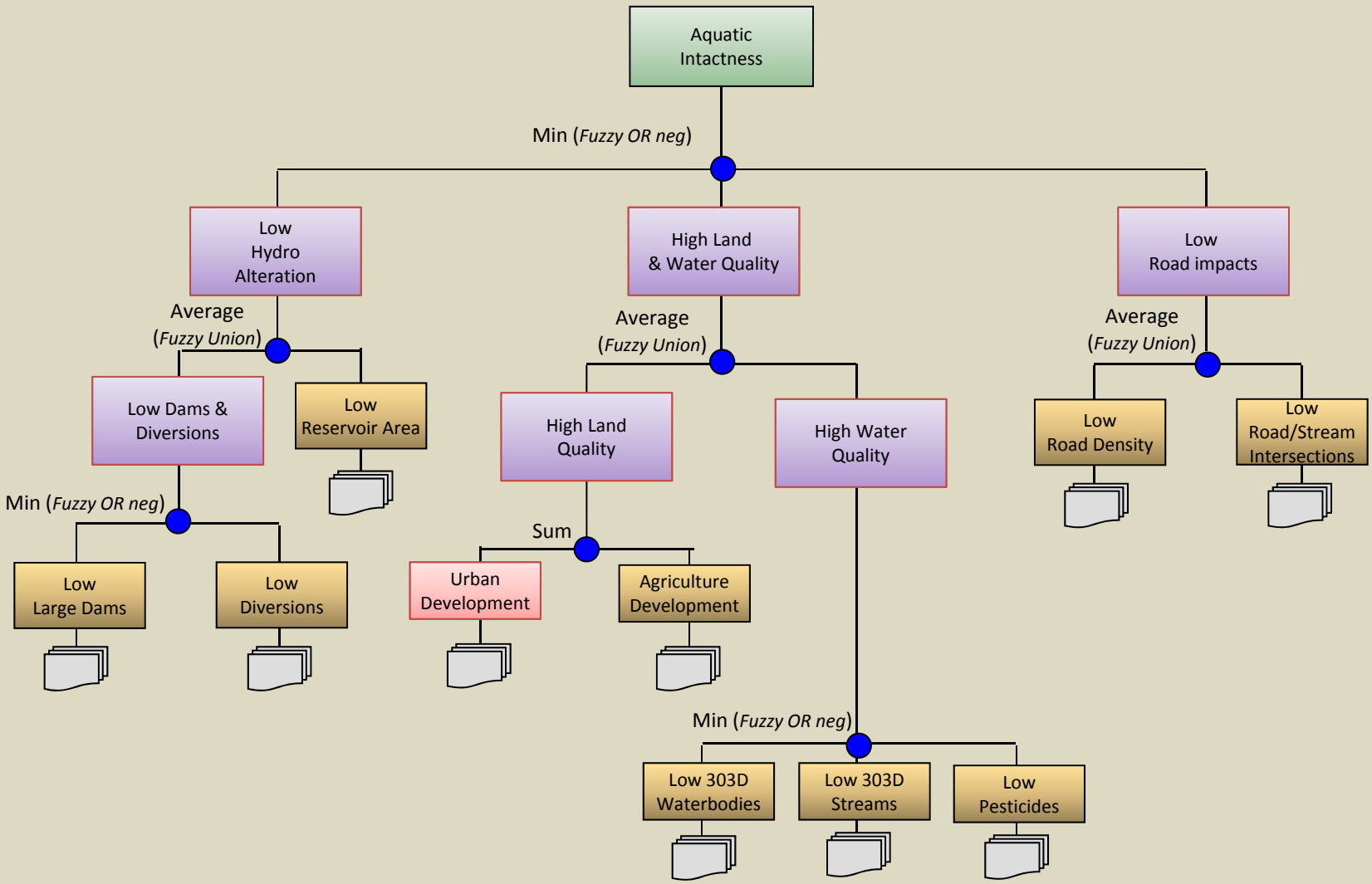
LeConte's Thrasher



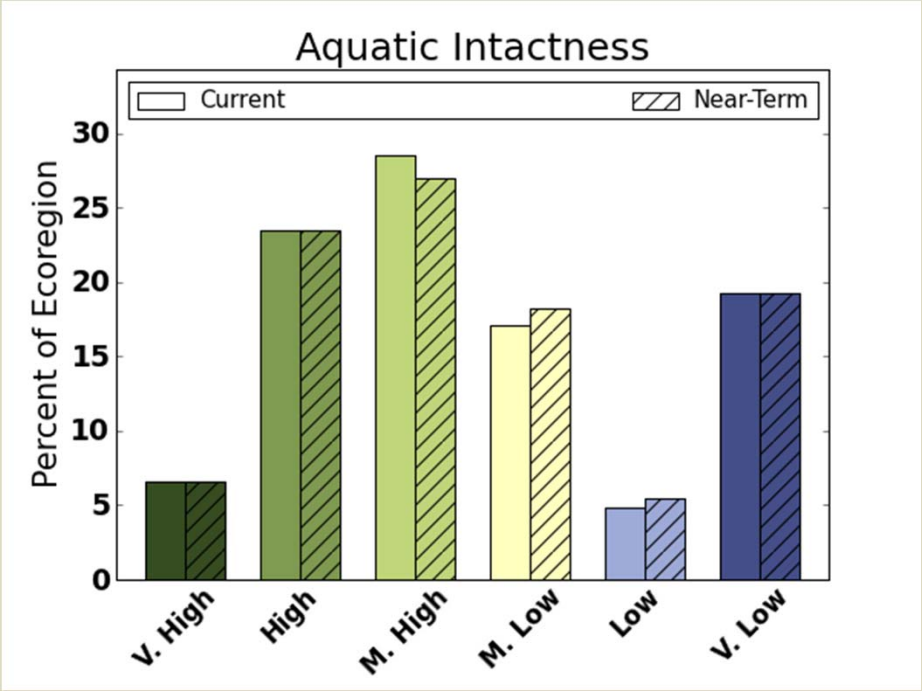
Bell's Vireo



Near-term Aquatic Intactness

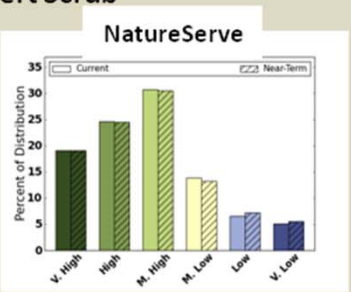


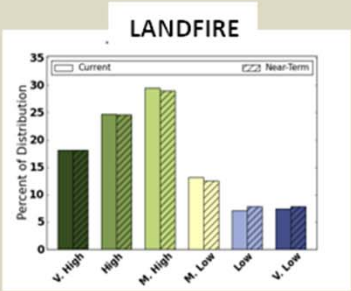
Near-term Aquatic Intactness



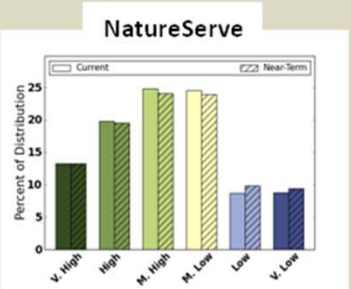
Near-term Status for Vegetation Communities

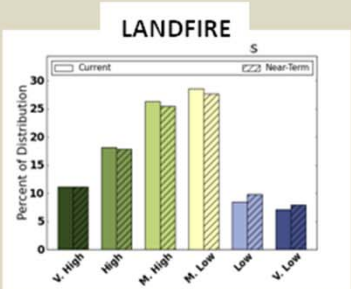
Sonoran Paloverde-Mixed Cacti Desert Scrub



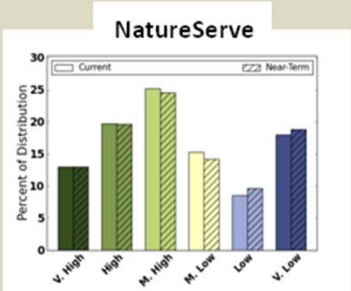


Sonora-Mojave Creosotebush-White Bursage Desert Scrub

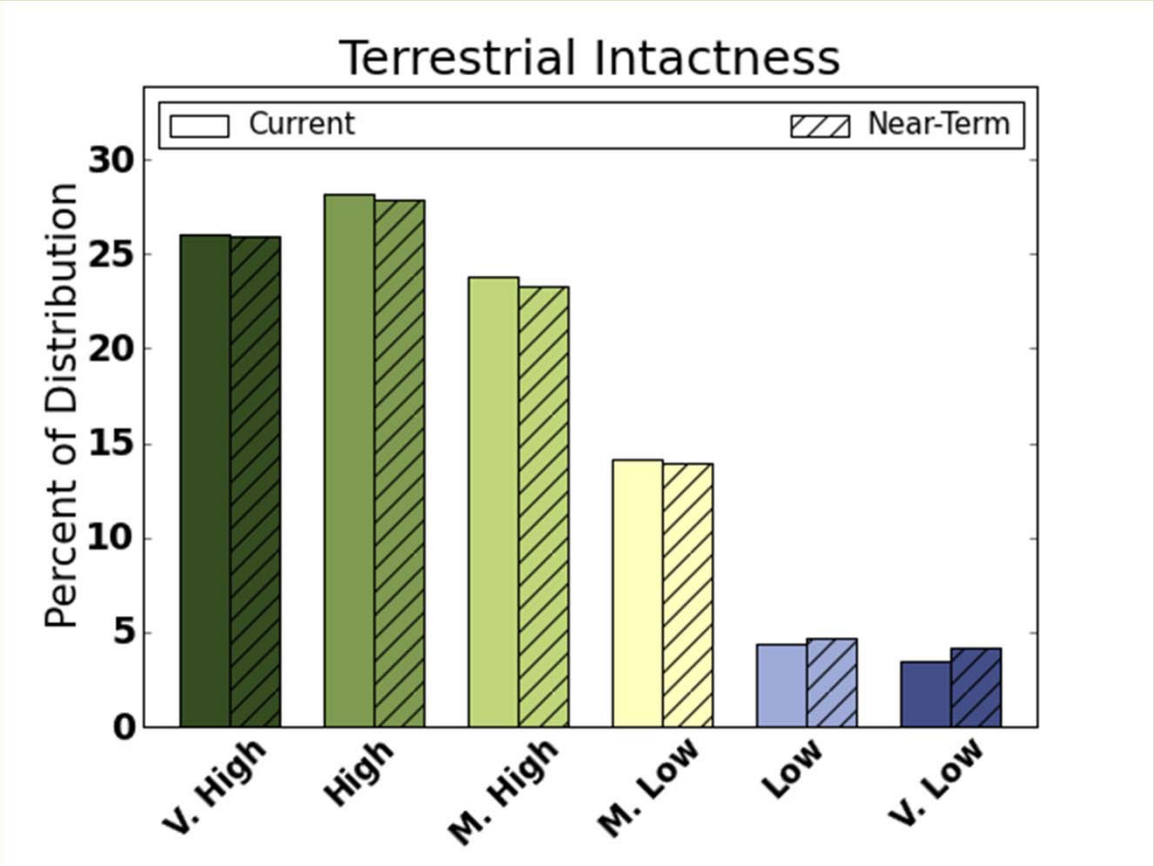




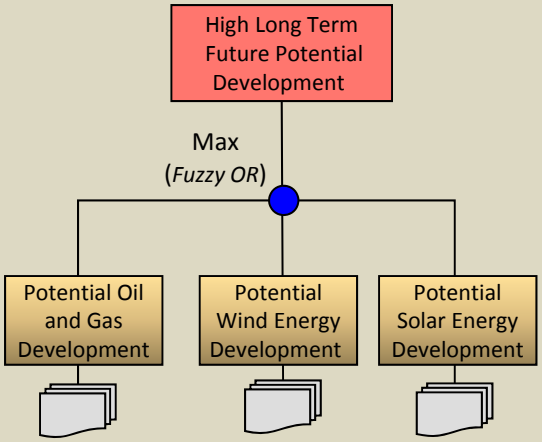
Riparian Vegetation

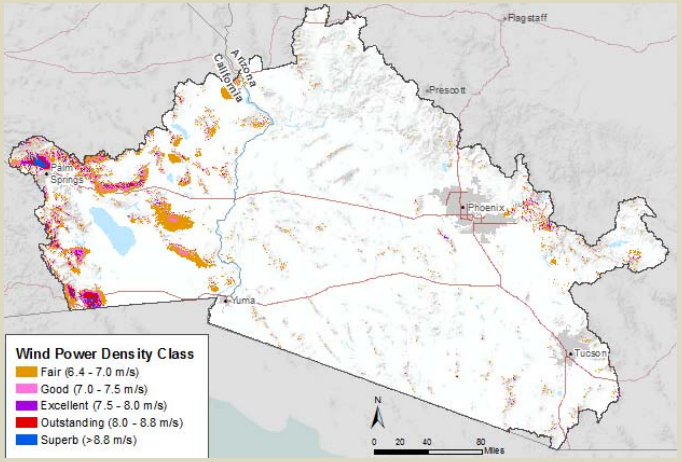


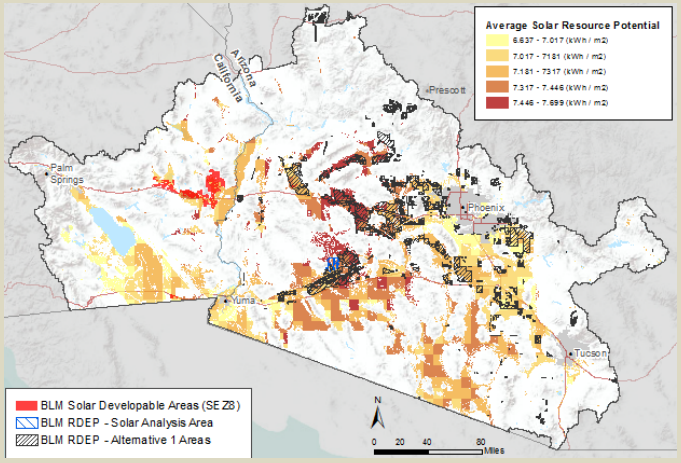
Near-term Status for Designated Lands



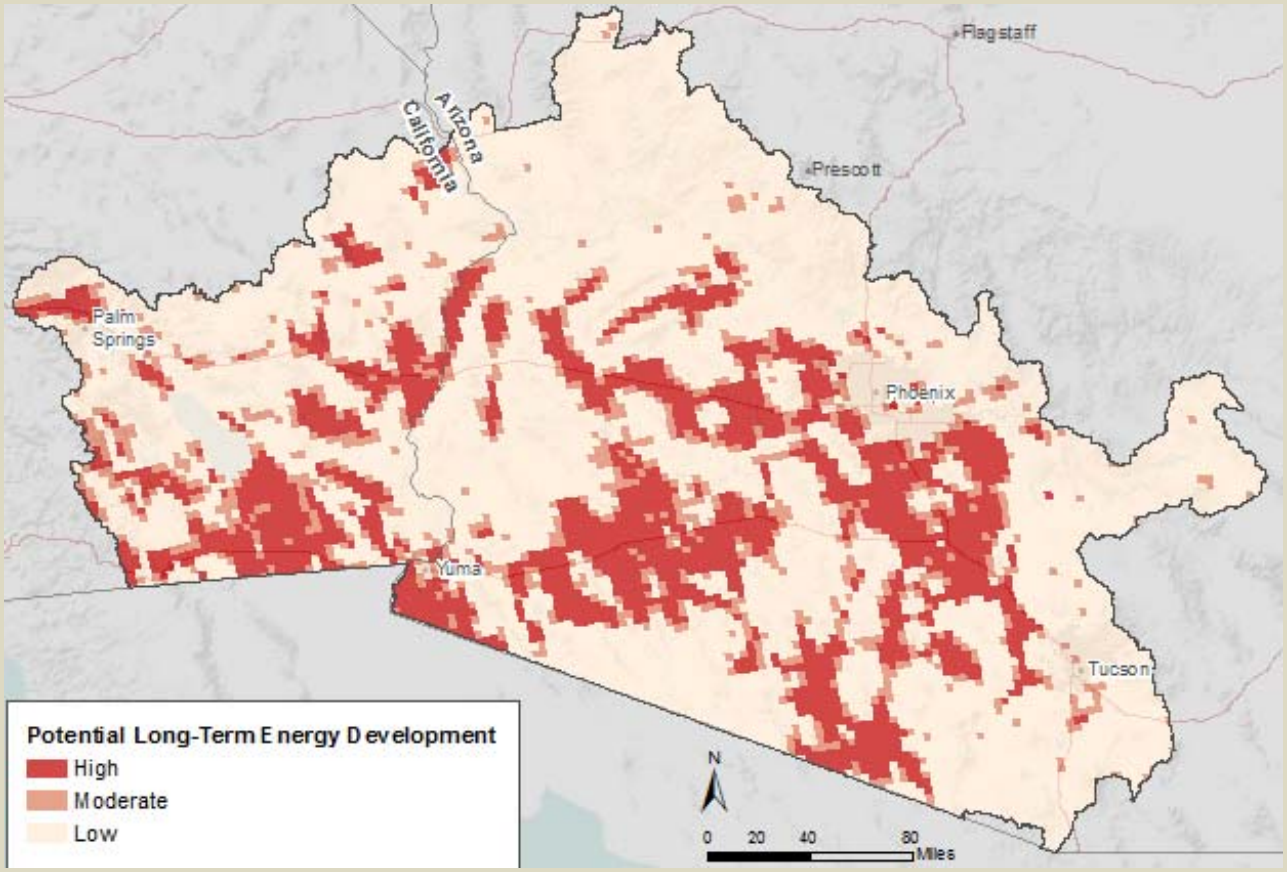
Potential Energy Development





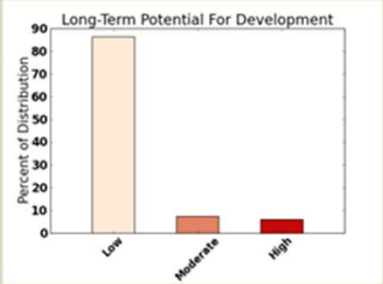


Potential Energy Development

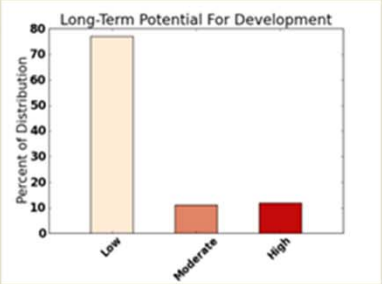


Potential Energy Development Impact on Species

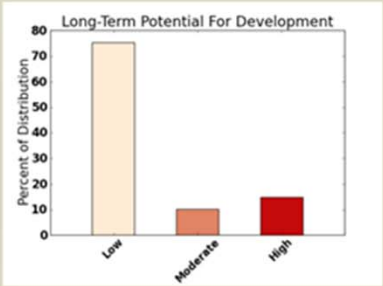
Mountain Lion



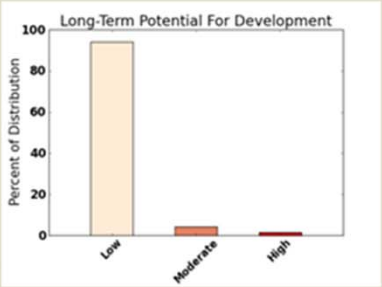
Desert Tortoise (agassizii)



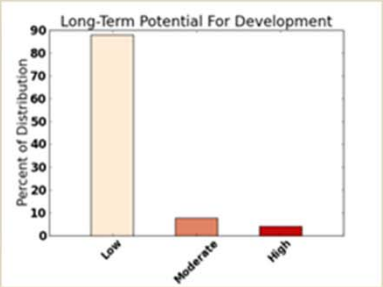
Mule Deer



Desert Tortoise (morafkai)

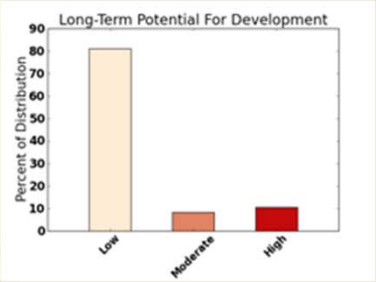


Desert Bighorn Sheep

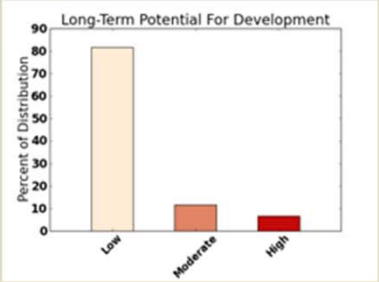


Potential Energy Development Impact on Species

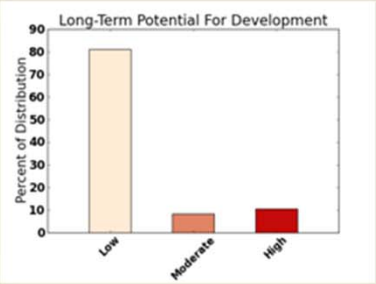
Golden Eagle



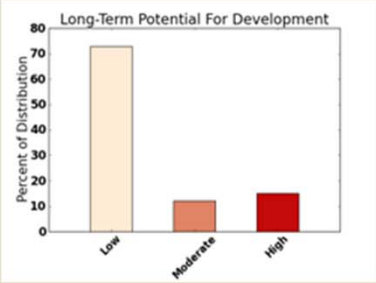
Southwest Willow Flycatcher



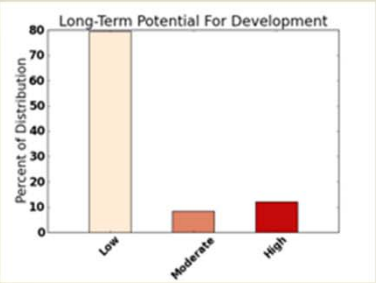
Lucy's Warbler



LeConte's Thrasher

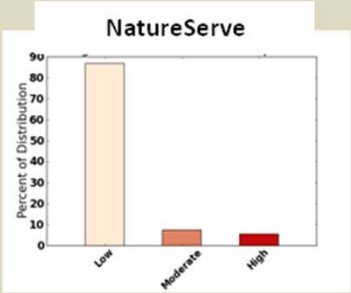


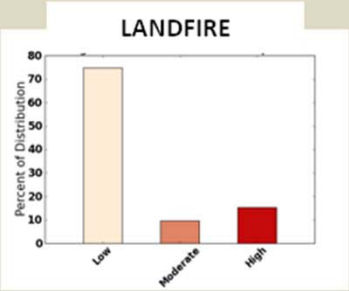
Bell's Vireo



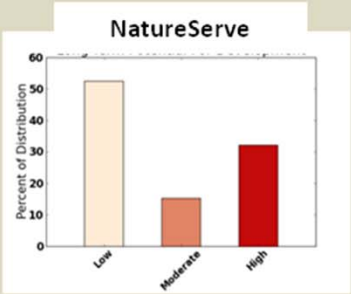
Potential Energy Development Impact on Vegetation Communities

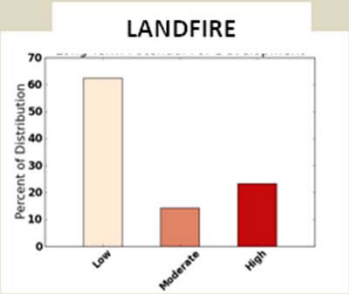
Sonoran Paloverde-Mixed Cacti Desert Scrub



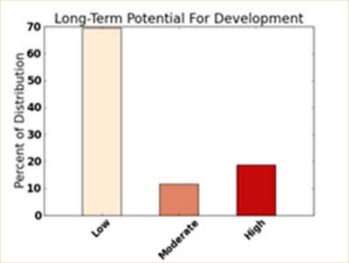


Sonora-Mojave Creosotebush-White Bursage Desert Scrub



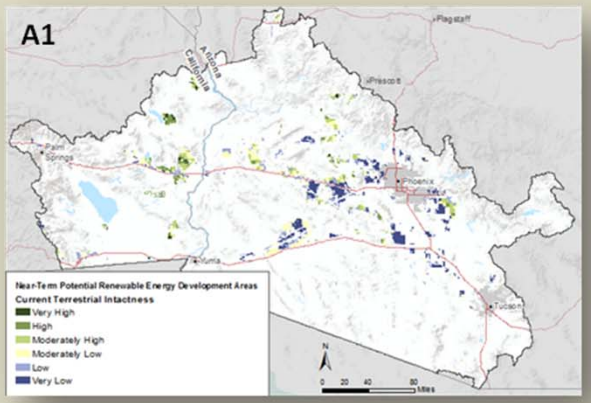


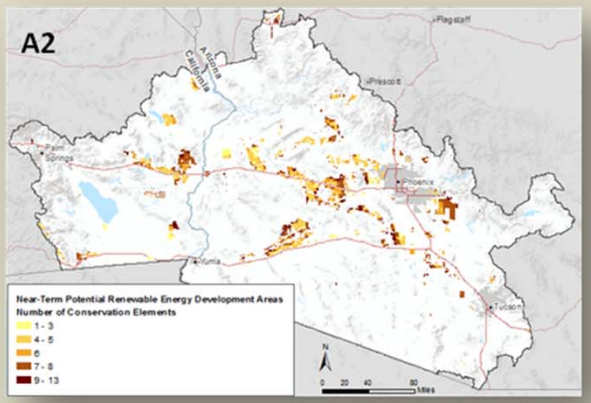
Riparian Vegetation



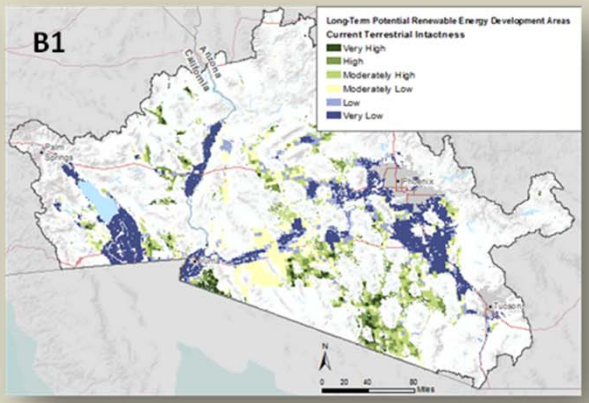
Concentration of Conservation Elements and Intactness

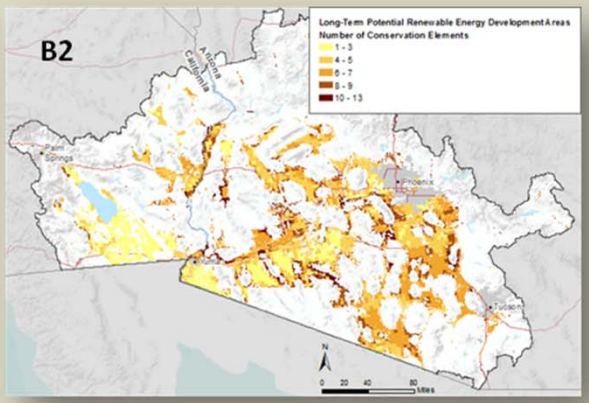
Near-term Renewable





Potential Renewable





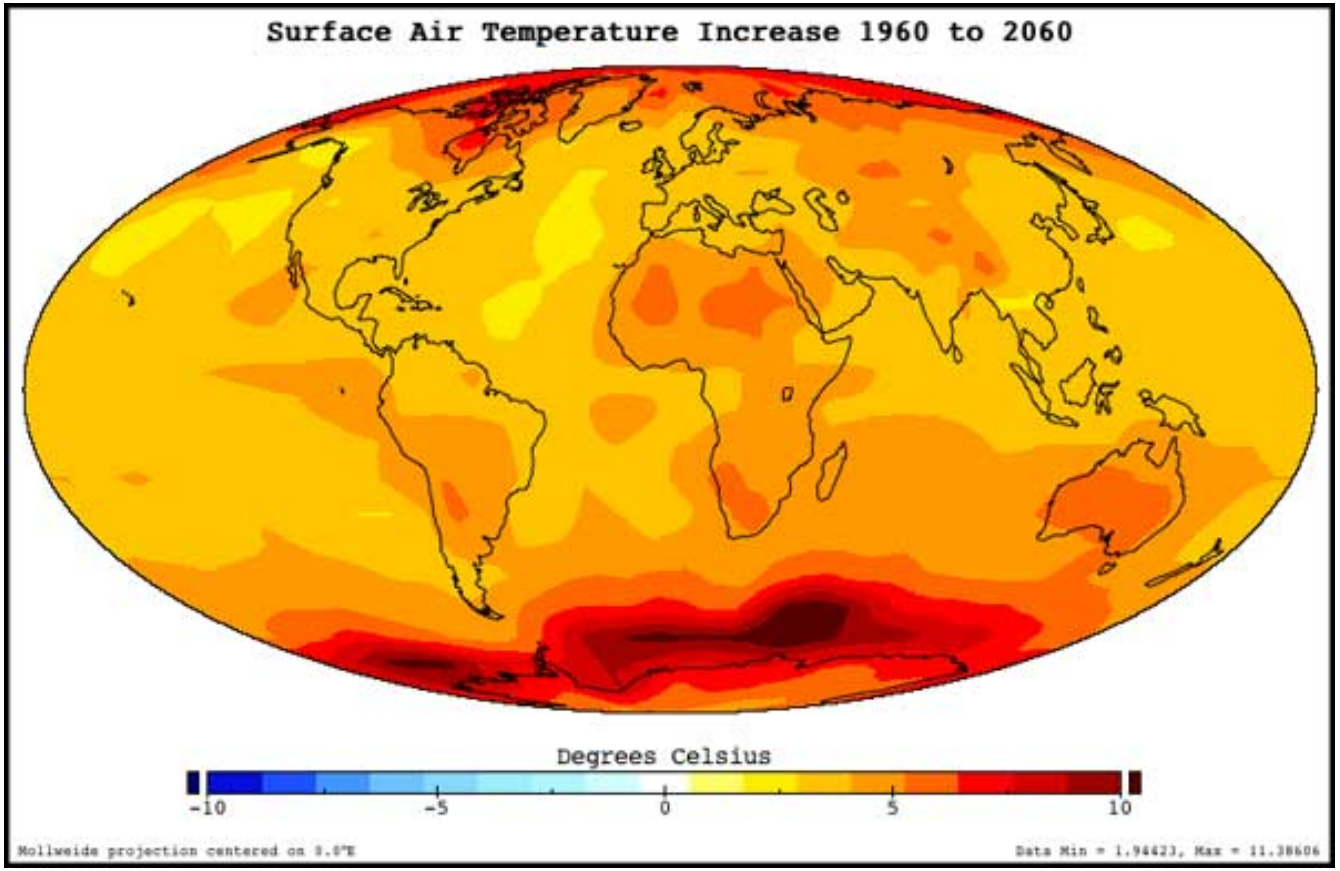
Concentration of Conservation Elements and Intactness

Number of CEs	Very High	High	Moderately High	Moderately Low	Low	Very Low	Totals
0	11%			31%		4	4
1	0	78	1,793	0	509	6,522	8,901
2	3,266	2,476	3,470	9,980	1,347	15,766	36,303
3	7	3,954	5,317	17,475	12,581	22,747	62,080
4	5,311	33,081	33,489	57,667	34,632	78,044	242,225
5	9,774	28,195	36,774	61,400	44,138	103,959	284,240
6	4,854	18,102	50,092	60,574	49,573	96,485	279,681
7	6,980	34,117	63,719	66,127	37,919	89,370	298,232
8	4,943	21,236	36,051	47,653	31,143	33,761	174,788
9	392	2,526	33,306	24,563	26,948	14,110	101,845
10	1,191	2,968	3,693	6,334	4,871	15,469	34,526
11	0	0	0	886	0	0	886
13	18% 0	0	0	40% 15	0	32	47
Totals	**36,719**	**146,732**	**267,703**	**352,675**	**243,661**	**476,268**	**1,523,758**

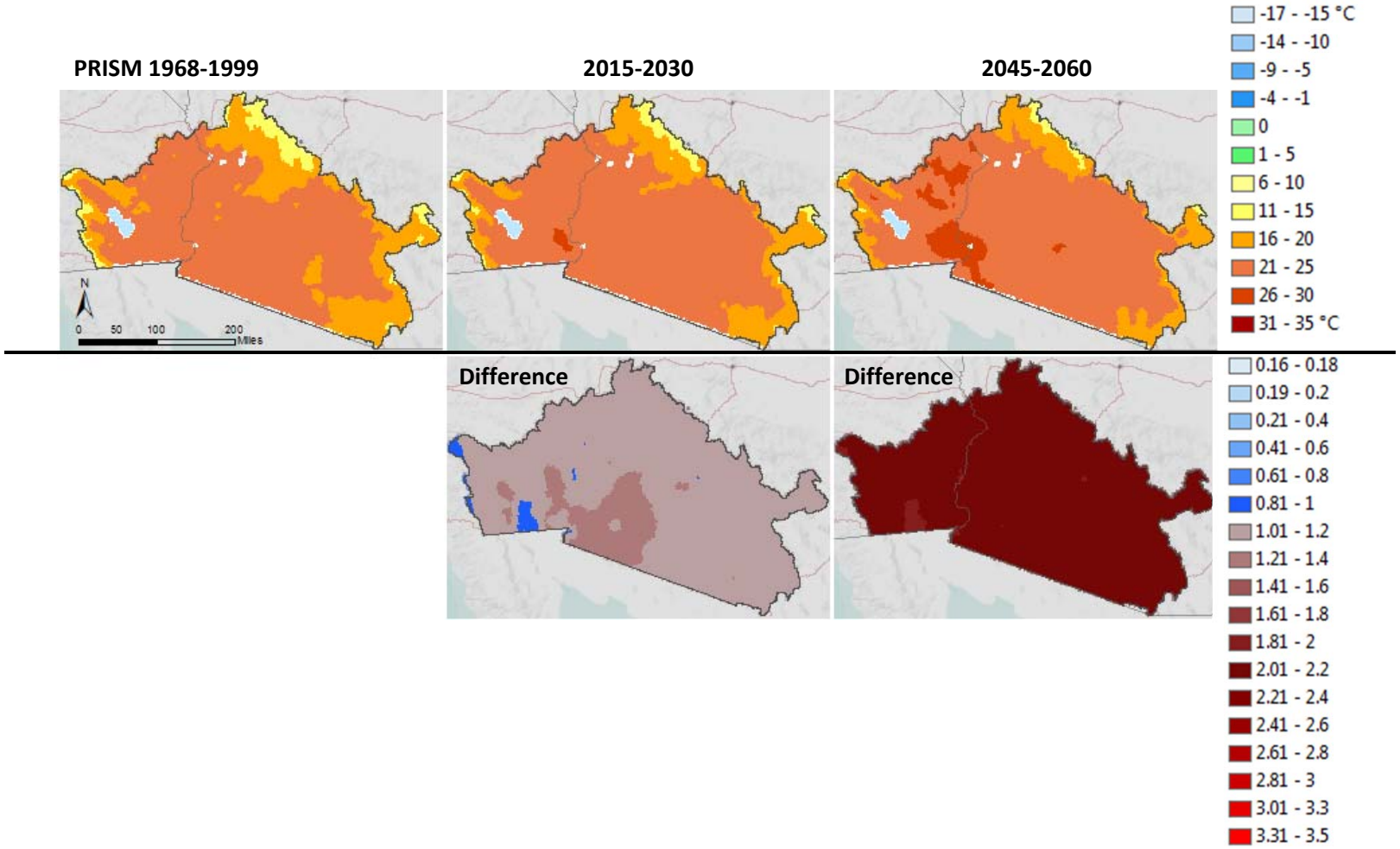
Concentration of Conservation Elements and Intactness

Number of CEs	Very High	High	Moderately High	Moderately Low	Low	Very Low	Totals
0	13%	0	0	36% 0	6,968	125,247	132,216
1		20,270	48,932	47,185	14,471	164,887	317,428
2		49,488	84,937	68,864	21,651	237,925	522,226
3		53,279	88,518	205,563	48,168	248,860	672,812
4		99,259	127,843	231,331	104,577	293,262	895,990
5		155,629	234,901	186,315	98,927	498,232	1,219,561
6		232,568	379,855	225,690	137,690	360,316	1,375,692
7		110,654	202,064	267,959	109,951	338,006	1,064,456
8		128,844	151,565	132,135	82,706	167,165	693,696
9		19,779	114,893	97,819	61,806	89,962	397,034
10		18,860	53,011	50,952	19,485	50,524	207,918
11		3,063	17,625	18,408	2,077	6,180	47,353
12		0	461	471	789	5,607	7,328
13	20%	0	459	31% 2,919	0	629	4,007
Totals		**891,693**	**1,505,063**	**1,535,611**	**709,266**	**2,586,803**	**7,228,435**

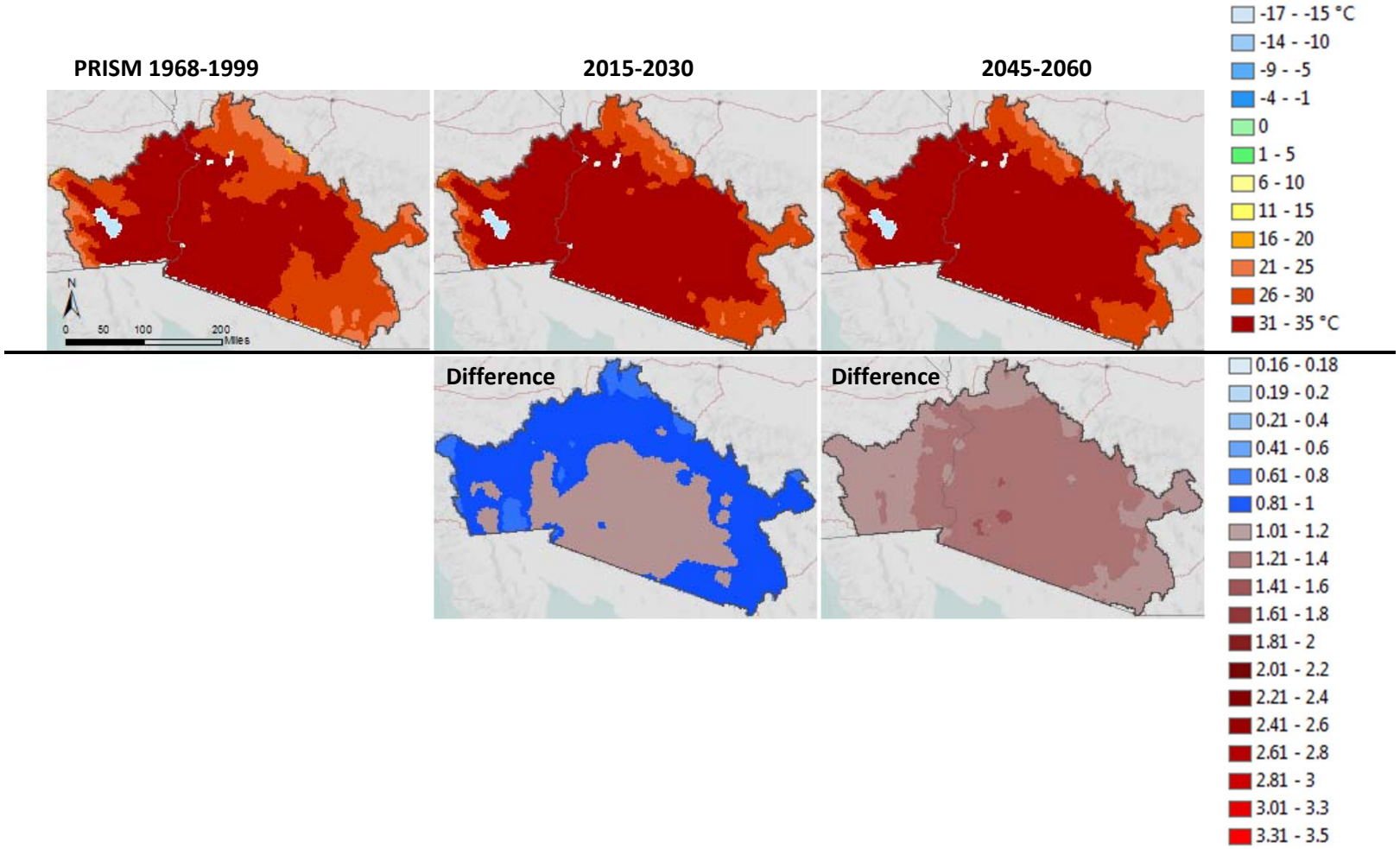
Climate Change



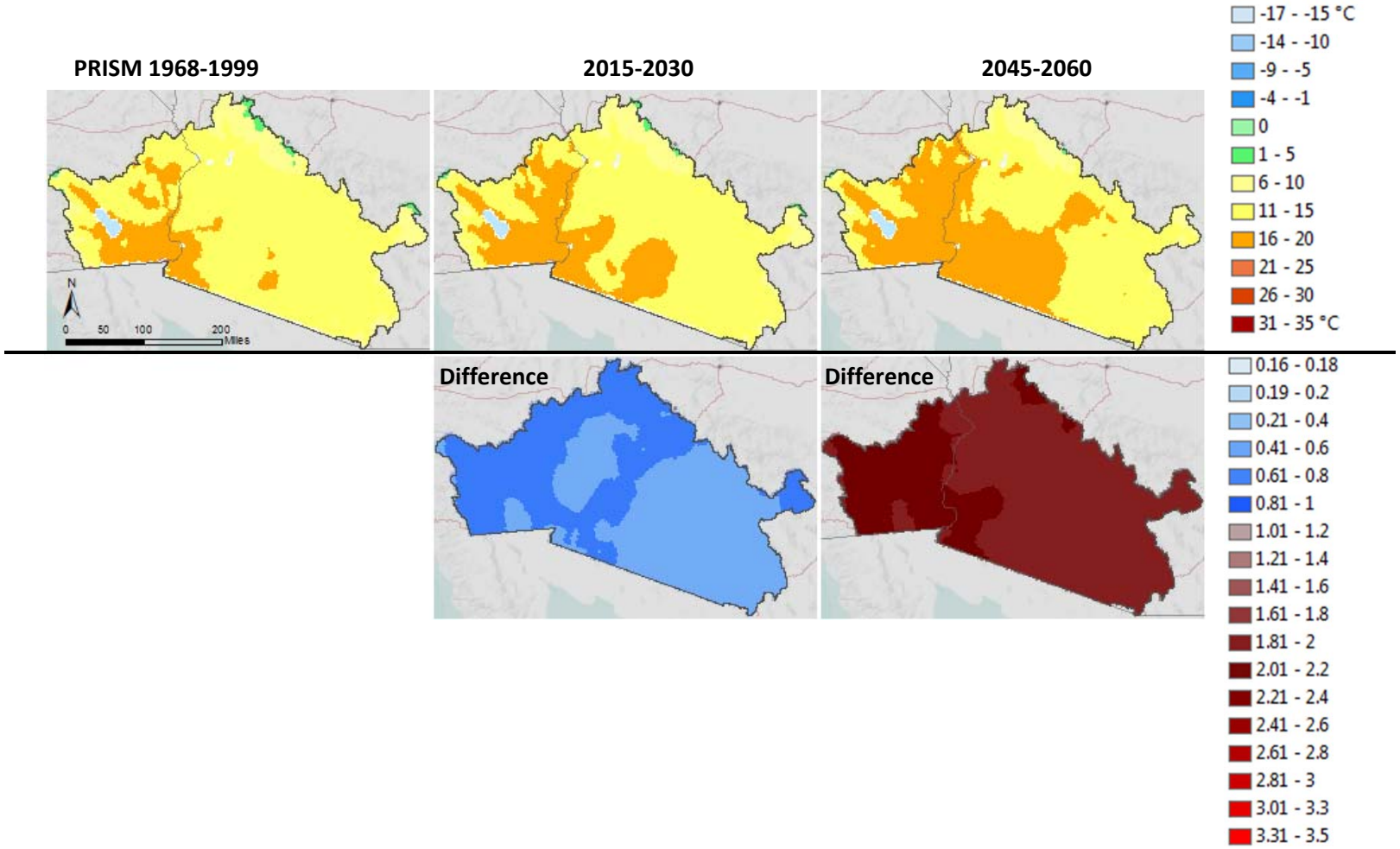
Average Annual Temperature



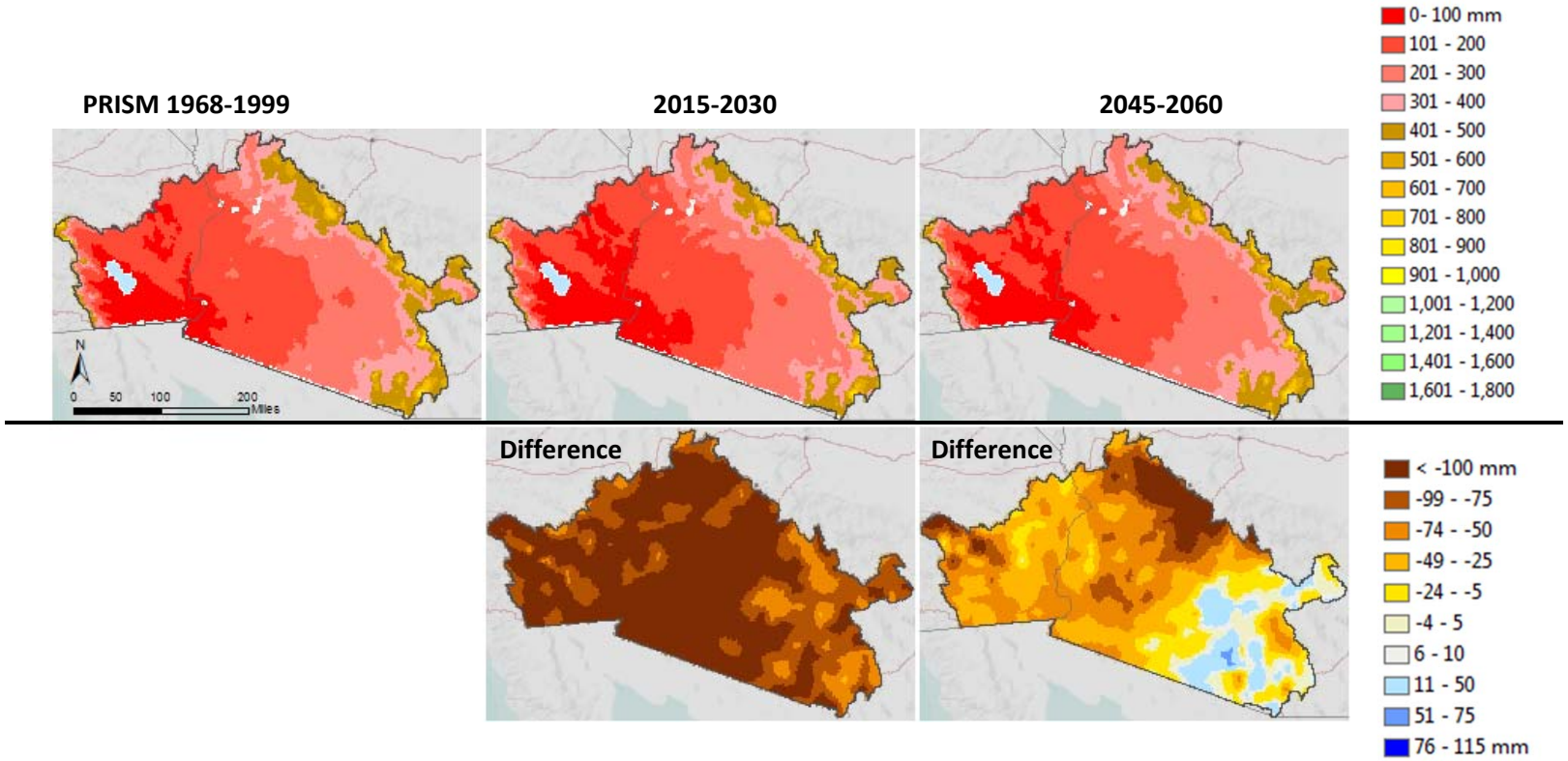
Average Summer Temperature



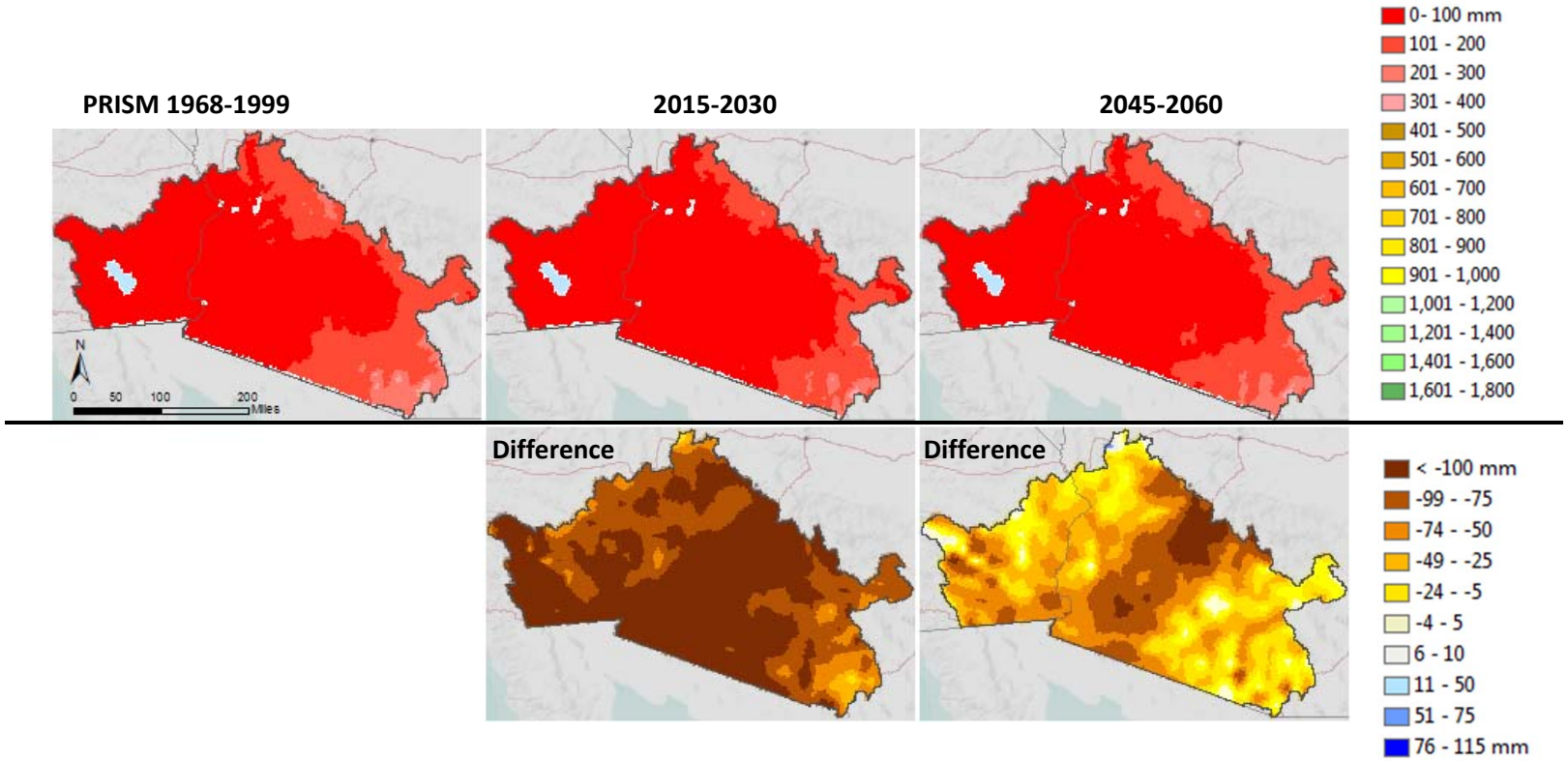
Average Winter Temperature



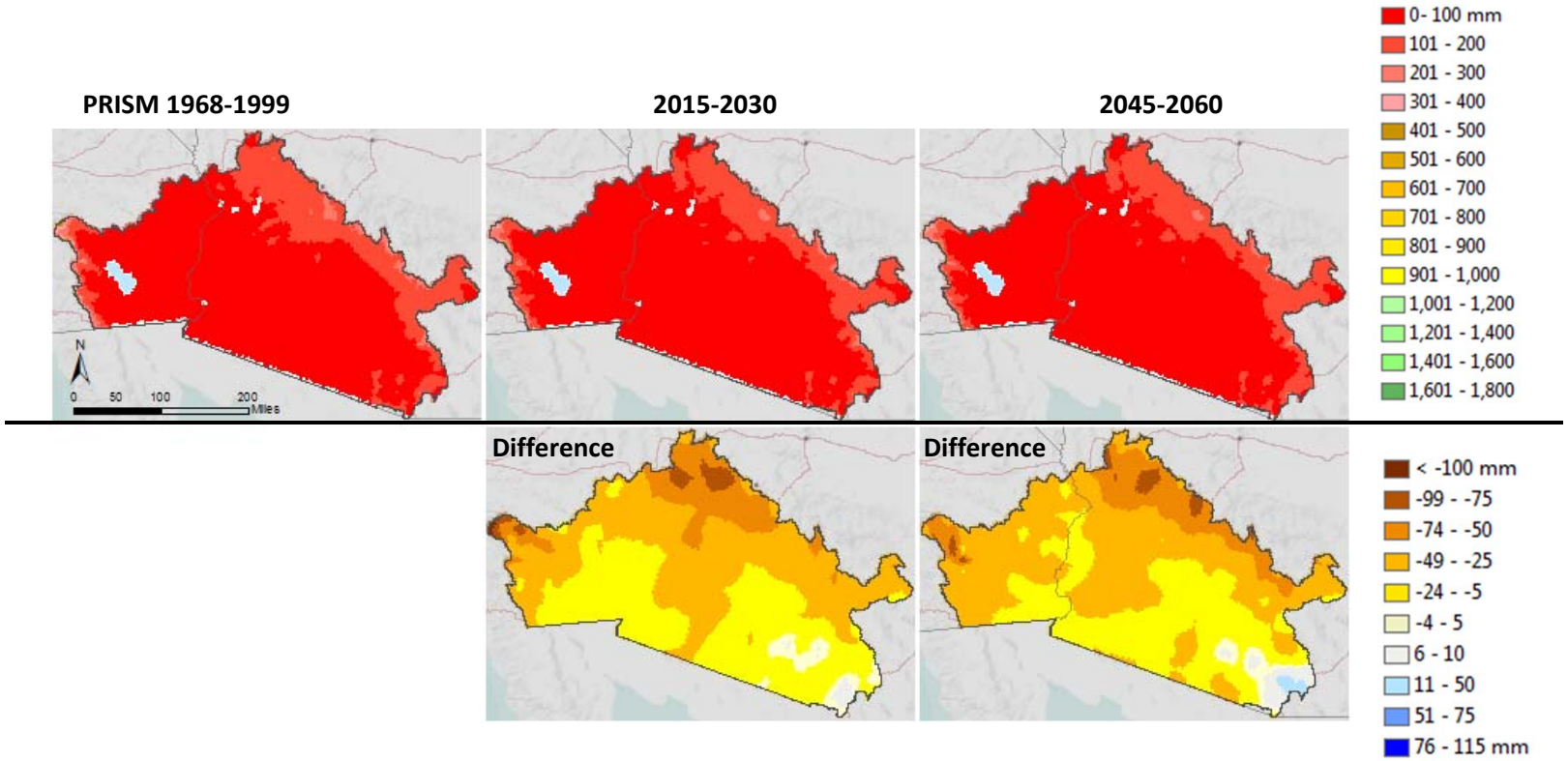
Average Annual Precipitation



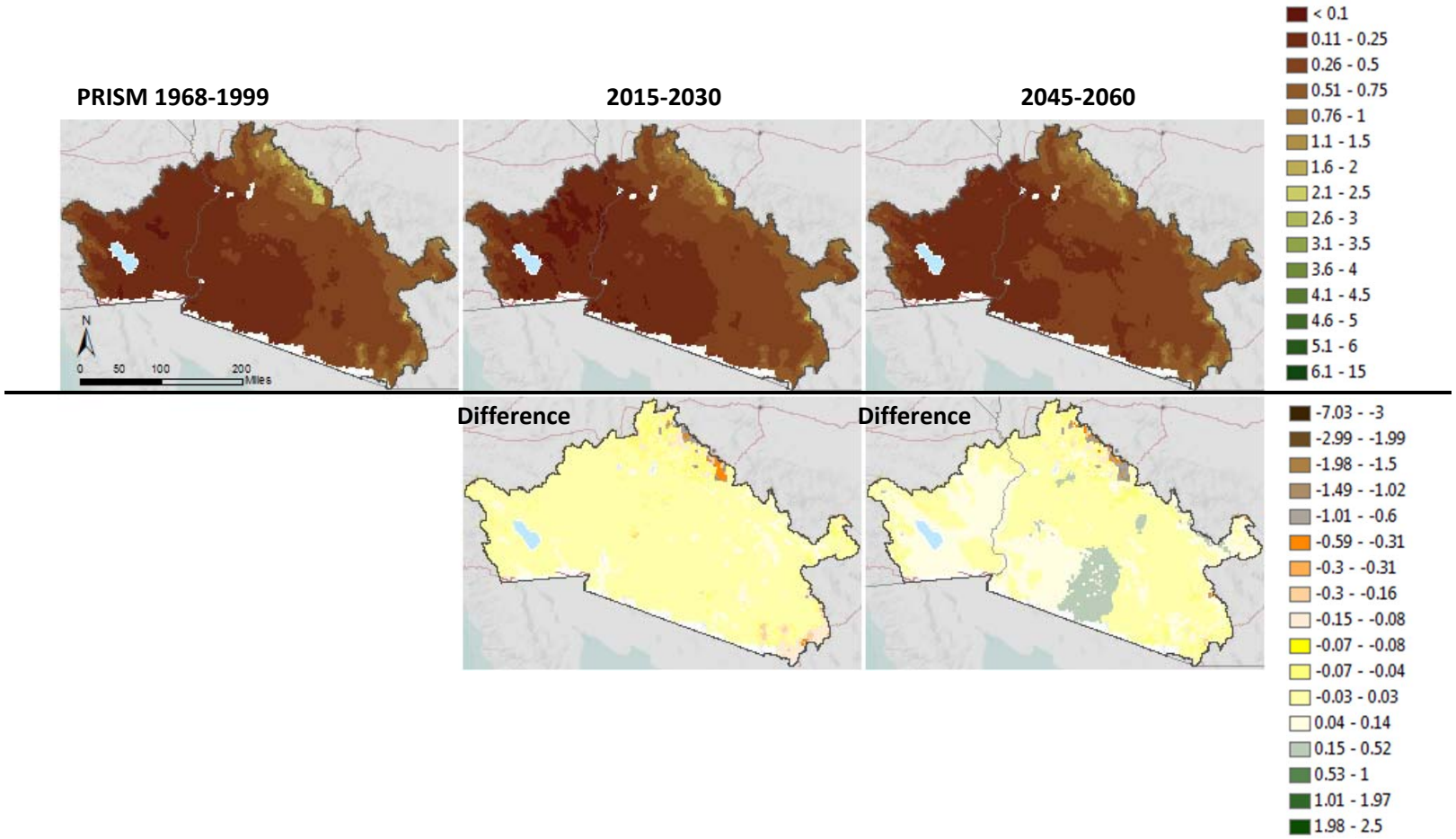
Average Summer Precipitation



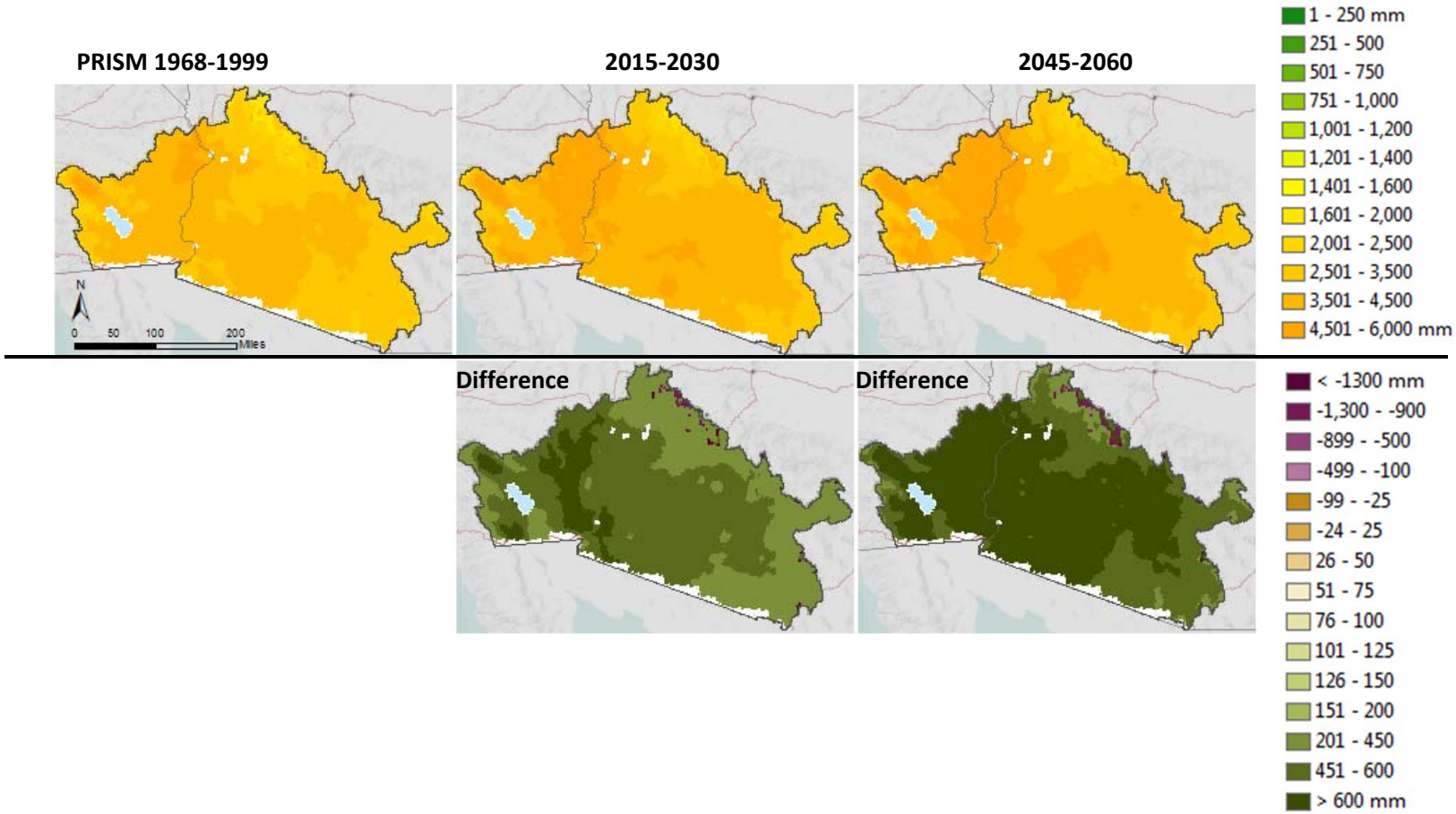
Average Winter Precipitation



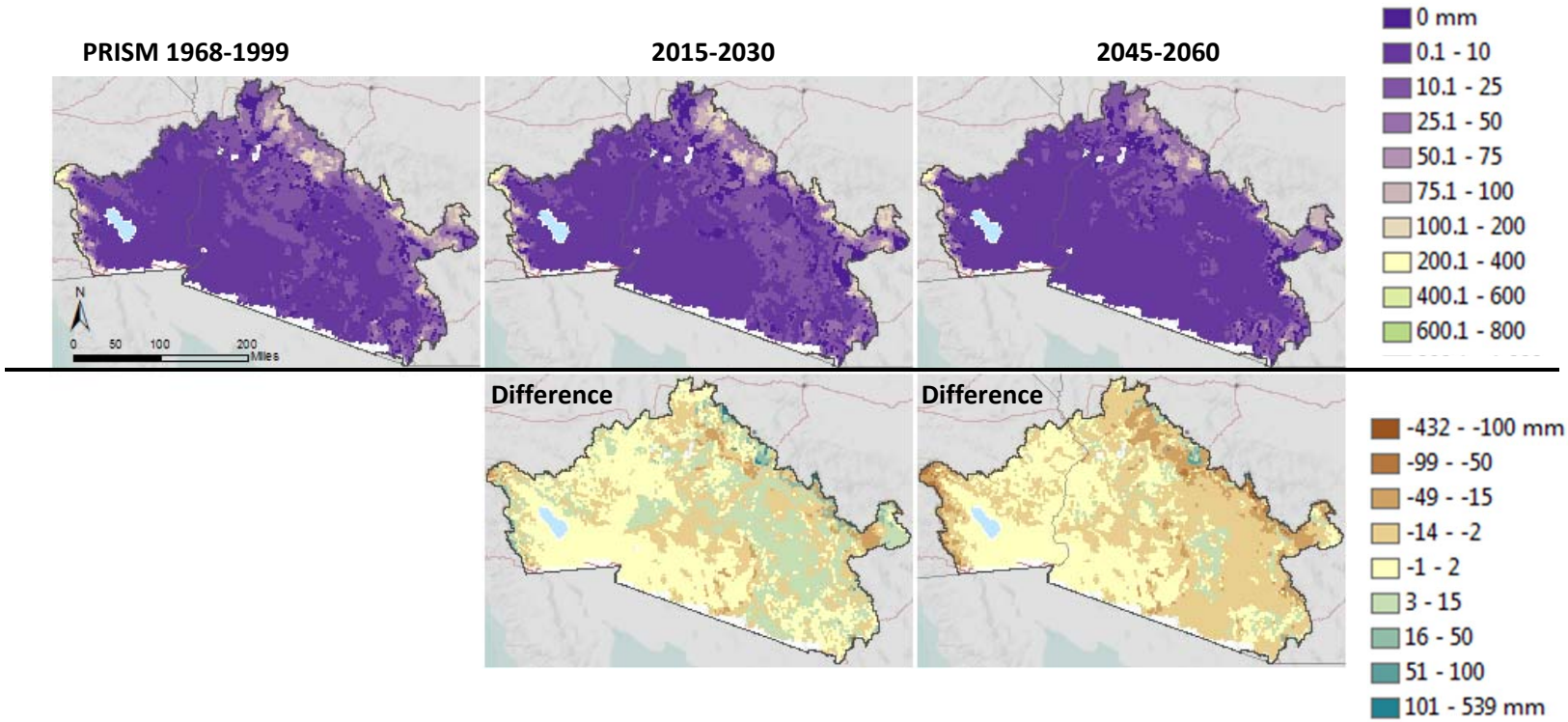
Leaf Area Index



Potential Evapotranspiration

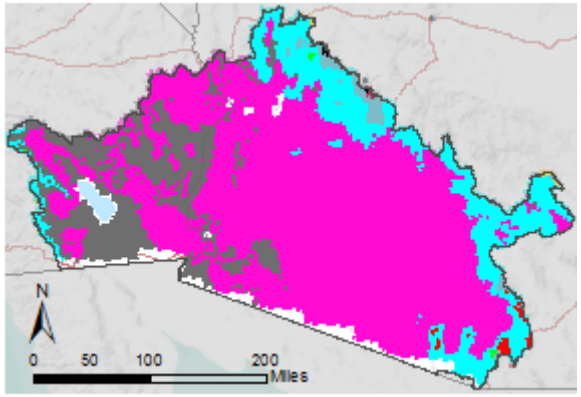


Runoff

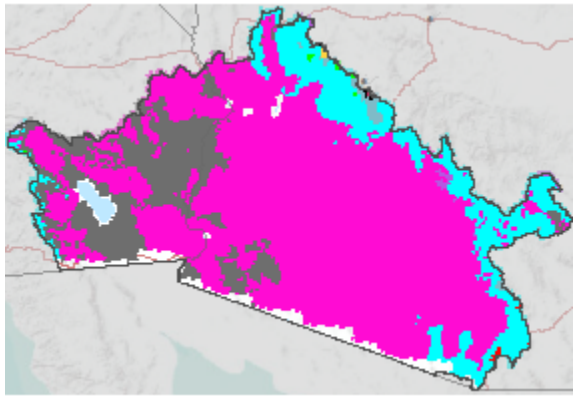

PRISM 1968-1999
2015-2030
2045-2060
0 mm
0.1 - 10
10.1 - 25
25.1 - 50
50.1 - 75
75.1 - 100
100.1 - 200
200.1 - 400
400.1 - 600
600.1 - 800
N
0 50 100 200
Miles
Difference
Difference
-432 - -100 mm
-99 - -50
-49 - -15
-14 - -2
-1 - 2
3 - 15
16 - 50
51 - 100
101 - 539 mm

Change in Vegetation

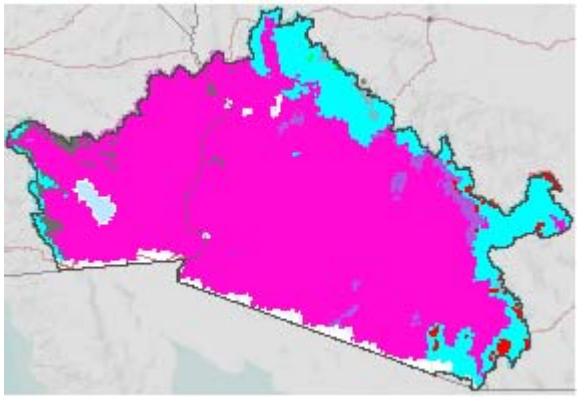
PRISM 1968-1999



2015-2030



2045-2060

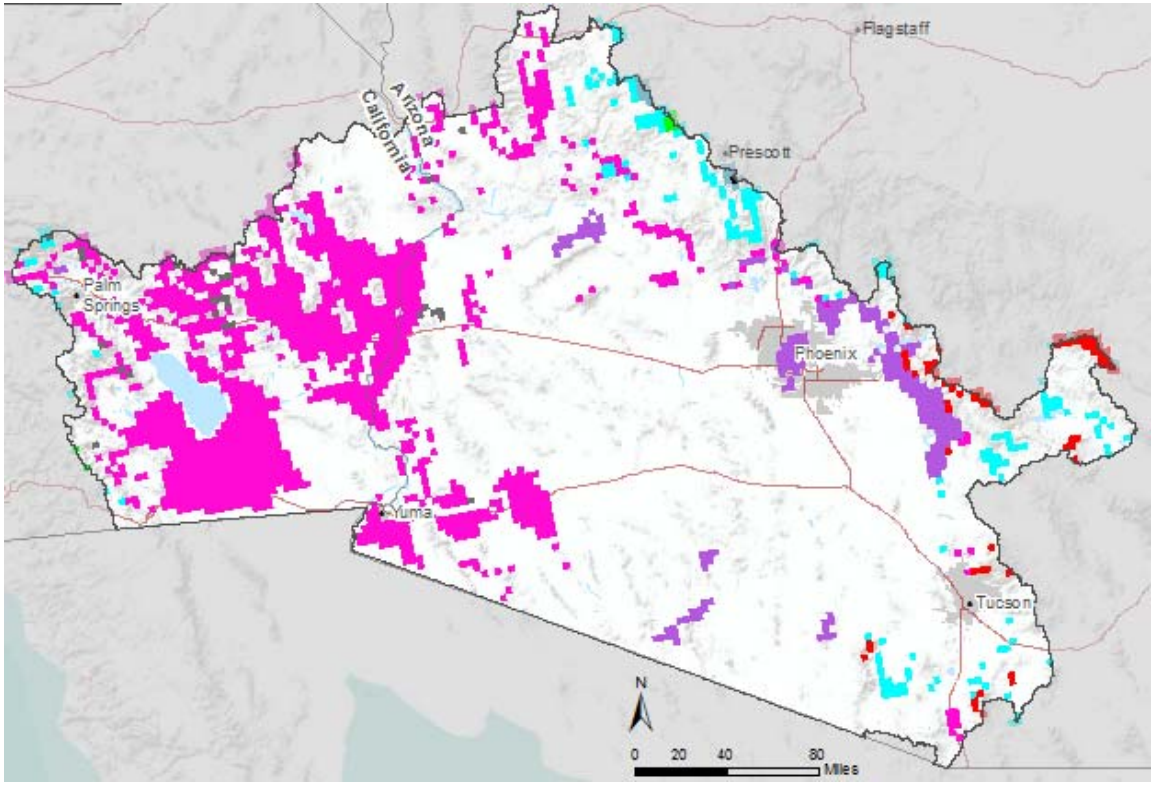


- Tree savanna mixed warm (EN)
- Tree savanna evergreen needle continental
- Tree savanna PJ continental
- Tree savanna PJ maritime
- Shrub savanna evergreen micro
- Shrub savanna subtropical mixed
- Shrubland subtropical xeromorphic
- Shrubland subtropical mediterranean
- Grass mid C3/C4
- Grass short C3/C4
- Grass short C4
- Grass semi desert C4
- Desert subtropical

Change in Vegetation

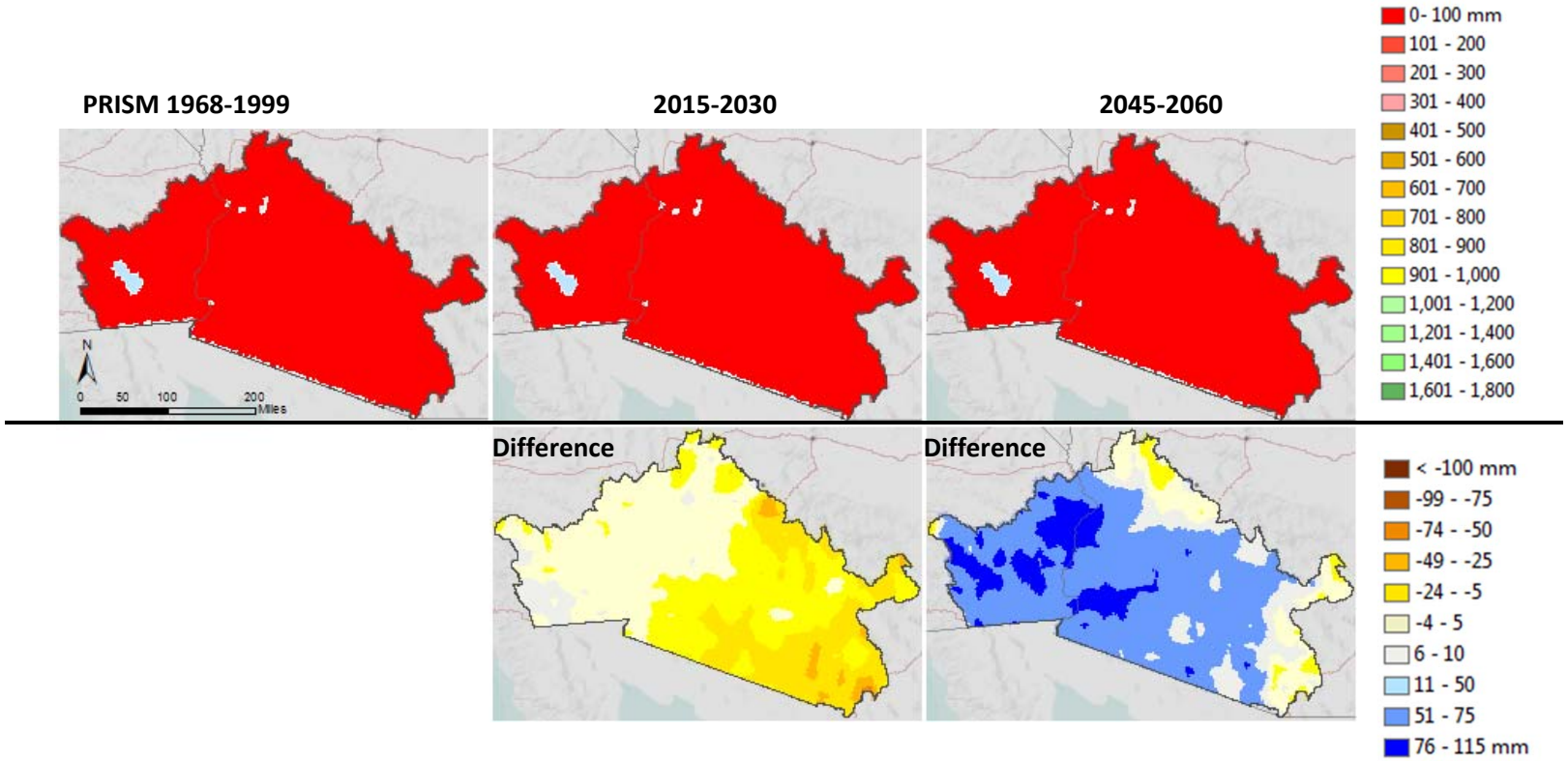
Vegetation Class	PRISM	2045-2060	Change
Tree Savanna Mixed Warm(EN)	593,053	253,036	-340,017
Tree Savanna Evergreen Needle Continental	23,722	0	-23,722
Tree Savanna PJ Continental	39,537	3,954	-35,583
Tree Savanna PJ Maritime	3,954	0	-3,954
Shrub Savanna Evergreen Micro	39,537	19,768	-19,768
Shrub Savanna Subtropical Mixed	177,916	434,905	256,990
Shrubland Subtropical Xeromorphic	5,902,853	5,851,455	-51,398
Shrubland Subtropical Mediterranean	47,444	47,444	0
Grass MidC3C4	15,815	0	-15,815
Grass ShortC3C4	75,120	0	-75,120
Grass ShortC4	7,907	759,108	751,200
Grass SemiDesertC4	22,350,188	26,687,381	4,337,194
Desert Subtropical	5,365,152	585,146	-4,780,006

Change in Vegetation



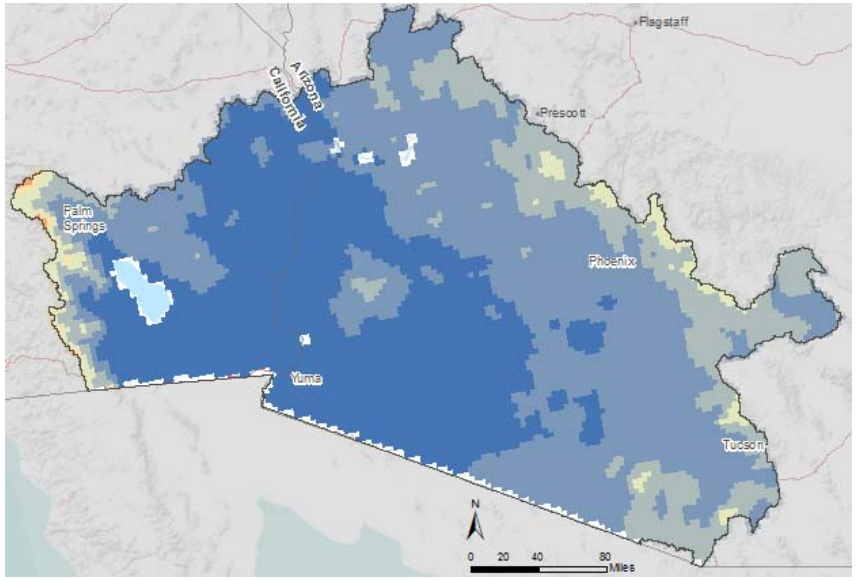
- Tree savanna mixed warm (EN)
- Tree savanna evergreen needle continental
- Tree savanna PJ continental
- Tree savanna PJ maritime
- Shrub savanna evergreen micro
- Shrub savanna subtropical mixed
- Shrubland subtropical xeromorphic
- Shrubland subtropical mediterranean
- Grass mid C3/C4
- Grass short C3/C4
- Grass short C4
- Grass semi desert C4
- Desert subtropical

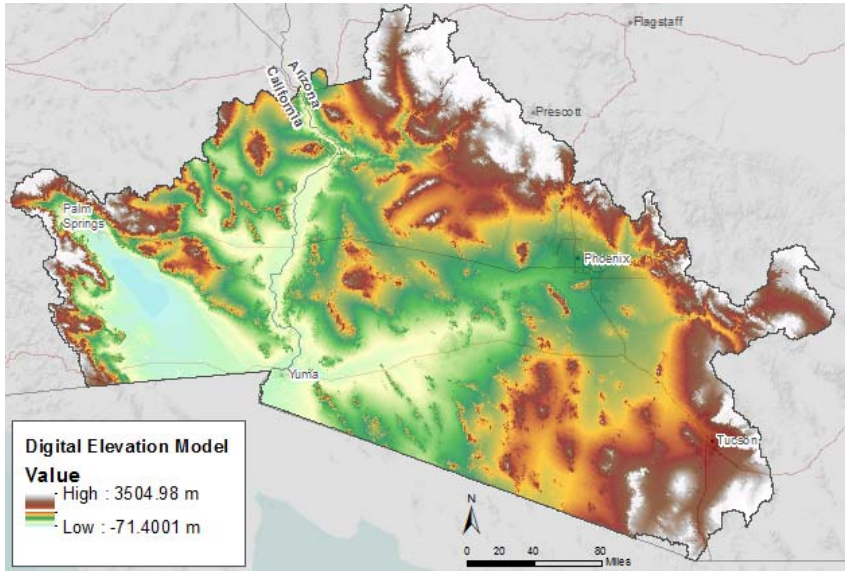
Average Spring Precipitation



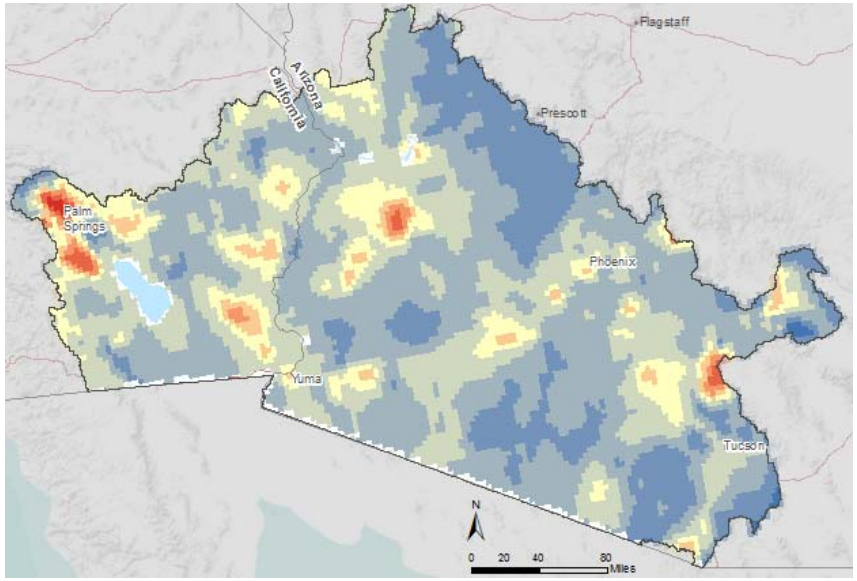
Uncertainty

< 75 mm
75 - 121
122 - 183
184 - 273
274 - 378
379 - 487
488 - 623
> 623 mm

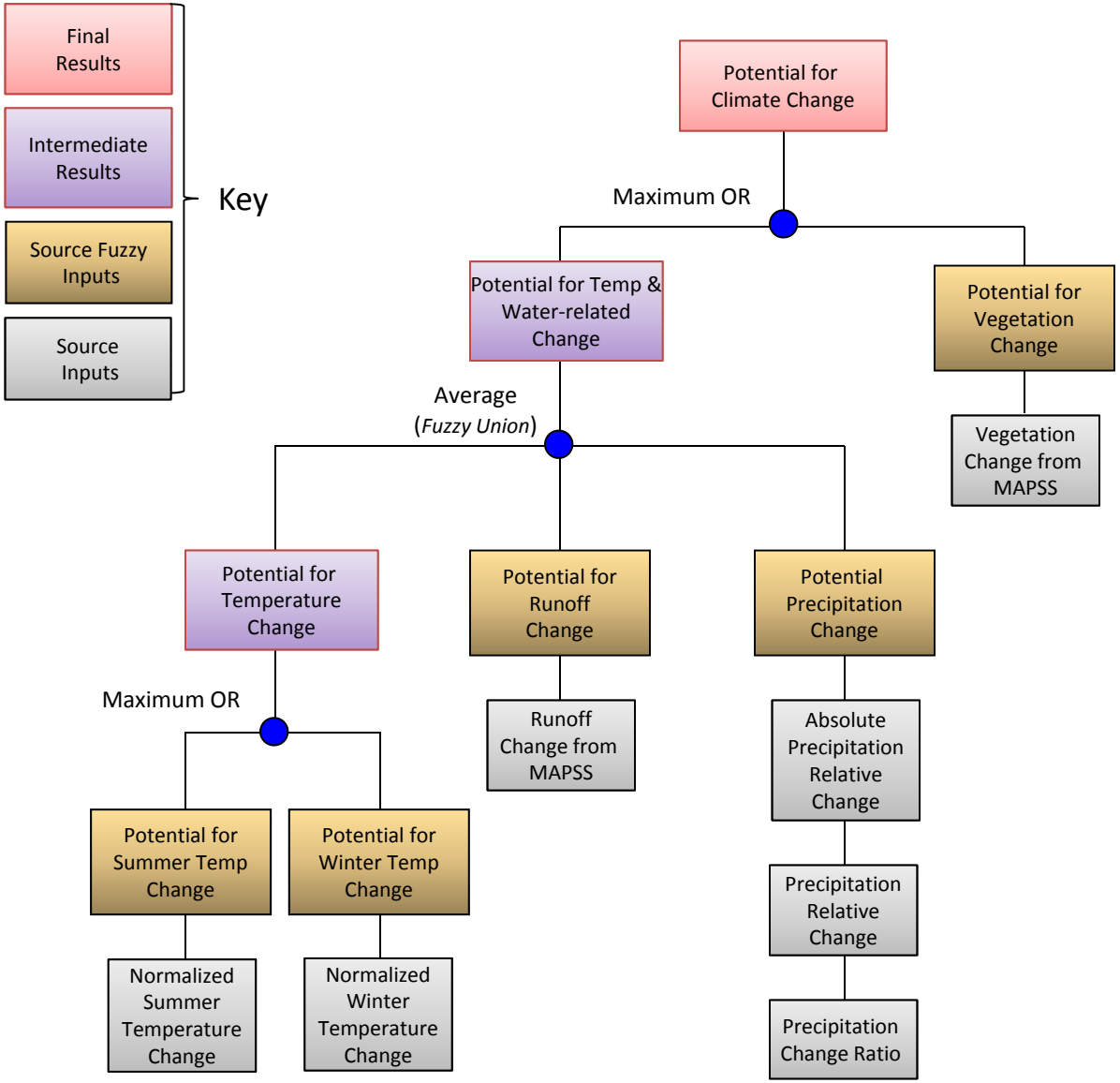


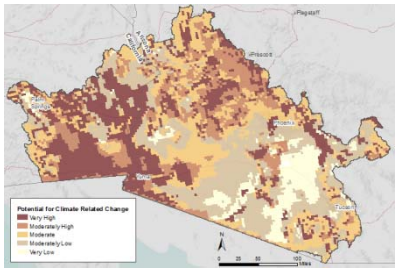


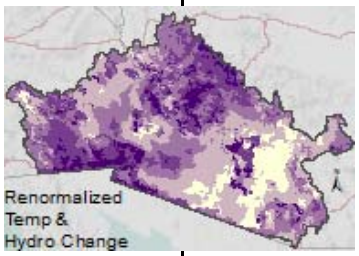
< 0.42 degrees C
0.43 - 0.49
0.5 - 0.54
0.55 - 0.59
0.6 - 0.65
0.66 - 0.72
0.73 - 0.8
0.81 - 0.92
> 0.92 degrees C

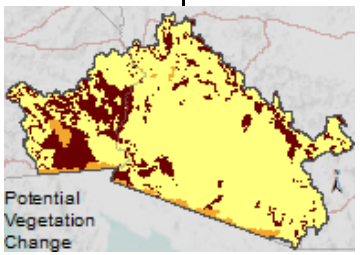


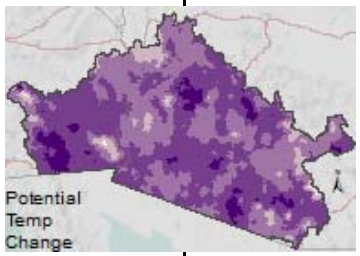
Assessing Potential Climate Change Impacts on Conservation Elements

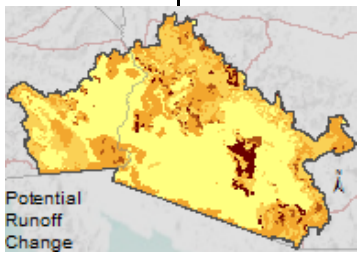


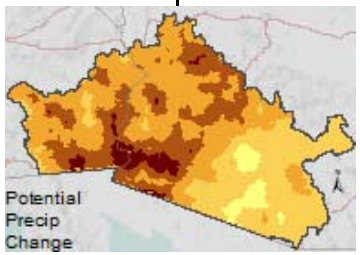

Potential for Climate Related Change
Very High
Moderately High
Moderate
Moderately Low
Very Low

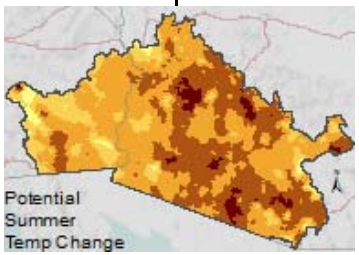

Renormalized
Temp &
Hydro Change

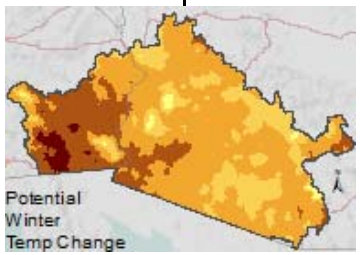

Potential
Vegetation
Change


Potential
Temp
Change


Potential
Runoff
Change

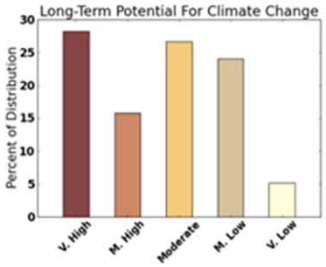

Potential
Precip
Change


Potential
Summer
Temp Change

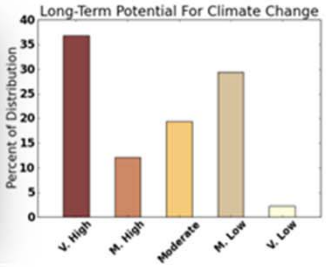

Potential
Winter
Temp Change

Assessing Potential Climate Change Impacts on Conservation Elements

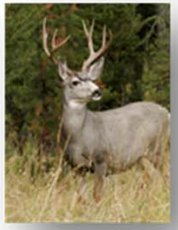
Mountain Lion

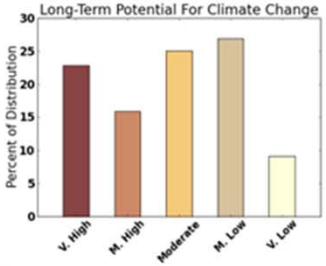


Desert Tortoise (agassizii)

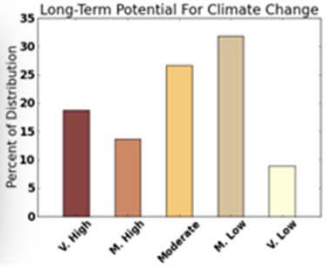


Mule Deer

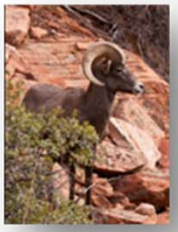


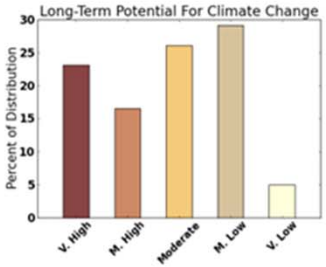


Desert Tortoise (morafkai)

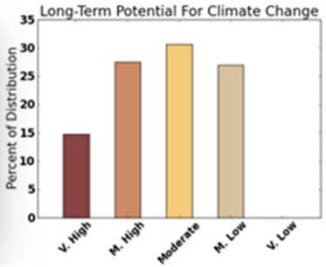


Desert Bighorn Sheep



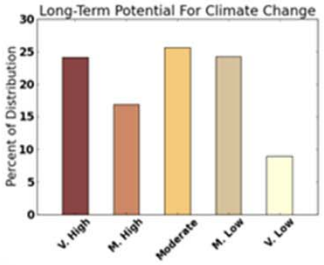


Lowland Leopard Frog

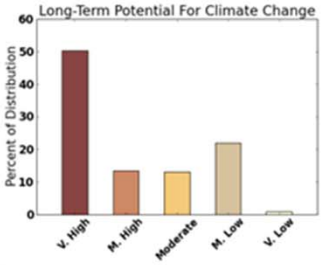


Assessing Potential Climate Change Impacts on Conservation Elements

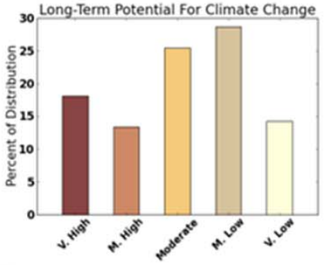
Golden Eagle



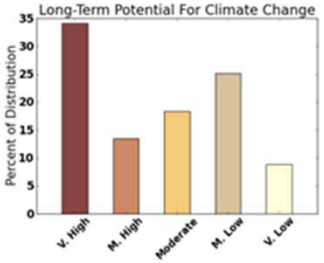
Southwest Willow Flycatcher



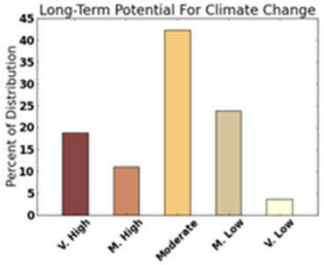
Lucy's Warbler



LeConte's Thrasher

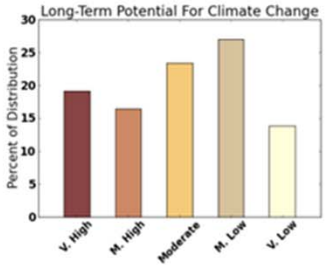


Bell's Vireo

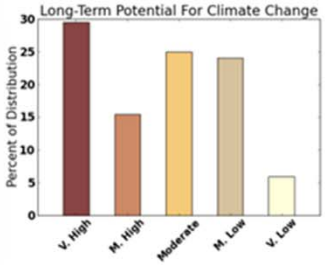


Assessing Potential Climate Change Impacts on Conservation Elements

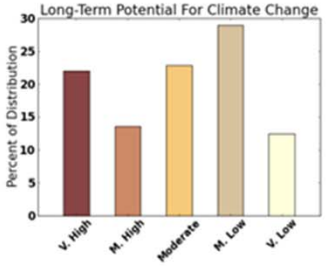
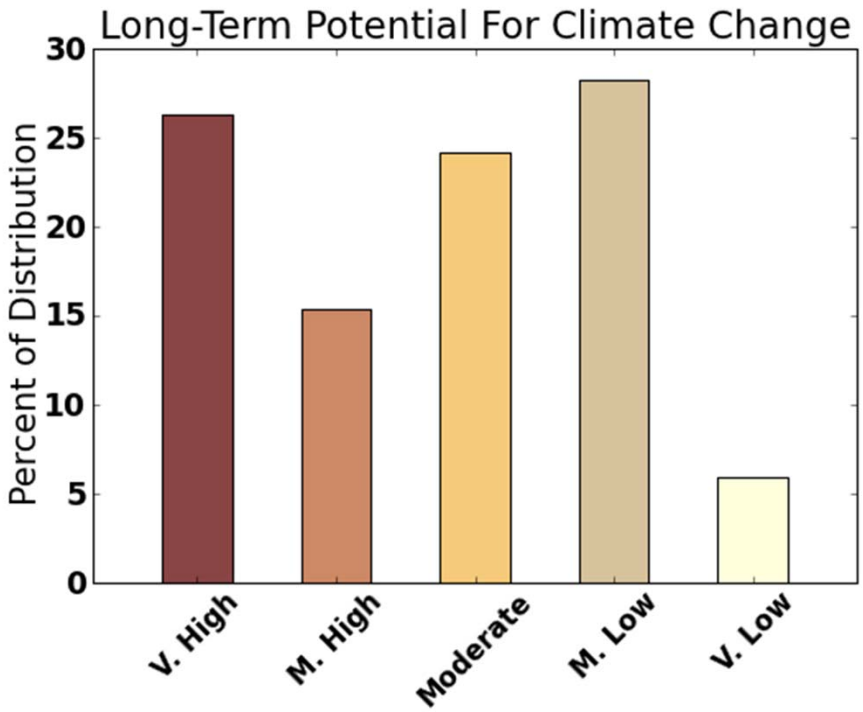
Sonoran Paloverde-Mixed Cacti Desert Scrub



Sonora-Mojave Creosotebush-White Bursage Desert Scrub



Riparian Vegetation



Assessing Potential Climate Change Impacts on Designated Lands