Overview of Preliminary Plan-Wide Biological Reserve Design and Renewable Energy Development Scenarios

Supplemental Materials

DRECP Stakeholder's Meeting
April 25/26, 2012

Table of Contents

Introduction

1. Supplemental Tables..... 1-1

Table 1-1a. Development Scenario by Development Type..... 1-1
Table 1-1b. Development Scenario by County and Private Land..... 1-2
Table 1-1c. Development Scenario by Ecoregional Subarea..... 1-3
Table 1-1d. Development Scenario overlap with BLM Non-biological Resources and Uses..... 1-4
Table 1-1e. Development Scenario by Natural Community..... 1-5
Table 1-1f. Development Scenario overlap of Modeled Species Habitat..... 1-6
Table 1-1g. BLM Land by Development Scenario..... 1-12
Table 1-2. BLM Non-Biological Resources and Uses relative to the Preliminary Plan-Wide Envelope for Conflict Identification Map..... 1-13
Table 1-3a. Preliminary Plan-wide Biological Reserve Design by Ownership Type..... 1-14
Table 1-3b. Preliminary Plan-wide Biological Reserve Design by County..... 1-15
Table 1-3c. Preliminary Plan-wide Biological Reserve Design by Community Formation..... 1-18
Table 1-3d. Preliminary Plan-wide Biological Reserve Design by Proposed Feinstein Monument.. 1-19
Table 1-3e. Preliminary Plan-wide Biological Reserve Design by Species Habitat Model..... 1-20

2. Supplemental Maps..... 2-1

Scenario 1
- Scenario 1
- Scenario 1: Solar DFAs
- Scenario 1: Wind DFAs
- Scenario 1: Geothermal DFAs

Scenario 2
- Scenario 2
- Scenario 2: Solar DFAs
- Scenario 2: Wind DFAs
- Scenario 2: Geothermal DFAs

Scenario 3
- Scenario 3
- Scenario 3: Solar DFAs
- Scenario 3: Wind DFAs
- Scenario 3: Geothermal DFAs

Scenario 4
- Scenario 4
- Scenario 4: Solar DFAs
- Scenario 4: Wind DFAs
- Scenario 4: Geothermal DFAs

Scenario 5
- Scenario 5
- Scenario 5: Solar DFAs
- Scenario 5: Wind DFAs
- Scenario 5: Geothermal DFAs

Scenario 6
- Scenario 6
- Scenario 6: Solar DFAs
- Scenario 6: Wind DFAs
- Scenario 6: Geothermal DFAs

Preliminary Plan-wide Biological Reserve Design
Preliminary Plan-Wide Envelope for Conflict Identification

3. PowerPoint Presentation: ***"Overview of Preliminary Plan-Wide Biological Reserve Design and Renewable Energy Development Scenarios"***..... **3-1**

Introduction

This handout supplements information presented as part of the Overview of Preliminary Plan-Wide Biological Reserve Design and Renewable Energy Development Scenarios at the April 26, 2012, DRECP Stakeholders Meeting. This handout provides the following supplemental materials in addition to the overview powerpoint presentation given at the meeting:

- Larger scale versions of maps displayed in the powerpoint presentation including the preliminary plan-wide biological reserve design map, the envelope for conflict identification map, and maps for each of the six development scenarios
- Technology specific maps (wind, solar, geothermal) for each of the six development scenarios
- Tables presenting summary information for the preliminary plan-wide biological reserve design, the 6 development scenarios, and preliminary conflict identification.

The information presented in this handout is based on the preliminary plan-wide biological reserve design and the six development scenarios developed to date. It is intended for use by the REAT Agencies and stakeholders in future consideration and identification of alternatives to be carried forward for analysis in the DRECP. No features of the information presented in this handout have regulatory effect or are intended to represent specific DRECP alternatives.

Supplemental Tables

Preliminary Plan-Wide Envelope for Conflict Identification
Development Scenarios
Supplemental Summary Information
April 25, 2012

Table 1-1a. Development Scenario by Development Type

DFA Type	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5	Scenario 6
Solar	947,469	1,413,676	1,568,939	1,756,977	2,081,100	4,712,635
Wind	178,281	215,903	174,423	363,314	654,143	1,782,651
Geothermal	342,918	351,054	349,981	350,680	351,174	350,430
Total not accounting for geographic overlap	1,468,668	1,980,633	2,093,343	2,470,972	3,086,416	6,845,716
Total accounting for geographic overlap	1,074,460	1,519,472	1,684,542	1,872,796	2,197,411	4,802,336

1. Acreages shown are for total acres of identified DFA element, do not reflect actual ground disturbance footprint identified for analysis and are therefore substantially larger than potential acreages of actual impacts.
2. For reference, the CEERT/LSA proposal (March 2012) included approximately 2,016,362 acres of solar DFAs and the CALWEA (April 2012) included approximately 2,291,110 acres in Phase 1 wind DFAs.

Table 1-1b. Development Scenario by County and Private Land

County	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5	Scenario 6
Imperial County	691,963	796,026	792,576	817,355	880,940	1,166,328
% of total Scenario	64%	52%	47%	44%	40%	24%
% on private land	79%	74%	74%	72%	67%	57%
Inyo County	16,639	29,293	28,791	32,475	32,475	251,926
% of total Scenario	2%	2%	2%	2%	1%	5%
% on private land	7%	5%	5%	8%	8%	9%
Kern County	52,181	136,669	168,016	254,784	354,692	911,860
% of total Scenario	5%	9%	10%	14%	16%	19%
% on private land	96%	95%	95%	95%	92%	77%
Los Angeles County	147,266	129,154	206,844	206,844	206,844	498,349
% of total Scenario	14%	8%	12%	11%	9%	10%
% on private land	100%	99%	100%	100%	100%	98%
Riverside County	73,294	105,039	138,328	138,175	192,042	518,700
% of total Scenario	7%	7%	8%	7%	9%	11%
% on private land	89%	78%	65%	65%	48%	29%
San Bernardino County	93,117	323,290	349,989	423,163	530,420	1,455,059
% of total Scenario	9%	21%	21%	23%	24%	30%
% on private land	96%	92%	92%	82%	74%	44%
San Diego County	--	--	--	--	--	115
% of total Scenario	--	--	--	--	--	0%
% on private land	--	--	--	--	--	100%
Total	**1,074,460**	**1,519,472**	**1,684,542**	**1,872,796**	**2,197,411**	**4,802,336**

1. Acreages/percentage shown are intended to portray relative differences among development scenarios regarding potential conflicts with biological and non-biological resources and uses; detailed analysis will be needed to determine actual impacts for scenarios carried forward.
2. Acreages shown are for total acres of identified DFA element, do not reflect actual ground disturbance footprint identified for analysis and are therefore substantially larger than potential acreages of actual impacts.
3. Acreages do not account for overlap among analysis elements.

Table 1-1c. Development Scenario by Ecoregional Subarea

Ecoregional Subarea	Scenario 1	%	Scenario 2	%	Scenario 3	%	Scenario 4	%	Scenario 5	%	Scenario 6	%
Cadiz Valley and Chocolate Mountains	73,296	7%	105,045	7%	138,339	8%	138,202	7%	198,869	9%	587,873	12%
Imperial Borrego Valley	691,960	64%	796,020	52%	792,564	47%	817,327	44%	874,112	40%	1,123,060	23%
Kingston and Funeral Mountains		0%		0%		0%		0%		0%	80,615	2%
Mojave and Silurian Valley	18,690	2%	46,067	3%	47,628	3%	60,027	3%	60,023	3%	160,789	3%
Owens River Valley	16,639	2%	29,293	2%	28,791	2%	29,293	2%	29,293	1%	168,011	3%
Panamint Death Valley	1	0%	1	0%	1	0%	33,586	2%	33,586	2%	60,210	1%
Pinto Lucern Valley and Eastern Slopes	14,018	1%	121,668	8%	121,668	7%	151,683	8%	208,731	9%	523,032	11%
Providence and Buillion Mountains	548	0%	17,341	1%	17,341	1%	17,341	1%	29,228	1%	315,238	7%
West Mojave and Eastern Slopes	259,307	24%	404,035	27%	538,209	32%	625,335	33%	763,569	35%	1,783,506	37%
Grand Total	**1,074,460**		**1,519,472**		**1,684,542**		**1,872,796**		**2,197,411**		**4,802,336**	

1. Acreages/percentage shown are intended to portray relative differences among development scenarios regarding potential conflicts with biological and non-biological resources and uses; detailed analysis will be needed to determine actual impacts for scenarios carried forward.
2. Acreages shown are for total acres of identified DFA element, do not reflect actual ground disturbance footprint identified for analysis and are therefore substantially larger than potential acreages of actual impacts.

Table 1-1d. Development Scenario overlap with BLM Non-biological Resources and Uses

BLM Resources and Uses	Scenario 1	%	Scenario 2	%	Scenario 3	%	Scenario 4	%	Scenario 5	%	Scenario 6	%
ACECs	11,882	1%	9,226	1%	9,216	1%	9,223	0%	30,900	1%	347,365	7%
Grazing Allotment	18,660	2%	54,942	4%	54,981	3%	121,435	6%	198,952	9%	690,849	14%
Herd Management	1,083	0%	1,083	0%	1,081	0%	1,435	0%	25,011	1%	131,524	3%
Special Recreation Management Areas	38,295	4%	112,251	7%	110,276	7%	210,248	11%	259,399	12%	677,470	14%
Subtotal Potential BLM Conflict	69,920	7%	177,503	12%	175,553	10%	342,341	18%	514,262	23%	1,847,208	38%
Subtotal of Non-BLM Conflict	1,004,544	93%	1,341,975	88%	1,508,996	90%	1,530,462	82%	1,683,158	77%	3,006,710	63%
Total Scenario Acreage	1,074,464		1,519,478		1,684,549		1,872,803		2,197,420		4,802,336	

1. Acreages/percentage shown are intended to portray relative differences among development scenarios regarding potential conflicts with biological and non-biological resources and uses; detailed analysis will be needed to determine actual impacts for scenarios carried forward.
2. Acreages shown are for total acres of identified DFA element, do not reflect actual ground disturbance footprint identified for analysis and are therefore substantially larger than potential acreages of actual impacts.
3. Acreages do not account for overlap among analysis elements.

Table 1-1e. Development Scenario by Natural Community

Community Formation	Total in the Plan Area	Scenario 1	%	Scenario 2	%	Scenario 3	%	Scenario 4	%	Scenario 5	%	Scenario 6	%
Agriculture	758,018	590,106	78%	597,543	79%	620,258	82%	621,863	82%	621,650	82%	665,983	88%
Developed and Disturbed Areas	1,170,818	163,549	14%	306,428	26%	323,371	28%	344,211	29%	350,958	30%	601,871	51%
Dune	439,352	8,322	2%	20,081	5%	20,355	5%	20,560	5%	20,584	5%	80,864	18%
Forest	82,984	7	0%	7	0%	7	0%	7	0%	15,443	19%	39,402	47%
Grassland	186,382	37,656	20%	15,593	8%	55,679	30%	59,162	32%	61,400	33%	137,062	74%
Not Classified	13,857	2,838	20%	4,888	35%	4,925	36%	4,926	36%	4,938	36%	6,277	45%
Riparian	75,261	10,202	14%	12,743	17%	12,832	17%	13,003	17%	13,752	18%	35,208	47%
Rocky, Barren, and Unvegetated	6,823,958	16,800	0%	44,921	1%	50,403	1%	99,116	1%	157,063	2%	605,132	9%
Scrub and Chaparral	12,543,434	183,246	1%	454,156	4%	532,129	4%	643,147	5%	866,735	7%	2,376,631	19%
Wetland	312,210	59,123	19%	61,404	20%	62,265	20%	64,481	21%	68,429	22%	139,011	45%
Woodland	180,505	2,611	1%	1,709	1%	2,318	1%	2,318	1%	16,459	9%	114,894	64%
Total	**22,586,778**	**1,074,460**	5%	**1,519,472**	7%	**1,684,542**	7%	**1,872,796**	8%	**2,197,411**	10%	**4,802,336**	21%

1. Acreages/percentage shown are intended to portray relative differences among development scenarios regarding potential conflicts with biological and non-biological resources and uses; detailed analysis will be needed to determine actual impacts for scenarios carried forward.
2. Acreages shown are for total acres of identified DFA element, do not reflect actual ground disturbance footprint identified for analysis and are therefore substantially larger than potential acreages of actual impacts.

Table 1-1f. Development Scenario overlap of Modeled Species Habitat

Species Habitat Model	Total Modeled Habitat	Scenario 1	%	Scenario 2	%	Scenario 3	%	Scenario 4	%	Scenario 5	%	Scenario 6	%
Expert Models													
Amphibian/Reptile													
Arroyo Toad	88,758	5,899	7%	1	0%	1	0%	1	0%	1	0%	2,041	2%
Barefoot Banded Gecko	9,581		0%		0%		0%		0%		0%	155	2%
Coast Horned Lizard	1,931,501	187,964	10%	328,306	17%	422,491	22%	482,944	25%	544,184	28%	1,134,718	59%
Desert Tortoise (Refined USGS model)	11,567,031	10,695	0%	62,346	1%	85,374	1%	122,901	1%	234,814	2%	959,575	8%
Flat-tailed Horned Lizard	1,369,580	203,865	15%	298,192	22%	295,904	22%	311,200	23%	343,350	25%	490,406	36%
Mojave Fringe-toed Lizard	420,009	205	0%	6,306	2%	6,357	2%	32,472	8%	32,559	8%	91,885	22%
Tehachapi Slender Salamander	1,396		0%		0%		0%		0%	86	6%	1,296	93%
Bird													
Arizona Bell's Vireo	14,388		0%		0%		0%		0%		0%		0%
Bald Eagle	1,696,162	153,754	9%	162,917	10%	191,658	11%	219,177	13%	301,229	18%	693,490	41%
Bank Swallow	1,053,571	98,120	9%	113,301	11%	141,377	13%	150,669	14%	153,958	15%	406,889	39%
Burrowing Owl	15,715,799	962,739	6%	1,358,008	9%	1,515,648	10%	1,651,519	11%	1,864,486	12%	3,558,382	23%
California Black Rail	40,425	8,821	22%	10,987	27%	10,964	27%	10,987	27%	10,987	27%	21,220	52%
California Condor - foraging	603,292	1,467	0%	450	0%	450	0%	450	0%	90,323	15%	282,592	47%
Elf Owl	44,687	1,766	4%	2,719	6%	2,715	6%	2,719	6%	2,719	6%	4,659	10%
Gilded Flicker	43,927	1,766	4%	2,719	6%	2,715	6%	2,719	6%	2,719	6%	4,659	11%
Gilded Woodpecker	45,737	3,036	7%	4,275	9%	4,271	9%	4,275	9%	4,275	9%	6,388	14%
Golden Eagle -	506,621	527	0%	796	0%	876	0%	1,561	0%	31,986	6%	158,487	31%

Table 1-1f. Development Scenario overlap of Modeled Species Habitat

Species Habitat Model	Total Modeled Habitat	Scenario 1	%	Scenario 2	%	Scenario 3	%	Scenario 4	%	Scenario 5	%	Scenario 6	%
breeding													
Golden Eagle - foraging	21,373,037	974,649	5%	1,396,111	7%	1,553,099	7%	1,731,997	8%	2,055,084	10%	4,349,686	20%
Greater Sandhill Crane	672,863	543,339	81%	558,488	83%	561,952	84%	562,961	84%	563,021	84%	594,248	88%
Inyo California Towhee	1,028		0%		0%		0%		0%		0%		0%
Least Bell's Vireo	32,228	1,301	4%	2,615	8%	2,675	8%	2,743	9%	2,745	9%	12,827	40%
Peregrine Falcon	2,119,014	452,910	21%	458,048	22%	551,189	26%	602,468	28%	634,992	30%	978,612	46%
Southwestern Willow Flycatcher - migratory	30,280	1,298	4%	1,614	5%	1,674	6%	1,823	6%	1,826	6%	11,206	37%
Southwestern Willow Flycatcher - breeding	60,091	10,088	17%	11,566	19%	11,603	19%	11,694	19%	11,697	19%	30,535	51%
Swainson's Hawk - breeding	50,731	35,718	70%	19,676	39%	37,789	74%	37,789	74%	37,825	75%	49,135	97%
Swanson's Hawk - migrating	2,122,000	69,108	3%	132,775	6%	166,632	8%	208,240	10%	288,068	14%	758,787	36%
Tri-colored Blackbird	272,917	85,963	31%	62,732	23%	103,250	38%	106,472	39%	110,274	40%	160,284	59%
Western Yellow-billed Cuckoo	74,115	10,467	14%	12,237	17%	12,111	16%	12,324	17%	12,377	17%	32,004	43%
White-tailed Kite	877,841	596,851	68%	600,215	68%	632,540	72%	634,095	72%	635,773	72%	738,176	84%
Yuma Clapper Rail	63,939	15,360	24%	16,652	26%	16,629	26%	16,652	26%	16,652	26%	30,256	47%
Fish													
Desert Pupfish	51,857	23,313	45%	28,650	55%	28,650	55%	28,650	55%	28,650	55%	45,300	87%
Mohave Tui Chub	360		0%		0%		0%		0%		0%	3	1%
Owens Pupfish	3,357		0%		0%		0%		0%		0%	1,552	46%
Owens Tui Chub	79,798	217	0%	657	1%	657	1%	657	1%	657	1%	66,810	84%
Mammal													
Amargosa River Vole	2,492		0%		0%		0%		0%		0%		0%

Table 1-1f. Development Scenario overlap of Modeled Species Habitat

Species Habitat Model	Total Modeled Habitat	Scenario 1	%	Scenario 2	%	Scenario 3	%	Scenario 4	%	Scenario 5	%	Scenario 6	%
Big Horn Sheep Critical Linkage	73,280		0%		0%		0%		0%		0%	10,896	15%
Big Horn Sheep Inter-Mountain Habitat	4,892,888	5,172	0%	19,552	0%	20,053	0%	64,531	1%	187,376	4%	476,583	10%
Big Horn Sheep Mountain Habitat	7,980,070	2,744	0%	38,466	0%	38,466	0%	70,714	1%	151,865	2%	549,195	7%
Mohave Ground Squirrel Recovery and Conservation Area	3,377,883	27,753	1%	24,820	1%	32,379	1%	152,392	5%	192,159	6%	587,221	17%
Pallid Bat	10,920,205	955,279	9%	1,278,917	12%	1,423,922	13%	1,544,723	14%	1,699,747	16%	3,186,208	29%
Tehachapi Pocket Mouse	363,372	1,742	0%	91	0%	91	0%	91	0%	75,250	21%	262,682	72%
Western Red Bat	75,000	10,096	13%	12,664	17%	12,701	17%	12,872	17%	13,622	18%	34,829	46%
Plant													
Algodones Dunes Sunflower	89,724	842	1%	5,100	6%	5,099	6%	5,100	6%	5,100	6%	9,666	11%
Alkali Mariposa Lily	3,142,637	30,113	1%	149,810	5%	165,511	5%	220,164	7%	266,341	8%	717,837	23%
Amargosa Beardtongue	1,545,062		0%		0%		0%		0%		0%	31,421	2%
Amargosa Niterwort	12,272		0%		0%		0%		0%		0%	3,702	30%
Ash Meadows Gumplant	154,063		0%		0%		0%		0%		0%	13,869	9%
Bakersfield Cactus	547,240	6,459	1%	63,897	12%	69,673	13%	93,994	17%	123,488	23%	319,091	58%
Barstow Woolly Sunflower	2,455,699	20,008	1%	139,992	6%	153,684	6%	204,492	8%	259,083	11%	714,859	29%
Carbonate Species	24,226		0%	1,739	7%	1,739	7%	1,739	7%	2,521	10%	10,761	44%
Charlotte's Phacelia	872,528	2,381	0%	27,800	3%	27,627	3%	59,139	7%	96,064	11%	246,230	28%
Desert Cymopterus	2,487,654	26,795	1%	161,522	6%	179,578	7%	234,356	9%	273,548	11%	669,811	27%
Kelso Creek	144,127	1,042	1%	439	0%	439	0%	439	0%	32,410	22%	56,874	39%

Table 1-1f. Development Scenario overlap of Modeled Species Habitat

Species Habitat Model	Total Modeled Habitat	Scenario 1	%	Scenario 2	%	Scenario 3	%	Scenario 4	%	Scenario 5	%	Scenario 6	%
Monkeyflower													
Kern Buckwheat	18,194		0%		0%		0%		0%	2,844	16%	11,728	64%
Lane Mountain Milk-vetch	27,020		0%		0%		0%		0%		0%		0%
Little San Bernardino Mtns. Linanthus	945,188	2,299	0%	35,198	4%	35,198	4%	51,333	5%	78,700	8%	216,266	23%
Mojave Monkeyflower	1,703,844	16,965	1%	58,721	3%	74,084	4%	85,065	5%	113,680	7%	357,580	21%
Mojave Tarplant	228,527	1,074	0%	5	0%	5	0%	5	0%	48,478	21%	105,760	46%
Mountain Plover	687,071	513,569	75%	499,026	73%	526,537	77%	528,211	77%	527,933	77%	592,661	86%
Oroccopia sage	1,120,940	84,893	8%	131,624	12%	129,895	12%	152,815	14%	198,955	18%	376,721	34%
Owens Valley Checkerbloom	168,592	4,889	3%	14,743	9%	14,603	9%	14,743	9%	14,743	9%	58,402	35%
Parish's Alkali Grass	16,531		0%	606	4%	606	4%	1,034	6%	1,034	6%	7,916	48%
Parish's Phacelia	1,198,319	18,991	2%	83,007	7%	97,581	8%	110,502	9%	135,722	11%	305,112	25%
Pierson's Milk-vetch	42,157		0%	4	0%	4	0%	4	0%	4	0%	848	2%
Piute Mountains Jewel-flower	99,736		0%	4	0%	4	0%	4	0%	15,049	15%	88,292	89%
Redrock Poppy	352,816	2,359	1%	26,026	7%	26,318	7%	34,668	10%	41,749	12%	113,060	32%
Redrock Tarplant	4,626		0%	25	1%	25	1%	25	1%	25	1%	25	1%
San Bernardino Mountains Dudleya	63,894		0%	2	0%	2	0%	2	0%	3,767	6%	7,366	12%
Sand Food	988,900	66,717	7%	127,222	13%	124,941	13%	132,661	13%	155,378	16%	254,881	26%
Sodaville Milk-vetch	194		0%		0%		0%		0%		0%		0%
Spanish Needle Onion	141,036	213	0%	4	0%	4	0%	4	0%	24,058	17%	116,381	83%
Thorne’s Buckwheat	481		0%		0%		0%		0%		0%		0%
Tracy's Eriastrum	109,351		0%	5	0%	5	0%	5	0%	11,151	10%	97,522	89%
Triple-ribbed Milk-vetch	20,059	52	0%	0	0%	0	0%	0	0%	2,840	14%	7,438	37%

Table 1-1f. Development Scenario overlap of Modeled Species Habitat

Species Habitat Model	Total Modeled Habitat	Scenario 1	%	Scenario 2	%	Scenario 3	%	Scenario 4	%	Scenario 5	%	Scenario 6	%
White-margined Beardtongue	426,987	354	0%	11,243	3%	11,243	3%	11,243	3%	16,713	4%	81,679	19%
Wiggin's Croton	483,555	66,432	14%	104,136	22%	102,224	21%	105,205	22%	105,847	22%	172,383	36%
Maxent Models													
Amphibian/Reptile													
Arroyo Toad	14,969	221	1%	106	1%	106	1%	106	1%	106	1%	716	5%
Coast Horned Lizard	1,306,425	187,940	14%	253,796	19%	336,815	26%	337,229	26%	392,750	30%	763,676	58%
Flat-tailed Horned Lizard	1,488,228	360,043	24%	454,944	31%	452,715	30%	460,943	31%	466,640	31%	592,943	40%
Mojave Fringe-toed Lizard	2,263,614	42,530	2%	83,958	4%	96,215	4%	102,189	5%	110,234	5%	427,286	19%
Bird													
Burrowing Owl	4,923,863	896,606	18%	1,153,786	23%	1,291,000	26%	1,376,665	28%	1,429,901	29%	2,241,305	46%
California Black Rail	551,467	141,222	26%	171,980	31%	170,750	31%	172,191	31%	175,149	32%	258,640	47%
Gila Woodpecker	983,116	143,025	15%	161,319	16%	168,862	17%	170,209	17%	188,349	19%	321,406	33%
Golden Eagle	6,300,456	233,588	4%	359,171	6%	464,214	7%	545,236	9%	674,904	11%	1,570,969	25%
Swainson's Hawk	486,770	136,826	28%	129,582	27%	207,104	43%	230,022	47%	232,837	48%	341,430	70%
Tri-colored Blackbird	1,303,983	127,900	10%	120,034	9%	230,122	18%	270,350	21%	293,192	22%	579,259	44%
Western Yellow-billed Cuckoo	1,448,307	88,968	6%	101,688	7%	104,837	7%	109,944	8%	124,001	9%	195,527	14%
Yuma Clapper Rail	735,869	382,521	52%	399,285	54%	400,169	54%	400,416	54%	402,227	55%	459,438	62%
Mammal													
California Leaf-nosed Bat	1,046,140	2,780	0%	6,244	1%	7,210	1%	18,739	2%	81,472	8%	187,533	18%
Mohave Ground Squirrel	4,613,777	200,599	4%	453,579	10%	497,627	11%	630,971	14%	697,259	15%	1,354,112	29%
Nelson’s Bighorn Sheep	2,402,801	67	0%	477	0%	554	0%	5,791	0%	31,328	1%	119,430	5%

Table 1-1f. Development Scenario overlap of Modeled Species Habitat

Species Habitat Model	Total Modeled Habitat	Scenario 1	%	Scenario 2	%	Scenario 3	%	Scenario 4	%	Scenario 5	%	Scenario 6	%
Peninsular Big Horn Sheep	60,944		0%	889	1%	889	1%	889	1%	889	1%	2,102	3%
Townsend's Big-eared Bat	2,980,735	145,607	5%	174,163	6%	176,297	6%	199,688	7%	222,123	7%	517,269	17%
Plant													
Alkali Mariposa Lily	221,608	39,895	18%	26,435	12%	44,510	20%	45,586	21%	46,194	21%	89,715	40%
Barstow Woolly Sunflower	615,722	9,597	2%	8,765	1%	29,880	5%	45,715	7%	80,043	13%	220,177	36%
Charlotte's Phacelia	243,199	610	0%	2,349	1%	2,349	1%	2,696	1%	17,180	7%	58,750	24%
Desert Cymopterus	418,061	1,534	0%	3,929	1%	5,184	1%	21,212	5%	43,212	10%	96,043	23%
Lane Mountain Milk-vetch	99,479		0%		0%		0%	16	0%	16	0%	62	0%
Mojave Monkeyflower	190,174	2,192	1%	5,380	3%	6,220	3%	11,969	6%	12,001	6%	42,852	23%
Owens Valley Checkerbloom	216,490	2,212	1%	11,269	5%	11,268	5%	11,269	5%	11,269	5%	58,352	27%
Pallid Bat	4,984,100	179,243	4%	311,087	6%	334,259	7%	394,618	8%	478,974	10%	1,096,769	22%
Parish's Daisy	208,601		0%	8,064	4%	8,064	4%	8,207	4%	38,372	18%	77,287	37%
Peirson's Milk-vetch	140,226	1,388	1%	11,354	8%	10,982	8%	11,354	8%	11,354	8%	16,015	11%
Redrock Poppy	186,868	3,620	2%	15,001	8%	15,004	8%	16,784	9%	17,388	9%	55,080	29%
Redrock Tarplant	51,005	1,755	3%	2,452	5%	2,452	5%	7,620	15%	7,636	15%	14,898	29%
Tracy's Eriastrum	122,100	949	1%	116	0%	116	0%	116	0%	45,415	37%	96,849	79%

1. Acreages/percentage shown are intended to portray relative differences among development scenarios regarding potential conflicts with biological and non-biological resources and uses; detailed analysis will be needed to determine actual impacts for scenarios carried forward.
2. Acreages shown are for total acres of identified DFA element, do not reflect actual ground disturbance footprint identified for analysis and are therefore substantially larger than potential acreages of actual impacts.
3. Acreages do not account for overlap among analysis elements.

Table 1-1g. BLM Land by Development Scenario

	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5	Scenario 6
United States Bureau of Land Management	98,729	200,922	225,958	303,004	488,209	1,850,228
% of each Scenario	9%	13%	13%	16%	22%	39%

1. Acreages/percentage shown are intended to portray relative differences among development scenarios regarding potential conflicts with biological and non-biological resources and uses; detailed analysis will be needed to determine actual impacts for scenarios carried forward.
2. Acreages shown are for total acres of identified DFA element, do not reflect actual ground disturbance footprint identified for analysis and are therefore substantially larger than potential acreages of actual impacts.
3. Acreages do not account for overlap among analysis elements.

Table 1-2. BLM Non-Biological Resources and Uses relative to the Preliminary Plan-Wide Envelope for Conflict Identification Map

Map Category	ACECs	%	Grazing Allotment	%	Herd Management Area	%	Special Recreation Management Areas	%
Preliminary Plan-wide Conflict Identification Area	3,178,632	76%	1,709,712	64%	322,183	52%	1,967,372	58%
Impervious and Urban Built-up Land	15,861	0%	21,050	1%	1,057	0%	29,990	1%
Legislatively and Legally Protected Areas	850,996	20%	570,077	21%	287,655	47%	373,812	11%
Military	3,371	0%	3,949	0%	3,147	1%	306,826	9%
Military Expansion Mitigation Lands	100,362	2%	10,554	0%		0%	17,112	1%
Open OHV Lands	13,994	0%	260,526	10%		0%	374,116	11%
Open OHV Lands - Imperial Sand Dunes	1,369	0%		0%		0%	133,868	4%
Tribal Lands	1	0%	321	0%	350	0%	9,150	0%
Undesignated	1,271	0%	99,087	4%	227	0%	153,842	5%
Total	**4,165,859**		**2,675,277**		**614,620**		**3,366,089**	

Preliminary Plan-Wide Biological Reserve Design
Supplemental Summary Information
April 25, 2012

Table 1-3a. Preliminary Plan-wide Biological Reserve Design by Ownership Type

Map Category	Federal	State	Local	Municipal/ Spec. District	Non-Profit	Private	Tribal Lands	Total
Preliminary Plan-wide Conservation Area – Higher Biological Sensitivity	4,194,251	175,973	732	30,422	188	1,058,611		5,460,178
Preliminary Plan-wide Conservation Area – Moderate Biological Sensitivity	1,747,575	135,940	4,482	98,438	40	1,277,081		3,263,556
Impervious and Urban Built-up Land	46,167	327	2,551	3,339	41	313,922	3,968	370,315
Legislatively and Legally Protected Areas	7,123,613	331,667			3,522	2,493		7,461,295
Military	2,933,001					700		2,933,701
Military Expansion Mitigation Lands	95,802							95,802
Open OHV Lands	352,776	2,580				22,787		378,143
Open OHV Lands - Imperial Sand Dunes	132,988	30				850		133,869
Tribal Lands	124						128,561	128,685
Undesignated	436,117	23,959	390	185,758		1,715,126		2,361,349
Total	17,062,413	670,477	8,155	317,957	3,791	4,391,571	132,529	22,586,892

Table 1-3b. Preliminary Plan-wide Biological Reserve Design by County

Preliminary Plan-wide Biological Reserve Design Map Categories by County	Public	Private	Other	Total
Imperial County	**1,811,998**	**818,573**	**145,165**	**2,775,737**
Preliminary Plan-wide Conservation Area - Higher Biological Sensitivity	543,347	113,400	763	657,510
Preliminary Plan-wide Conservation Area - Moderate Biological Sensitivity	225,444	47,853	29	273,325
Impervious and Urban Built-up Land	7,051	29,734	815	37,601
Legislatively and Legally Protected Areas	264,947	2,342	0	267,290
Military	386,384			386,384
Open OHV Lands	40,495	2,703		43,198
Open OHV Lands - Imperial Sand Dunes	133,018	850		133,868
Tribal Lands	50		55,421	55,471
Undesignated	211,261	621,692	88,137	921,090
Inyo County	**2,724,852**	**48,477**	**214,340**	**2,987,670**
Preliminary Plan-wide Conservation Area - Higher Biological Sensitivity	292,219	19,557	29,639	341,415
Preliminary Plan-wide Conservation Area - Moderate Biological Sensitivity	379,402	26,087	91,242	496,731
Impervious and Urban Built-up Land	4,521	1,032	2,965	8,518
Legislatively and Legally Protected Areas	1,901,691		61	1,901,752
Military	133,019			133,019
Open OHV Lands	409			409
Tribal Lands	9		423	431
Undesignated	13,582	1,801	90,010	105,394
Kern County	**850,314**	**895,101**	**348**	**1,745,763**
Preliminary Plan-wide Conservation Area - Higher Biological Sensitivity	352,283	123,002		475,285

Table 1-3b. Preliminary Plan-wide Biological Reserve Design by County

Preliminary Plan-wide Biological Reserve Design Map Categories by County	Public	Private	Other	Total
Preliminary Plan-wide Conservation Area - Moderate Biological Sensitivity	63,616	470,572	36	534,225
Impervious and Urban Built-up Land	4,519	48,454	39	53,011
Legislatively and Legally Protected Areas	107,259		41	107,300
Military	287,585			287,585
Open OHV Lands	11,289	3,494		14,783
Tribal Lands	18		231	249
Undesignated	23,744	249,579	1	273,324
Los Angeles County	**63,527**	**616,083**	**426**	**680,036**
Preliminary Plan-wide Conservation Area - Higher Biological Sensitivity	1,739	22,025		23,764
Preliminary Plan-wide Conservation Area - Moderate Biological Sensitivity	6,711	301,293	48	308,052
Impervious and Urban Built-up Land	617	61,882	46	62,544
Legislatively and Legally Protected Areas	6,003	59	51	6,113
Military	47,610			47,610
Undesignated	847	230,825	281	231,952
Riverside County	**1,882,600**	**237,915**	**26,720**	**2,147,235**
Preliminary Plan-wide Conservation Area - Higher Biological Sensitivity	447,762	71,901	7	519,671
Preliminary Plan-wide Conservation Area - Moderate Biological Sensitivity	266,870	40,629	6,969	314,468
Impervious and Urban Built-up Land	4,062	6,816	228	11,107
Legislatively and Legally Protected Areas	981,927		290	982,217
Military	108,555			108,555
Tribal Lands	32		11,966	11,998
Undesignated	73,391	118,569	7,259	199,219

Table 1-3b. Preliminary Plan-wide Biological Reserve Design by County

Preliminary Plan-wide Biological Reserve Design Map Categories by County	Public	Private	Other	Total
San Bernardino County	**10,209,531**	**1,707,450**	**65,752**	**11,982,733**
Preliminary Plan-wide Conservation Area - Higher Biological Sensitivity	2,733,584	708,718	12	3,442,314
Preliminary Plan-wide Conservation Area - Moderate Biological Sensitivity	945,564	344,222	2	1,289,788
Impervious and Urban Built-up Land	28,261	161,507	3,239	193,007
Legislatively and Legally Protected Areas	3,995,686		1,910	3,997,597
Military	1,969,835	700		1,970,536
Military Expansion Mitigation Lands	95,802			95,802
Open OHV Lands	303,161	16,590		319,752
Tribal Lands	15		60,520	60,534
Undesignated	137,623	475,712	68	613,403
San Diego County	**198,138**	**67,945**	**1,523**	**267,606**
Preliminary Plan-wide Conservation Area - Higher Biological Sensitivity	2		188	190
Preliminary Plan-wide Conservation Area - Moderate Biological Sensitivity	380	46,416	151	46,947
Impervious and Urban Built-up Land	13	4,496	16	4,524
Legislatively and Legally Protected Areas	197,729	93	1,168	198,989
Undesignated	14	16,941		16,956
Total	**17,740,959**	**4,391,545**	**454,274**	**22,586,778**

Table 1-3c. Preliminary Plan-wide Biological Reserve Design by Community Formation

Map Categories	Agriculture	Developed and Disturbed Areas	Dune	Forest	Grassland	Not Classified	Riparian	Rocky, Barren, and Unvegetated	Scrub and Chaparral	Wetland	Woodland	Total
Preliminary Plan-wide Conservation Area – Higher Biological Sensitivity	33,962	191,412	90,891	4,611	11,505	1,971	24,263	1,196,952	3,842,253	52,759	9,599	5,460,178
Preliminary Plan-wide Conservation Area – Moderate Biological Sensitivity	31,061	182,972	28,286	51,137	97,309	3,580	14,094	853,498	1,849,368	31,839	120,412	3,263,556
Impervious and Urban Built-up Land	2,753	305,120	444	400	3,235	348	776	4,692	47,722	2,994	1,832	370,315
Legislatively and Legally Protected Areas	6,001	10,967	121,177	25,193	19,270	237	13,576	3,243,913	3,950,886	33,244	36,833	7,461,295
Military	1,130	24,783	66,673		2,085	8	949	1,215,169	1,621,119	1,765	21	2,933,701
Military Expansion Mitigation Lands		601	1,884				5	28,169	65,143			95,802
Open OHV Lands	246	1,108	5,679		64	4	392	108,136	262,498	15		378,143
Open OHV Lands - Imperial Sand Dunes	2	394	104,288			2,093	4	89	26,443	555		133,869
Tribal Lands	19,994	5,051	179	23	5	394	2,236	15,843	79,956	4,978	25	128,685
Undesignated	662,872	448,417	19,854	1,620	52,909	5,222	18,966	157,532	798,104	184,068	11,784	2,361,349
Total	**758,021**	**1,170,824**	**439,354**	**82,984**	**186,382**	**13,857**	**75,262**	**6,823,992**	**12,543,493**	**312,217**	**180,506**	**22,586,892**

Table 1-3d. Preliminary Plan-wide Biological Reserve Design by Proposed Feinstein Monument

Map Category	Feinstein Monument
Preliminary Plan-wide Conservation Area – Higher Biological Sensitivity	764,824
Preliminary Plan-wide Conservation Area – Moderate Biological Sensitivity	324,478
Impervious and Urban Built-up Land	7,304
Legislatively and Legally Protected Areas	416,544
Military	332
Military Expansion Mitigation Lands	1,663
Open OHV Lands	317,042
Tribal Lands	0
Undesignated	19,129
Total	**1,851,315**

Table 1-3e. Preliminary Plan-wide Biological Reserve Design by Species Habitat Model

Species Habitat Model	Preliminary Plan-wide BRD – Higher Biological Sensitivity	Preliminary Plan-wide BRD – Moderate Biological Sensitivity	Impervious and Urban Built-up Land	Legislatively and Legally Protected Areas	Military	Military Expansion Mitigation Lands	Open OHV Lands	Open OHV Lands - Imperial Sand Dunes	Tribal Lands	Un-designated	Total
Expert Models											
Amphibian/Reptile											
Arroyo Toad	57,673	12,904	13,572	2,973	1,049		151			436	88,758
Barefoot Gecko	16	1,899	37	6,125			1,428			77	9,581
Coast Horned Lizard	483,136	523,122	28,821	109,210	193,550	701	18,341		8	574,613	1,931,501
Desert Tortoise (Refined USGS model)	3,797,323	897,087	32,656	4,093,963	2,143,566	91,364	313,684		13,450	183,939	11,567,031
Flat-tailed Horned Lizard	371,833	157,905	14,393	190,060	134,943		41,668	126,405	23,026	309,346	1,369,580
Mojave Fringe-toed Lizard	130,734	103,410	660	94,660	70,285	3,306	8,340		46	8,567	420,009
Tehachapi Slender Salamander	39	1,327	6	25							1,396
Bird											
Arizona Bell's Vireo	4,128	1,883	40	4,480					2,043	1,814	14,388
Bald Eagle	284,027	490,184	45,224	316,882	81,332	3,188	13,757		35,553	426,014	1,696,162
Bank Swallow	253,931	211,632	63,188	40,694	241,777	8,156	2,218		431	231,545	1,053,571
Burrowing Owl	4,415,678	2,121,579	353,431	4,148,121	2,186,002	72,018	310,691	26,866	111,945	1,969,468	15,715,799
California Black Rail	14,598	4,419	434	6,081	344		246	4	1,217	13,083	40,425
California Condor - foraging	119,750	301,715	2,983	152,681			6,098		223	19,842	603,292

Table 1-3e. Preliminary Plan-wide Biological Reserve Design by Species Habitat Model

Species Habitat Model	Preliminary Plan-wide BRD – Higher Biological Sensitivity	Preliminary Plan-wide BRD – Moderate Biological Sensitivity	Impervious and Urban Built-up Land	Legislatively and Legally Protected Areas	Military	Military Expansion Mitigation Lands	Open OHV Lands	Open OHV Lands - Imperial Sand Dunes	Tribal Lands	Un-designated	Total
Elf Owl	7,283	7,506	114	11,356	256			65	9,099	9,008	44,687
Gilded Flicker	7,291	7,479	114	10,992	259			65	8,762	8,966	43,927
Gilded Woodpecker	7,615	7,510	157	10,992	259			65	8,762	10,377	45,737
Golden Eagle - breeding	34,367	189,311	1,874	252,567	16,476	201	720		116	10,989	506,621
Golden Eagle - foraging	5,308,929	3,158,432	69,778	7,287,674	2,840,423	93,656	370,550	26,473	119,688	2,097,434	21,373,037
Greater Sandhill Crane	24,618	16,241	2,137	6,156	1,114		247	2	19,959	602,388	672,863
Inyo California Towhee	416	8		34	569					0	1,028
Least Bell's Vireo	13,570	8,482	302	2,144	65	5	141		1,013	6,506	32,228
Mountain Plover	32,123	52,429	3,379	6,332	54,904	38	1,654		42	536,171	687,071
Peregrine Falcon	349,602	431,212	130,444	94,891	292,670	4,733	2,547	193	55,032	757,690	2,119,014
Southwestern Willow Flycatcher - migratory	11,280	6,840	290	4,539	599	5	144		1,013	5,570	30,280
Southwestern Willow Flycatcher - breeding	22,143	9,343	712	6,700	411	5	387	4	2,669	17,717	60,091
Swainson's Hawk - breeding		14,062	246	14	15					36,394	50,731
Swanson's Hawk - migratory	587,727	633,362	16,052	264,398	328,854		13,901		5,692	272,011	2,122,000

Table 1-3e. Preliminary Plan-wide Biological Reserve Design by Species Habitat Model

Species Habitat Model	Preliminary Plan-wide BRD – Higher Biological Sensitivity	Preliminary Plan-wide BRD – Moderate Biological Sensitivity	Impervious and Urban Built-up Land	Legislatively and Legally Protected Areas	Military	Military Expansion Mitigation Lands	Open OHV Lands	Open OHV Lands - Imperial Sand Dunes	Tribal Lands	Un-designated	Total
Tri-colored Blackbird	48,685	60,535	14,542	28,421	14,516	88	2,178		24	103,928	272,917
Western Yellow-billed Cuckoo	29,493	12,268	990	12,401	581		110		1,916	16,357	74,115
White-tailed Kite	42,008	101,059	5,153	24,097	3,530		246	2	19,999	681,746	877,841
Yuma Clapper Rail	16,799	5,685	585	9,225	425		246	406	3,119	27,449	63,939
Fish											
Desert Pupfish	832		1,235	2,962	14				1,630	45,185	51,857
Mohave Tui Chub	40		29	216	72					3	360
Owens Pupfish	3,347		10								3,357
Owens Tui Chub	10,938	11,721	345	450					33	56,311	79,798
Mammal											
Amargosa River Vole	1,422	214	45	811							2,492
Big Horn Sheep Critical Linkage	57,167	2,554	1,972	10,459						1,129	73,280
Big Horn Sheep Inter-Mountain Habitat	1,164,022	628,218	15,834	1,903,707	839,248	40,078	226,135		19,669	55,975	4,892,888
Big Horn Sheep Mountain Habitat	1,196,061	956,090	33,667	4,271,657	1,225,559	7,946	71,609		33,697	183,783	7,980,070
Mohave Ground Squirrel Recovery and Conservation Area	1,414,879	316,960	37,985	206,866	1,149,946	42,030	112,615			96,600	3,377,883

Table 1-3e. Preliminary Plan-wide Biological Reserve Design by Species Habitat Model

Species Habitat Model	Preliminary Plan-wide BRD – Higher Biological Sensitivity	Preliminary Plan-wide BRD – Moderate Biological Sensitivity	Impervious and Urban Built-up Land	Legislatively and Legally Protected Areas	Military	Military Expansion Mitigation Lands	Open OHV Lands	Open OHV Lands - Imperial Sand Dunes	Tribal Lands	Un-designated	Total
Pallid Bat	2,254,898	1,904,651	310,217	3,118,053	1,109,109	39,078	91,195	4,252	114,088	1,974,663	10,920,205
Tehachapi Pocket Mouse	53,004	299,456	2,362	1,083			1,453		193	5,822	363,372
Western Red Bat	24,296	13,910	760	13,615	945	5	392	4	2,236	18,836	75,000
Plant											
Algodones Dunes Sunflower	20,221	4,151	9	12,800	911			48,965		2,667	89,724
Alkali Mariposa Lily	1,210,678	224,664	16,801	295,762	921,989	54,313	145,212		54	273,166	3,142,637
Amargosa beardtongue	231,391	183,095	1,387	1,129,190							1,545,062
Amargosa Niterwort	8,596	2,006	245	1,424							12,272
Ash Meadows Gumplant	58,681	15,422	564	79,396							154,063
Bakersfield Cactus	173,569	149,057	5,808	34,265	52,883		10,135		139	121,384	547,240
Barstow Woolly Sunflower	998,494	218,282	16,376	86,189	732,151	35,341	128,074			240,793	2,455,699
Carbonate Species	7,286	12,632	799	501						3,007	24,226
Charlotte's Phacelia	351,595	129,328	2,862	100,834	212,934		14,131		190	60,654	872,528
Desert Cymopterus	941,990	213,415	15,234	82,073	874,874	34,950	46,856			278,263	2,487,654
Kelso Creek Monkeyflower	39,919	75,150	257	21,732			3,331		166	3,573	144,127

Table 1-3e. Preliminary Plan-wide Biological Reserve Design by Species Habitat Model

Species Habitat Model	Preliminary Plan-wide BRD – Higher Biological Sensitivity	Preliminary Plan-wide BRD – Moderate Biological Sensitivity	Impervious and Urban Built-up Land	Legislatively and Legally Protected Areas	Military	Military Expansion Mitigation Lands	Open OHV Lands	Open OHV Lands - Imperial Sand Dunes	Tribal Lands	Un-designated	Total
Kern Buckwheat	3,985	13,435	8	766						1	18,194
Lane Mountain Milk-vetch	10,592				12,301	4,127					27,020
Little San Bernardino Mtns. Linanthus	256,753	60,397	4,217	212,544	188,129	1,050	129,033		54	93,011	945,188
Mojave Monkeyflower	794,054	84,630	6,825	443,670	137,797	40,294	100,083			96,490	1,703,844
Mojave Tarplant	55,028	132,298	586	31,734			6,056		200	2,624	228,527
Oroccopia sage	403,625	153,661	2,924	75,907	303,463		5,062	26,447	27,892	121,959	1,120,940
Owens Valley Checkerbloom	42,614	85,403	1,337	5,330	1,277		9		80	32,540	168,592
Parish's Alkali Grass	8,483	2,889	346	828	439		972			2,574	16,531
Parish's Phacelia	711,580	73,718	7,162	57,212	137,657	53,476	48,221			109,294	1,198,319
Pierson's Milk-vetch		134	0	6,402				34,885		736	42,157
Piute Mountains Jewel-flower	6,065	92,397	313	953					1	6	99,736
Redrock Poppy	203,398	27,311	1,730	23,986	46,720		1,829			47,843	352,816
Redrock Tarplant	2,378	106		2,109						33	4,626
San Bernardino Mountains Dudleya	4,417	18,660	91	40,519						207	63,894
Sand Food	248,659	134,736	3,423	265,870	68,594		30,240	115,635	17,730	104,013	988,900

Table 1-3e. Preliminary Plan-wide Biological Reserve Design by Species Habitat Model

Species Habitat Model	Preliminary Plan-wide BRD – Higher Biological Sensitivity	Preliminary Plan-wide BRD – Moderate Biological Sensitivity	Impervious and Urban Built-up Land	Legislatively and Legally Protected Areas	Military	Military Expansion Mitigation Lands	Open OHV Lands	Open OHV Lands - Imperial Sand Dunes	Tribal Lands	Un-designated	Total
Sodaville Milk-vetch	2			192							194
Spanish Needle Onion	8,822	123,176	390	8,575			2		50	21	141,036
Thorne's Buckwheat	0	45		435							481
Tracy's Eriastrum	5,069	102,930	534	780					30	7	109,351
Triple-ribbed Milk-vetch	6,643	2,915	254	6,527						3,720	20,059
White-margined Beardtongue	148,674	41,412	1,289	152,168	46,539	14				36,891	426,987
Wiggin's Croton	136,378	32,641	3,286	28,980	58,262			128,320	18,516	77,172	483,555
Maxent Models											
Amphibian/Reptile											
Arroyo Toad	1,021	9,340	3,996	2						609	14,969
Coast Horned Lizard	102,063	387,799	200,589	185,797	8,952	145	6,347		48	414,684	1,306,425
Flat-tailed Horned Lizard	345,513	111,530	27,151	192,086	47,983		41,041	130,142	23,740	569,041	1,488,228
Mojave Fringe-toed Lizard	584,198	424,172	17,953	705,375	287,086	27,663	26,379	3,051	604	187,131	2,263,614
Bird											
Burrowing Owl	1,499,796	685,857	238,552	230,413	601,425	48,499	81,725	16,203	24,204	1,497,187	4,923,863
California Black Rail	91,892	55,330	12,718	68,787	41,468		11,695	14,918	42,067	212,592	551,467

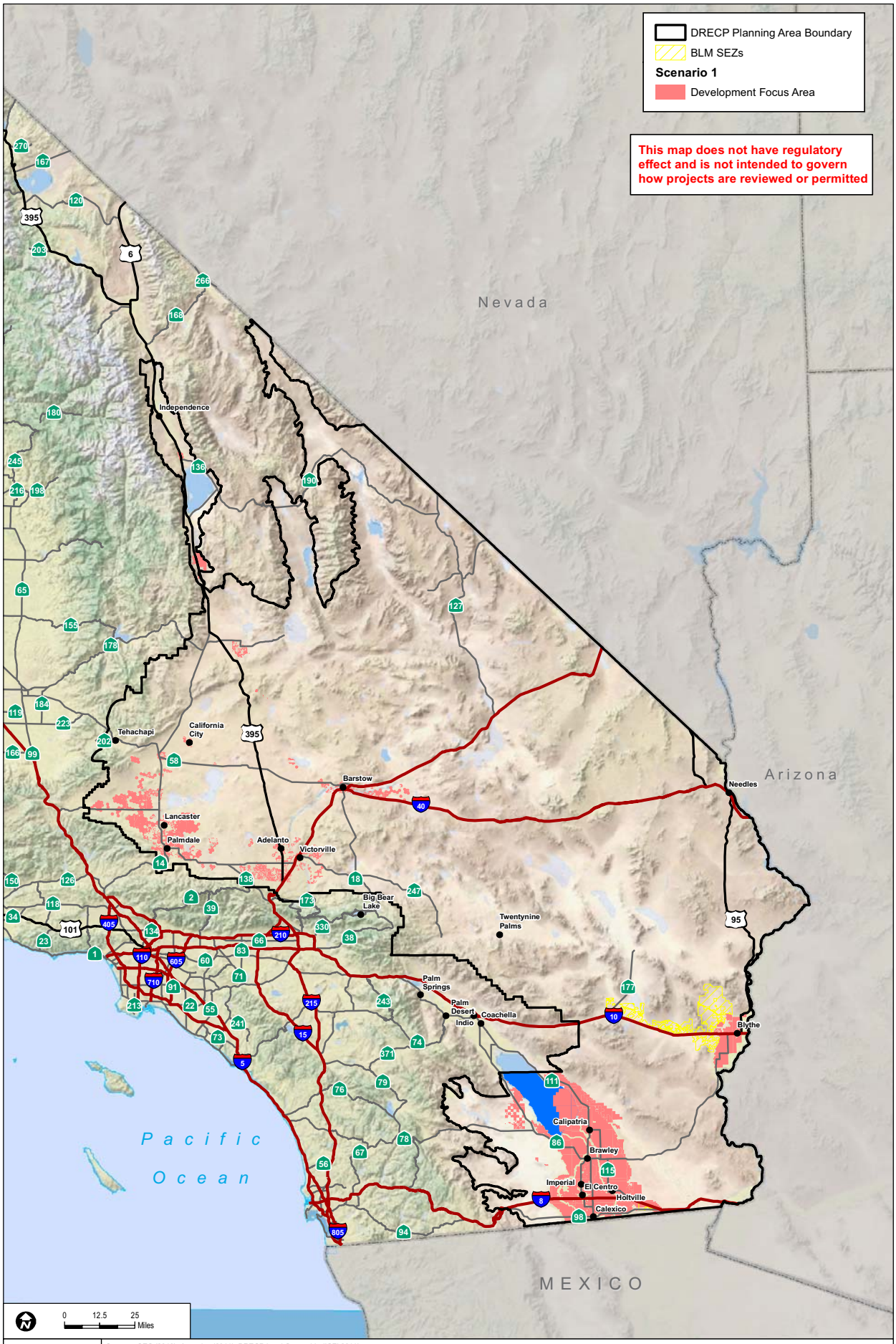
Table 1-3e. Preliminary Plan-wide Biological Reserve Design by Species Habitat Model

Species Habitat Model	Preliminary Plan-wide BRD – Higher Biological Sensitivity	Preliminary Plan-wide BRD – Moderate Biological Sensitivity	Impervious and Urban Built-up Land	Legislatively and Legally Protected Areas	Military	Military Expansion Mitigation Lands	Open OHV Lands	Open OHV Lands - Imperial Sand Dunes	Tribal Lands	Un-designated	Total
Gila Woodpecker	225,700	178,306	39,346	112,446	70,650		2,928	24,187	84,273	245,279	983,116
Golden Eagle	1,048,170	1,206,818	223,548	2,368,542	649,543	16,803	130,988	358	13,847	641,839	6,300,456
Swainson's Hawk	28,934	128,520	70,805	6,396	34,096	1	196			217,821	486,770
Tri-colored Blackbird	463,873	242,979	163,919	47,352	88,342	13,951	11,160	2	4	272,400	1,303,983
Western Yellow-billed Cuckoo	158,637	263,171	18,595	601,326	89,405	1,706	7,569	3,030	86,717	218,152	1,448,307
Yuma Clapper Rail	80,379	29,469	29,620	78,858	11,448	2,431	3,207	12	36,847	463,598	735,869
Mammal											
California Leaf-nosed Bat	143,601	247,855	1,357	386,119	198,447	3	3,968	3,455	28,026	33,309	1,046,140
Mohave Ground Squirrel	1,435,640	567,878	212,359	330,922	1,237,652	48,662	101,474		290	678,900	4,613,777
Nelson’s Bighorn Sheep	288,513	237,350	1,615	1,465,616	392,753	3,021	2,668		4,816	6,447	2,402,801
Pallid Bat	1,022,587	858,998	96,349	1,437,020	777,852	31,536	88,859	19,202	47,036	604,661	4,984,100
Peninsular Big Horn Sheep	235	6,640	136	53,004			20			909	60,944
Townsend's Big-eared Bat	507,229	449,408	17,023	1,176,064	440,641	10,768	24,764	166	43,345	311,328	2,980,735
Plant											
Alkali Mariposa Lily	3,525	48,140	16,976	5,492	92,832		453		2	54,189	221,608
Barstow Woolly Sunflower	388,375	74,616	17,007	16,490	73,261	8,091	5,711			32,172	615,722

Table 1-3e. Preliminary Plan-wide Biological Reserve Design by Species Habitat Model

Species Habitat Model	Preliminary Plan-wide BRD – Higher Biological Sensitivity	Preliminary Plan-wide BRD – Moderate Biological Sensitivity	Impervious and Urban Built-up Land	Legislatively and Legally Protected Areas	Military	Military Expansion Mitigation Lands	Open OHV Lands	Open OHV Lands - Imperial Sand Dunes	Tribal Lands	Un-designated	Total
Charlotte's Phacelia	101,606	53,344	717	66,317	7,272		7,416		56	6,469	243,199
Desert Cymopterus	128,351	42,465	8,382	6,558	211,148	7,464	3,803			9,889	418,061
Lane Mountain Milk-vetch	33,052	55		710	56,081	9,582					99,479
Mojave Monkeyflower	111,241	19,396	4,352	9,039	566	5,032	30,358			10,189	190,174
Owens Valley Checkerbloom	24,331	138,046	3,548	13,098	26		7		355	37,079	216,490
Parish's Daisy	39,692	55,309	2,657	81,803	116	16	262			28,746	208,601
Peirson's Milk-vetch	5,748	4,451	40	19,980	5,621			94,748		9,639	140,226
Redrock Poppy	106,473	13,431	1,117	37,384	4,075	2	5,537			18,850	186,868
Redrock Tarplant	19,347	5,777	763	14,729			2,506			7,883	51,005
Tracy's Eriastrum	11,178	102,168	4,504	1,348			38		193	2,672	122,100

Supplemental Maps



Sources: CEC (2010); Agencies (2011); DRECP Land Ownership (ICFI 2011); USGS (2010); DRECP Land Cover (ICFI 2011); ESRI (2010); BLM (2012)

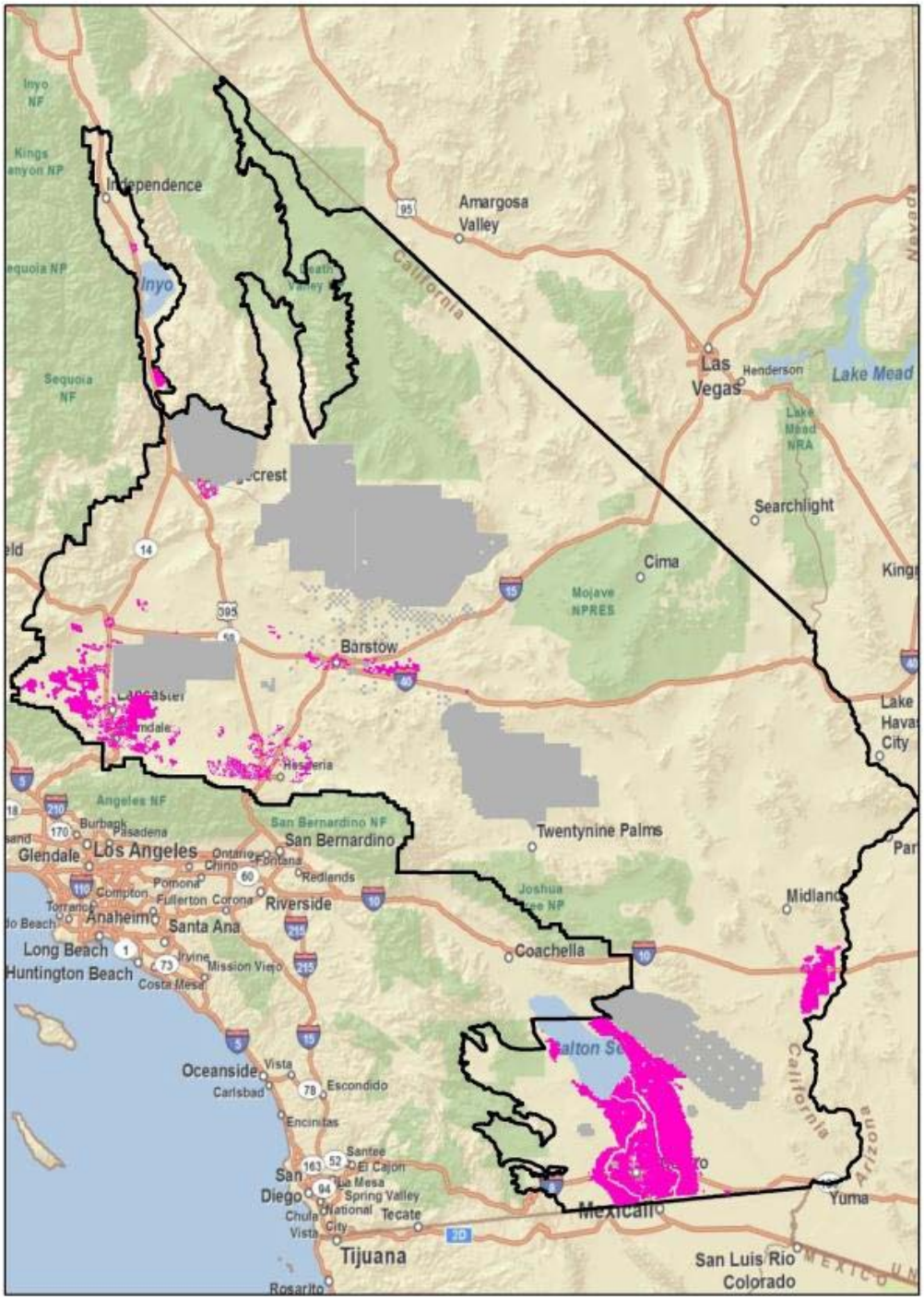
DUDEK
ICF INTERNATIONAL

April 2012

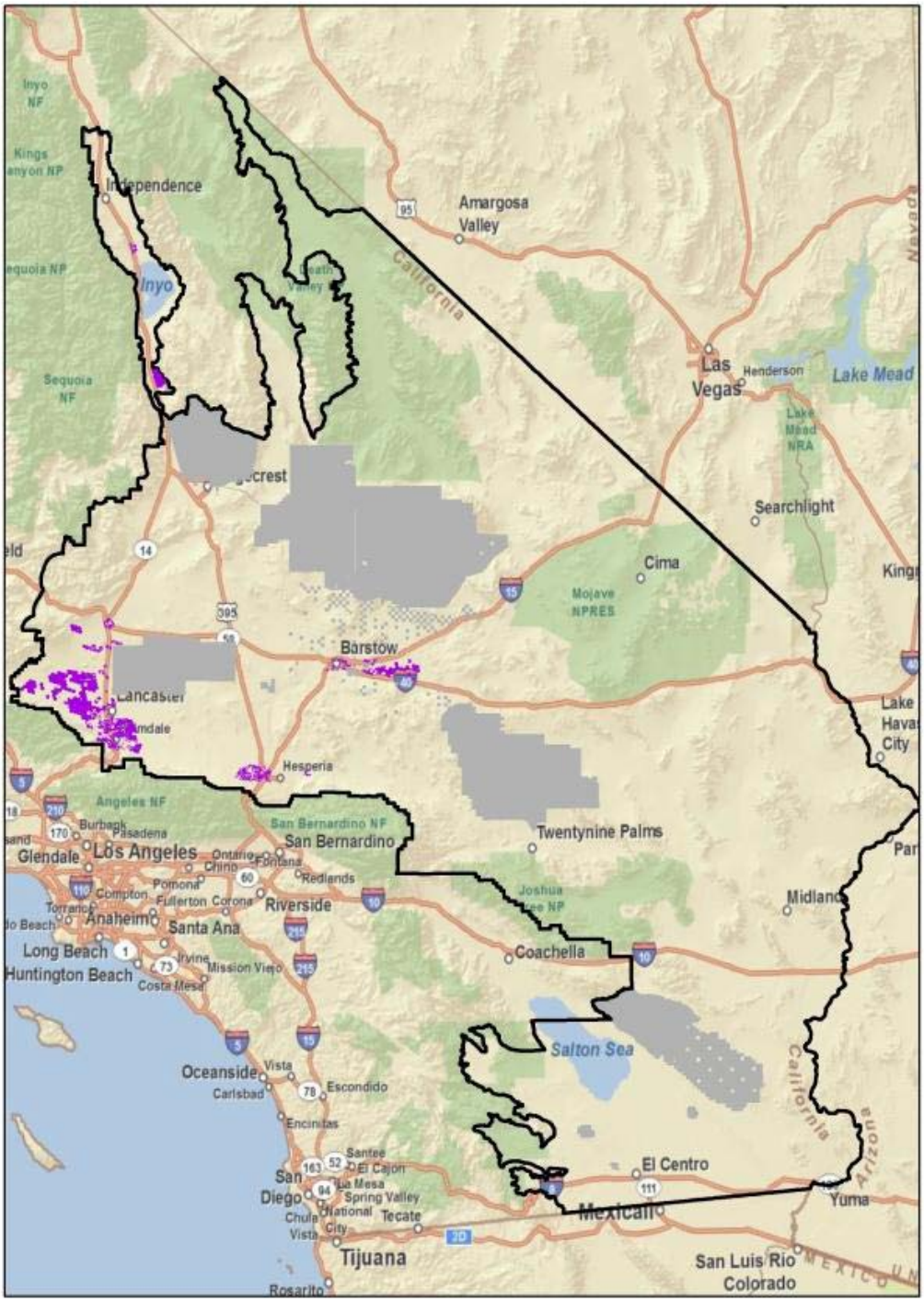
FIGURE 1
Scenario 1

DESERT RENEWABLE ENERGY CONSERVATION PLAN

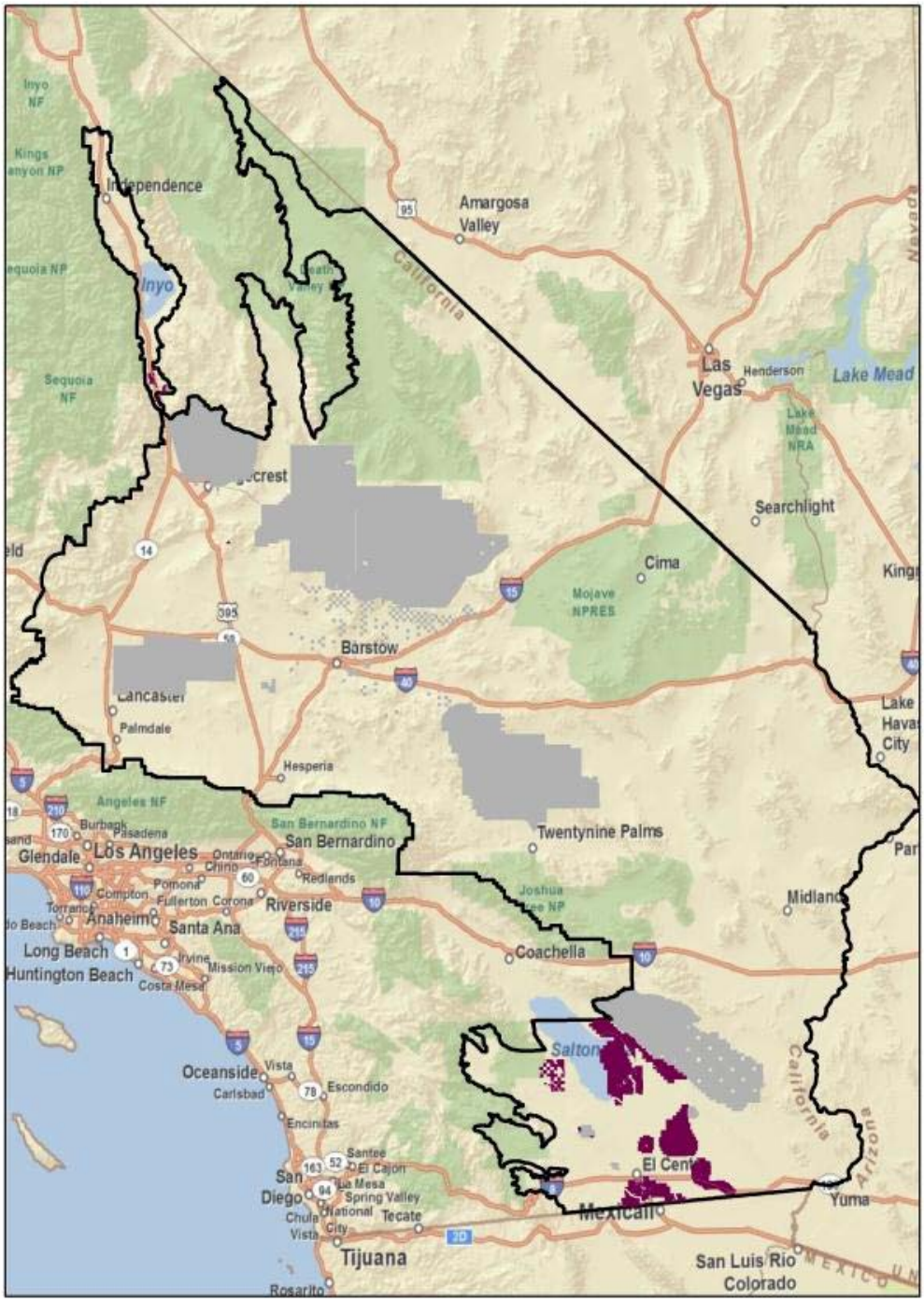
Preliminary Maps for Discussion - DRECP Stakeholder Discussion Purposes Only - 4/20/2012



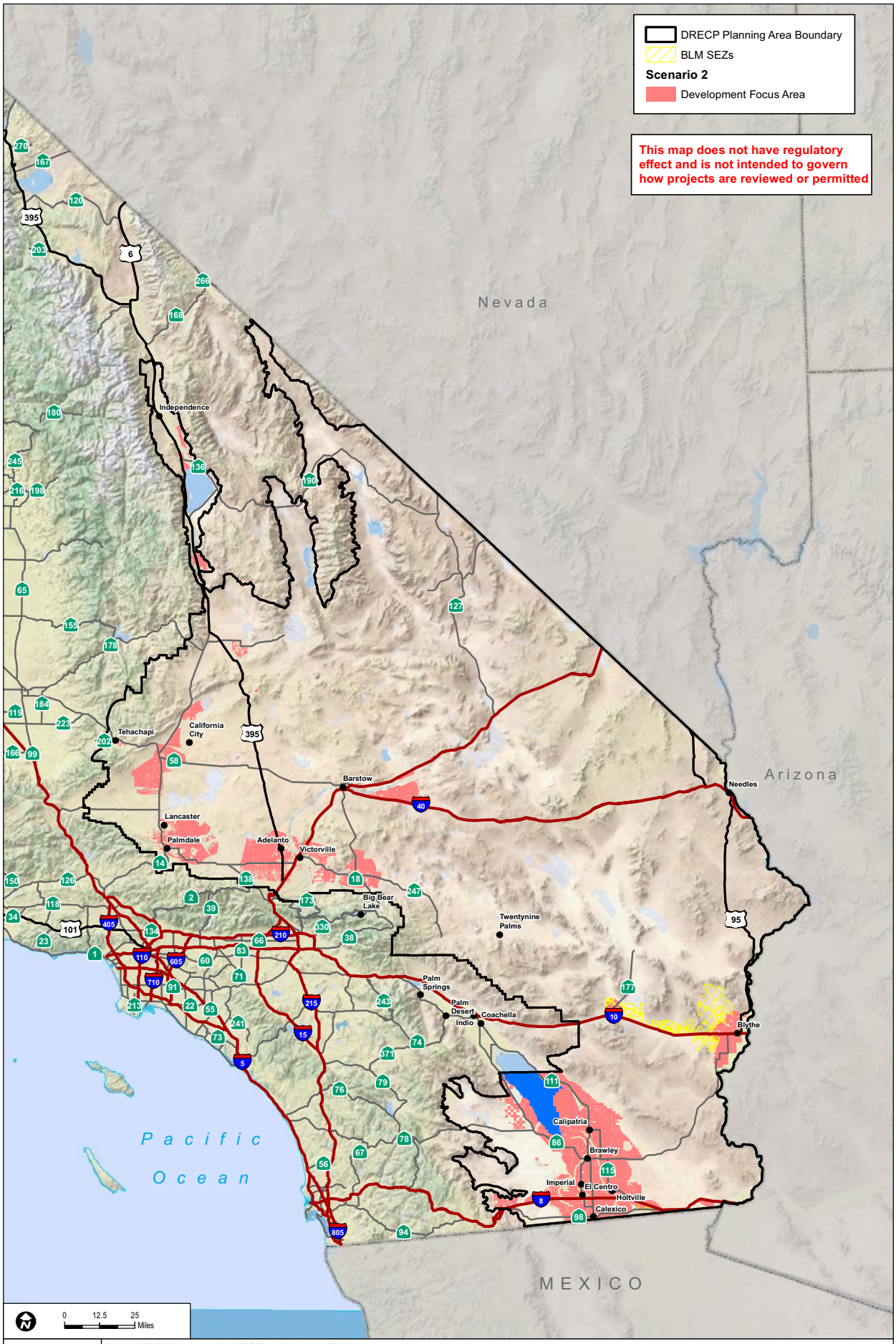
Scenario 1: Solar DFAs



Scenario 1: Wind DFAs



Scenario 1: Geothermal DFAs



Sources: CEC (2010); Agencies (2011); DRECP Land Ownership (ICFI 2011); USGS (2010); DRECP Land Cover (ICFI 2011); ESRI (2010); BLM (2012)

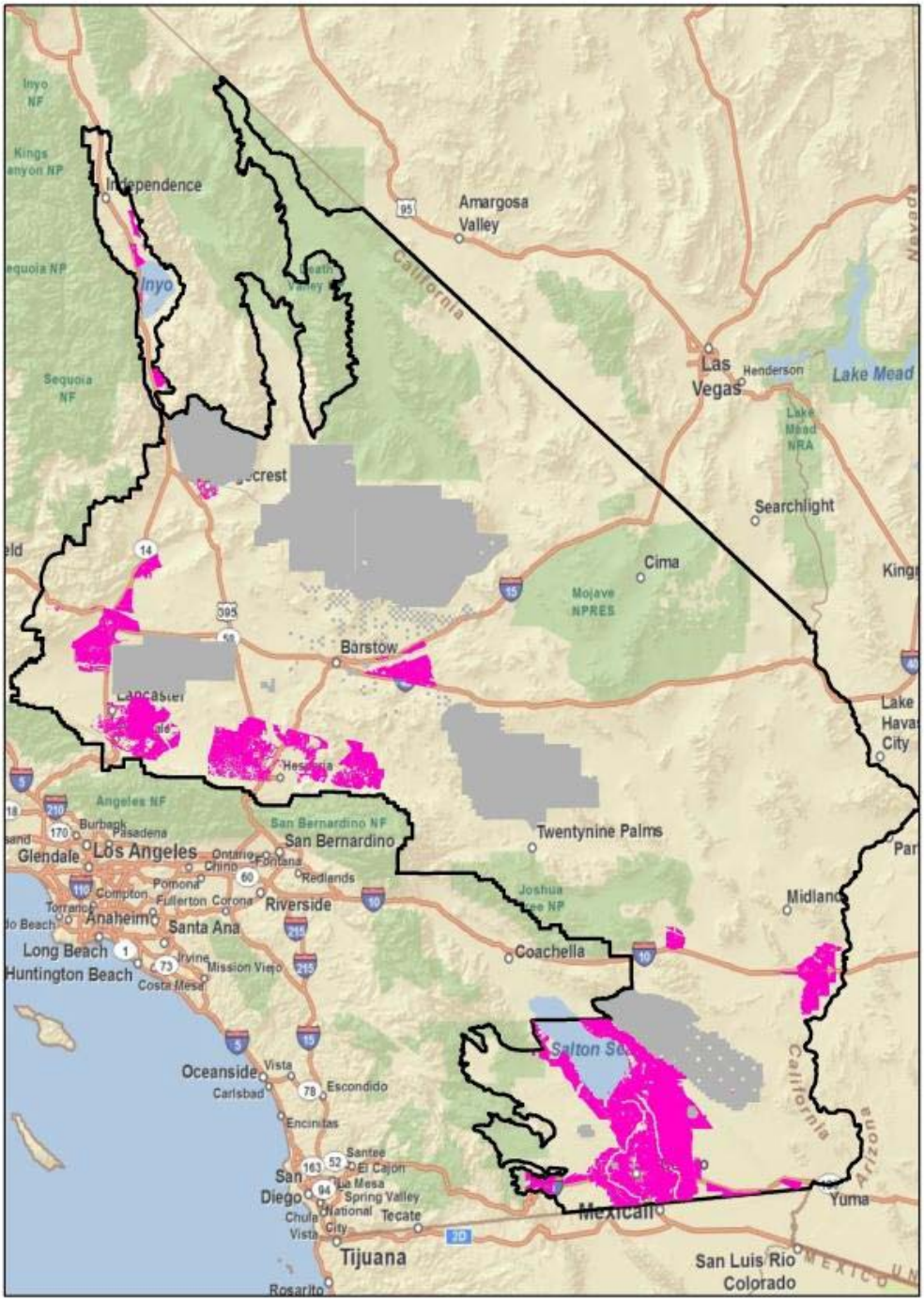
DUDEK
ICF INTERNATIONAL

April 2012

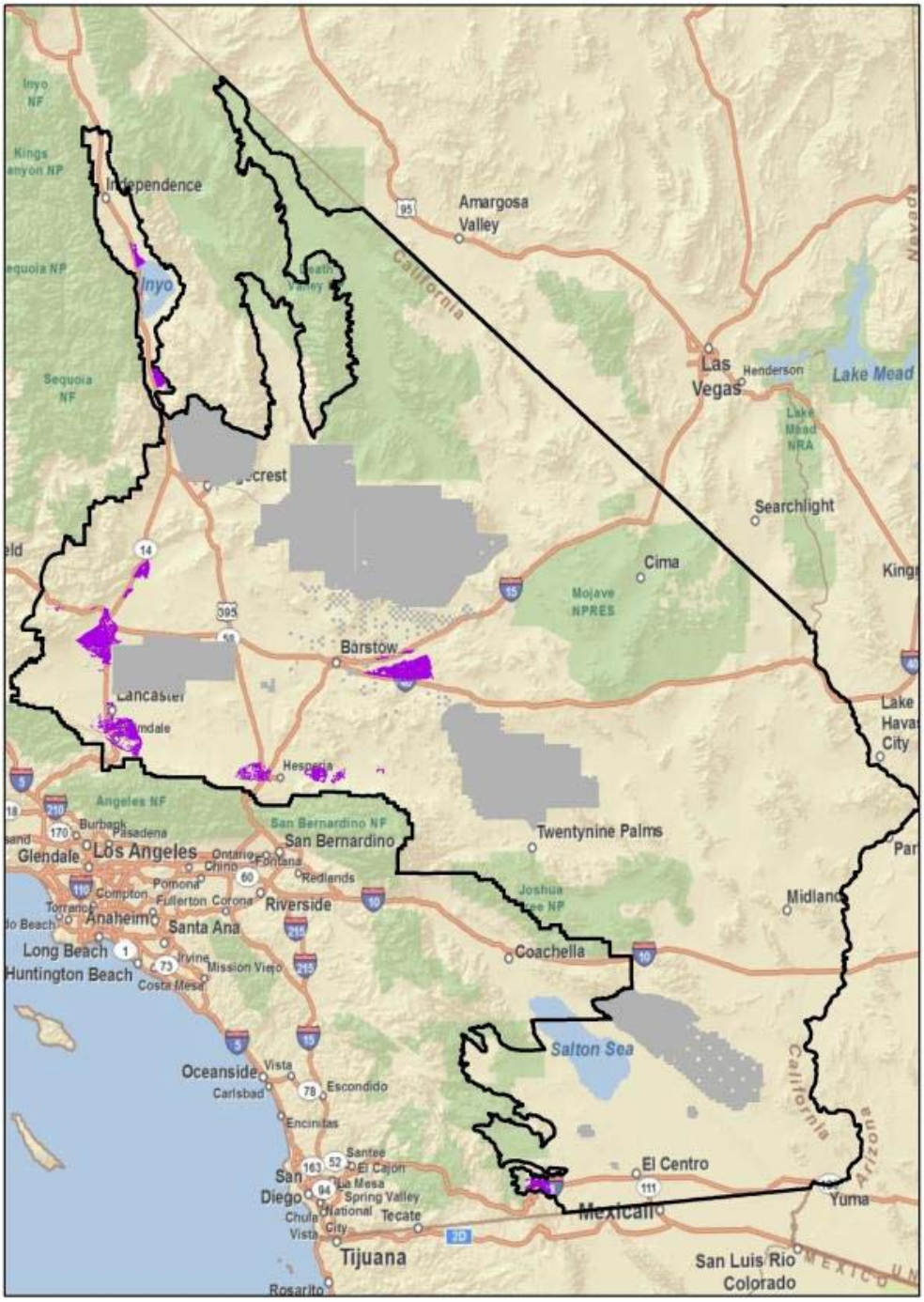
FIGURE 2
Scenario 2

DESERT RENEWABLE ENERGY CONSERVATION PLAN

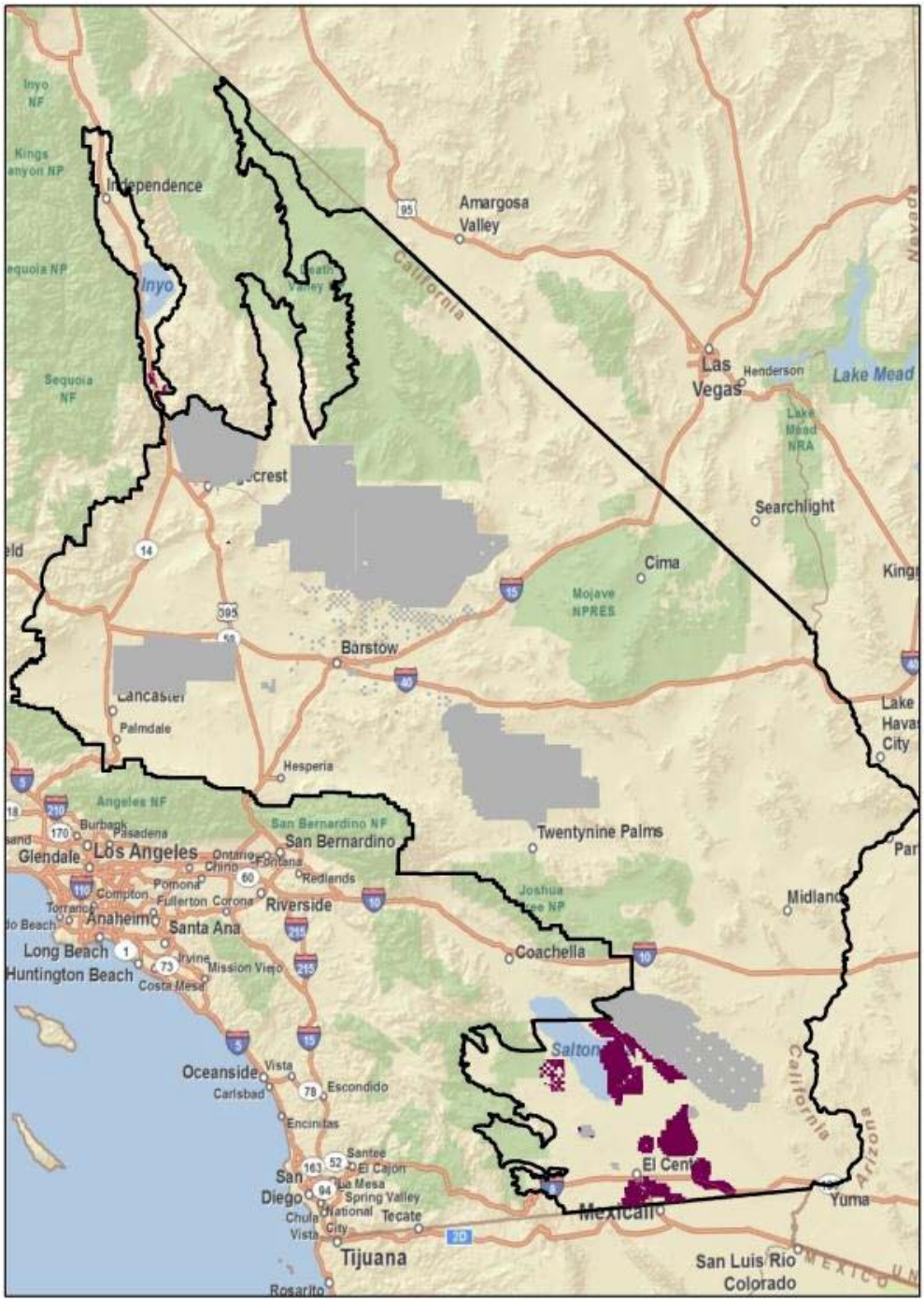
Preliminary Maps for Discussion - DRECP Stakeholder Discussion Purposes Only - 4/20/2012



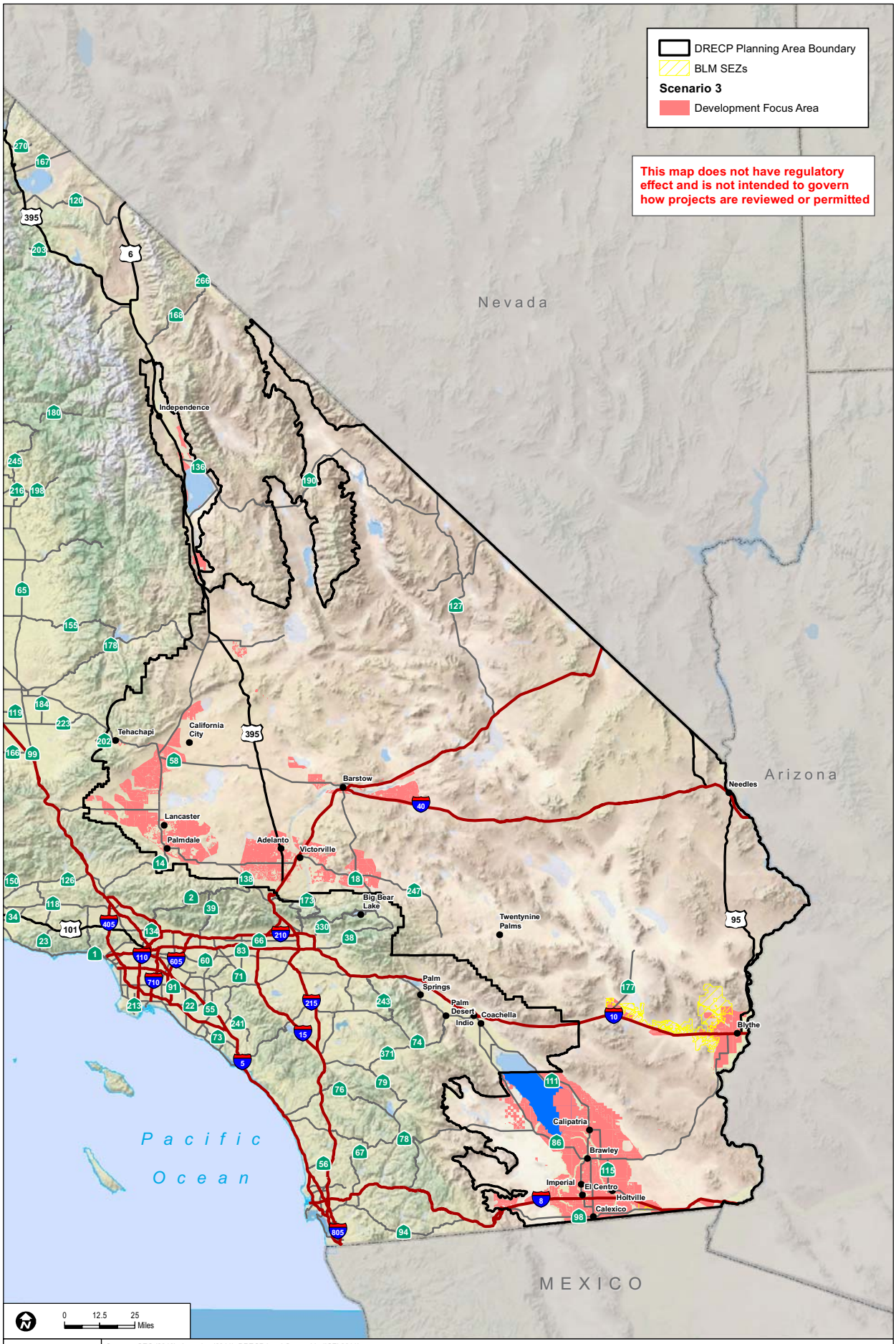
Scenario 2: Solar DFAs



Scenario 2: Wind DFAs



Scenario 2: Geothermal DFAs



Sources: CEC (2010); Agencies (2011); DRECP Land Ownership (ICFI 2011); USGS (2010); DRECP Land Cover (ICFI 2011); ESRI (2010); BLM (2012)

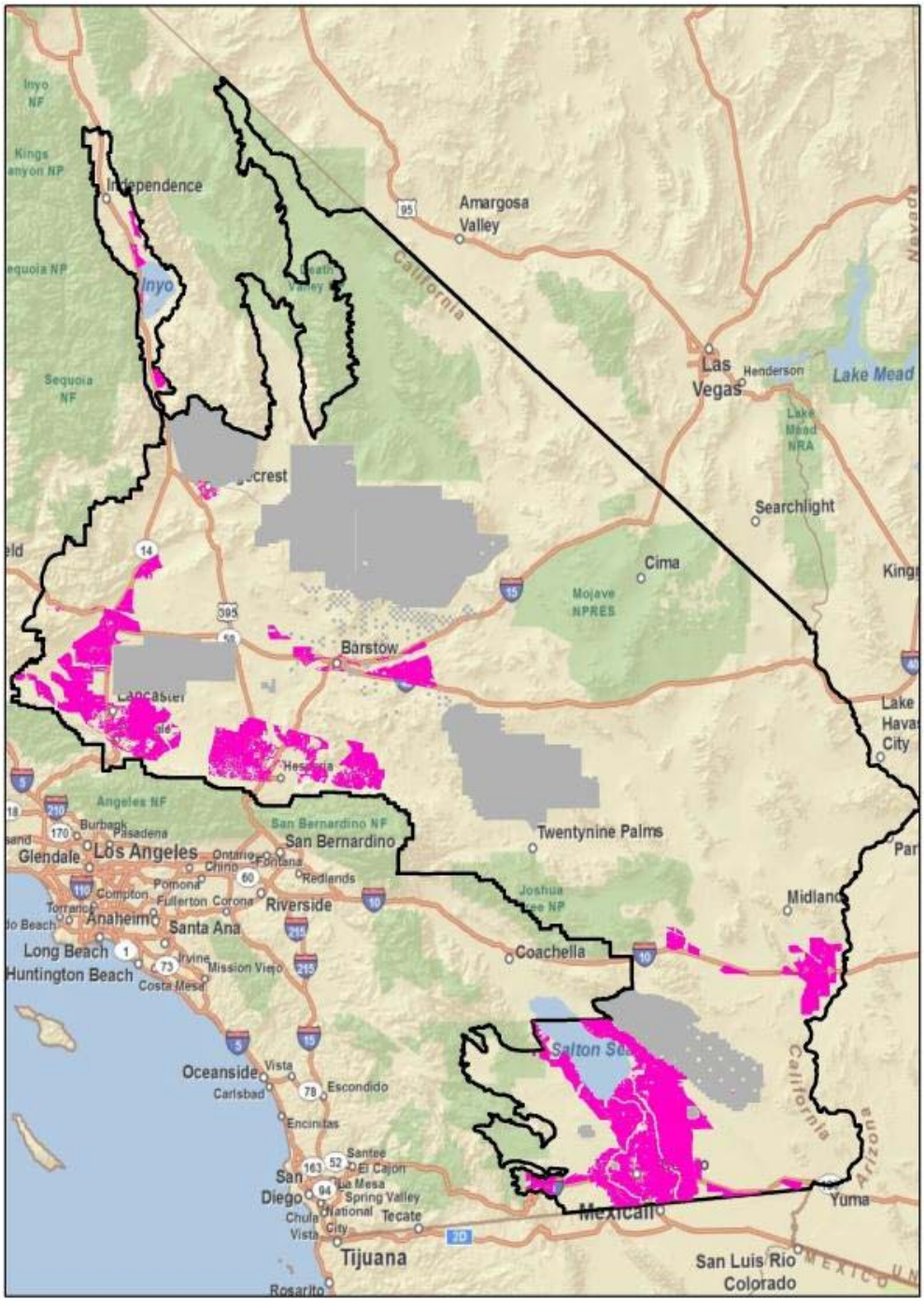
DUDEK
ICF INTERNATIONAL

April 2012

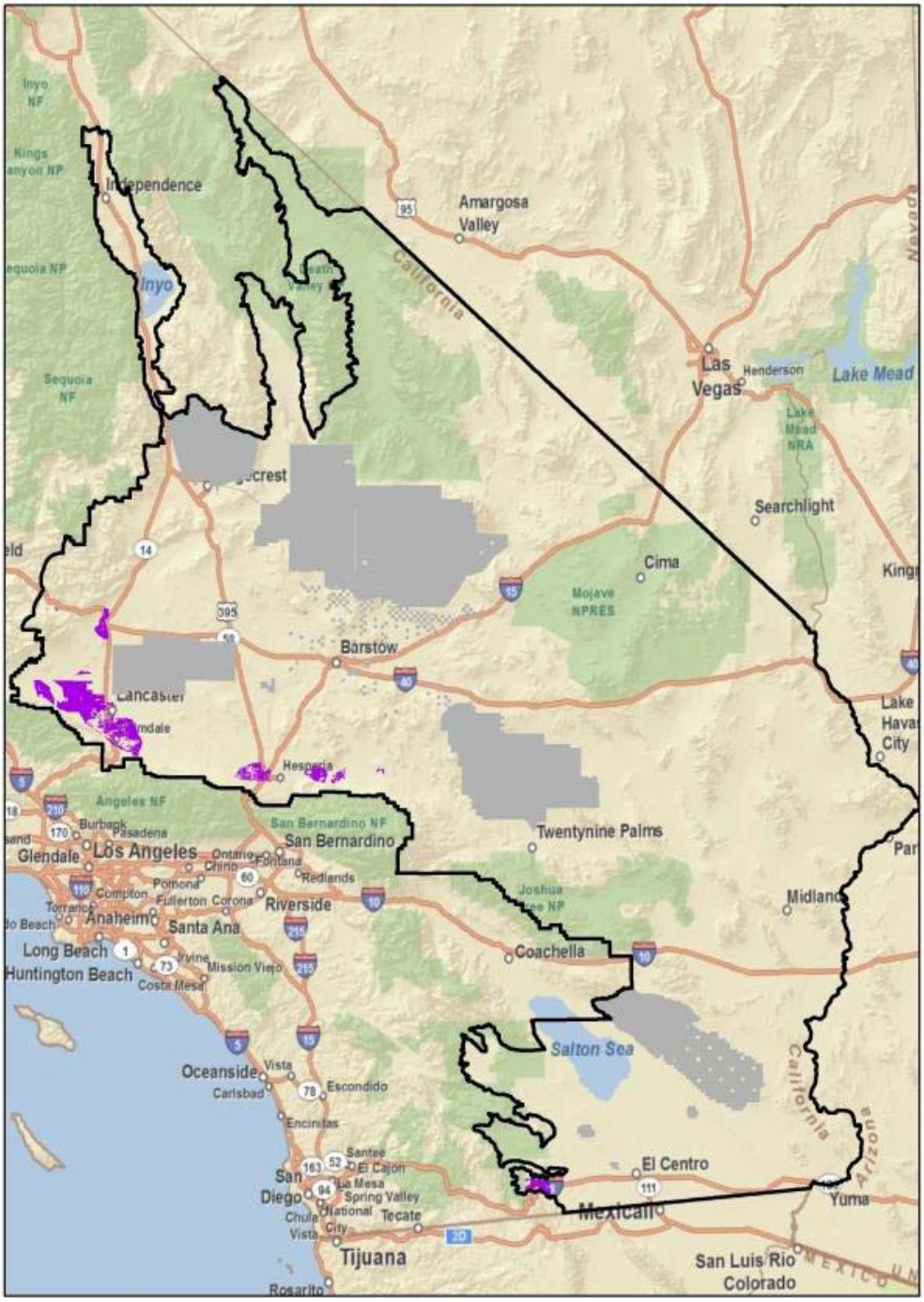
FIGURE 3
Scenario 3

DESERT RENEWABLE ENERGY CONSERVATION PLAN

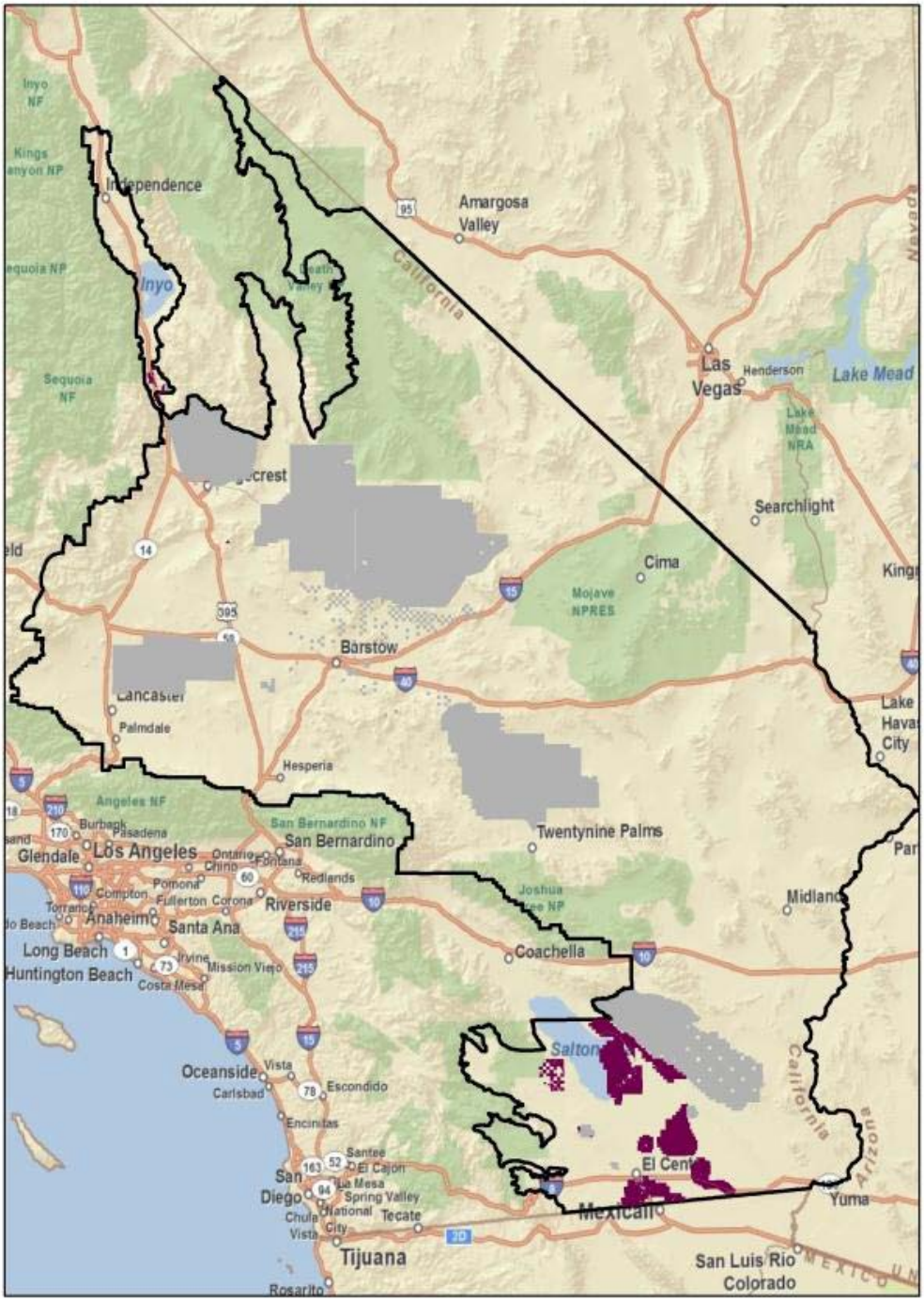
Preliminary Maps for Discussion - DRECP Stakeholder Discussion Purposes Only - 4/20/2012



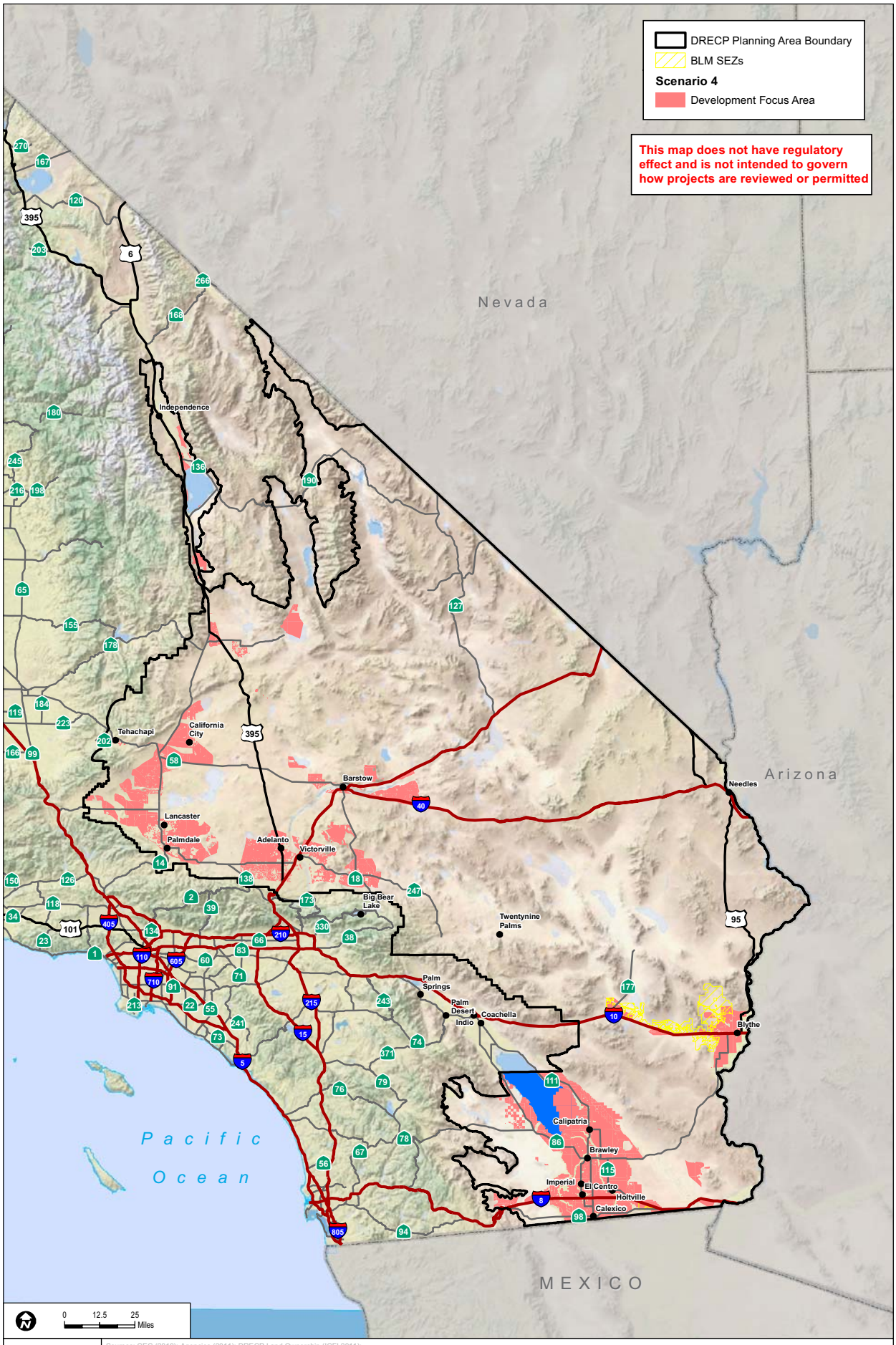
Scenario 3: Solar DFAs



Scenario 3: Wind DFAs



Scenario 3: Geothermal DFAs



Sources: CEC (2010); Agencies (2011); DRECP Land Ownership (ICFI 2011); USGS (2010); DRECP Land Cover (ICFI 2011); ESRI (2010)

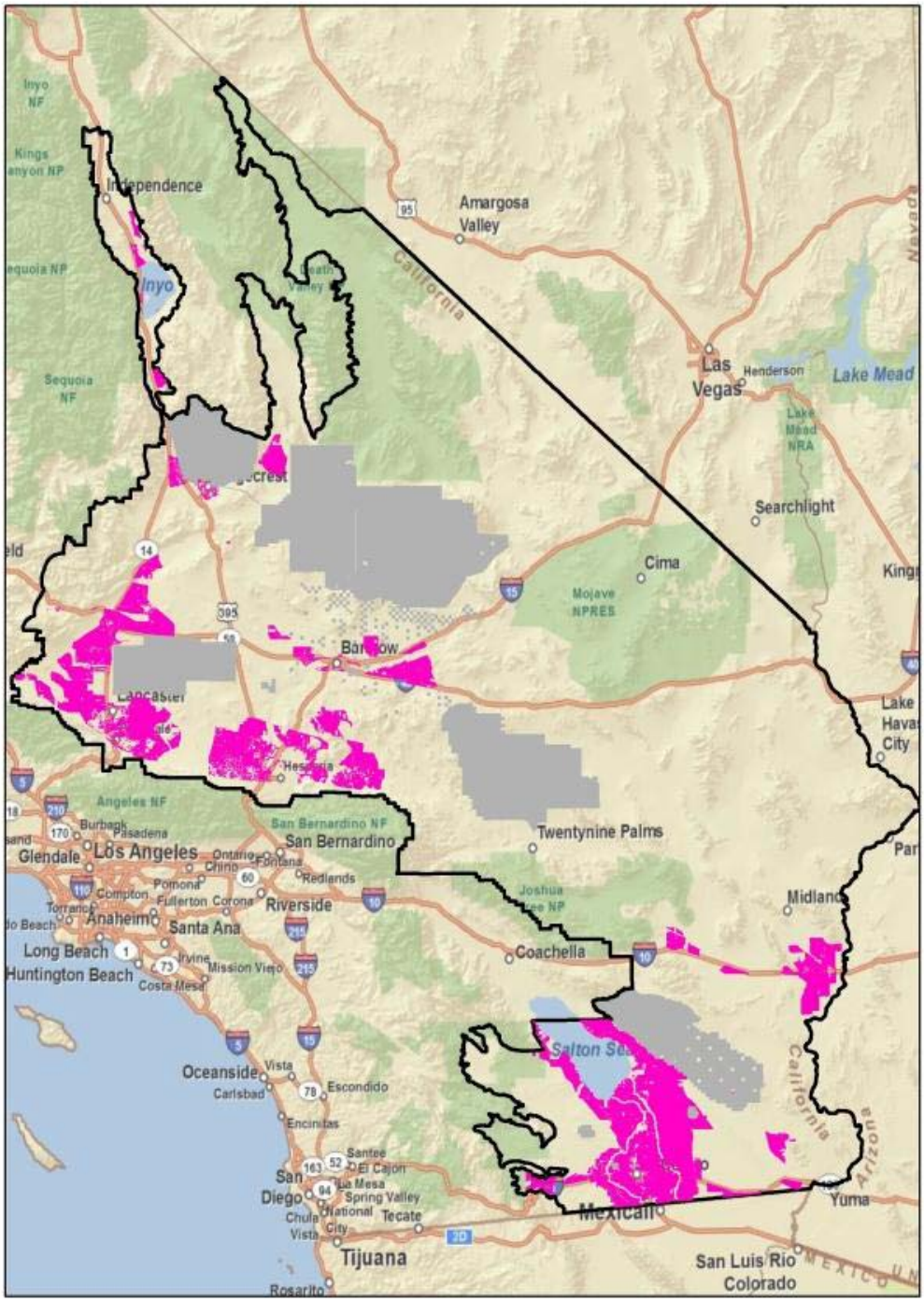
DUDEK
ICF INTERNATIONAL

April 2012

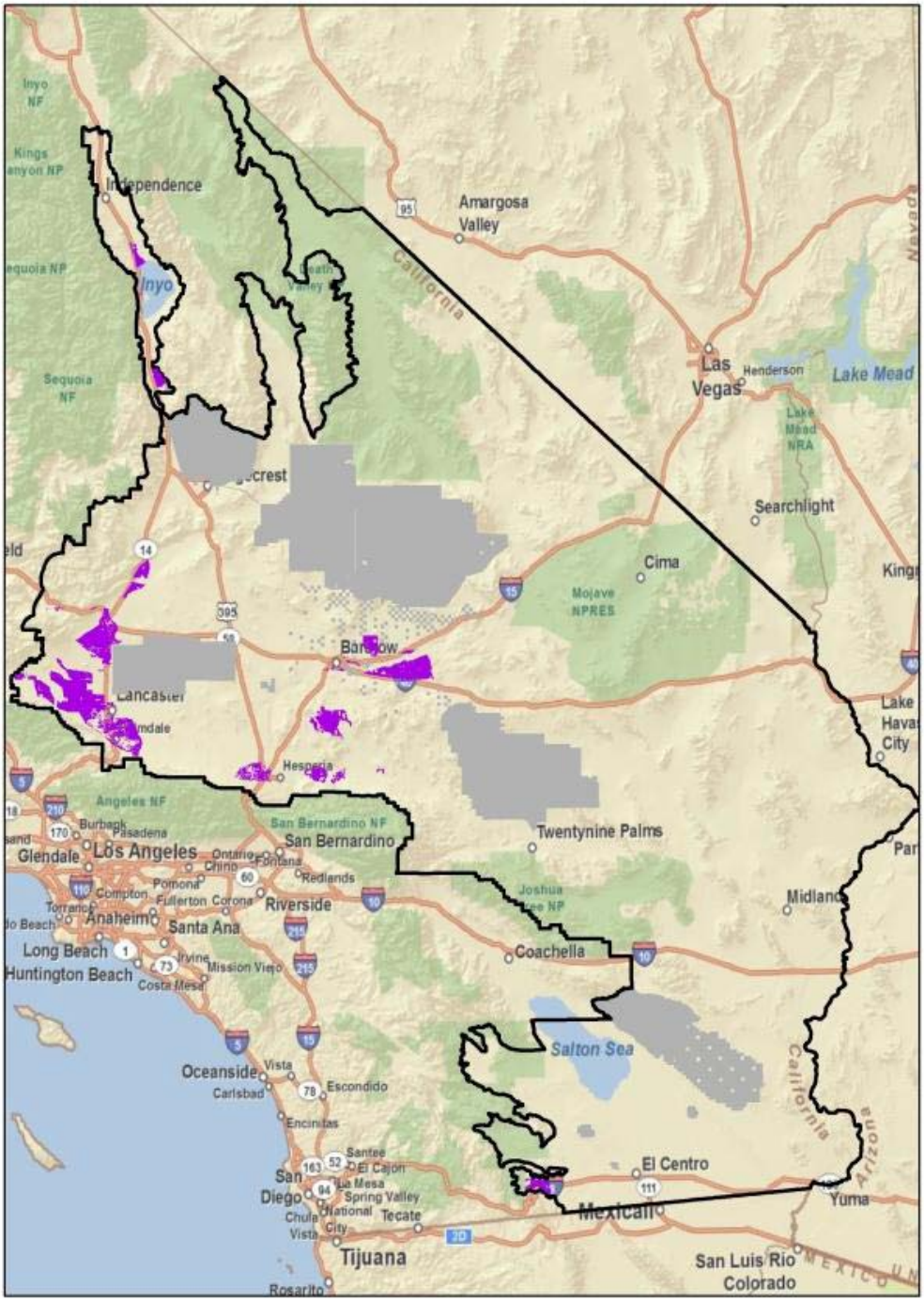
FIGURE 4
Scenario 4

DESERT RENEWABLE ENERGY CONSERVATION PLAN

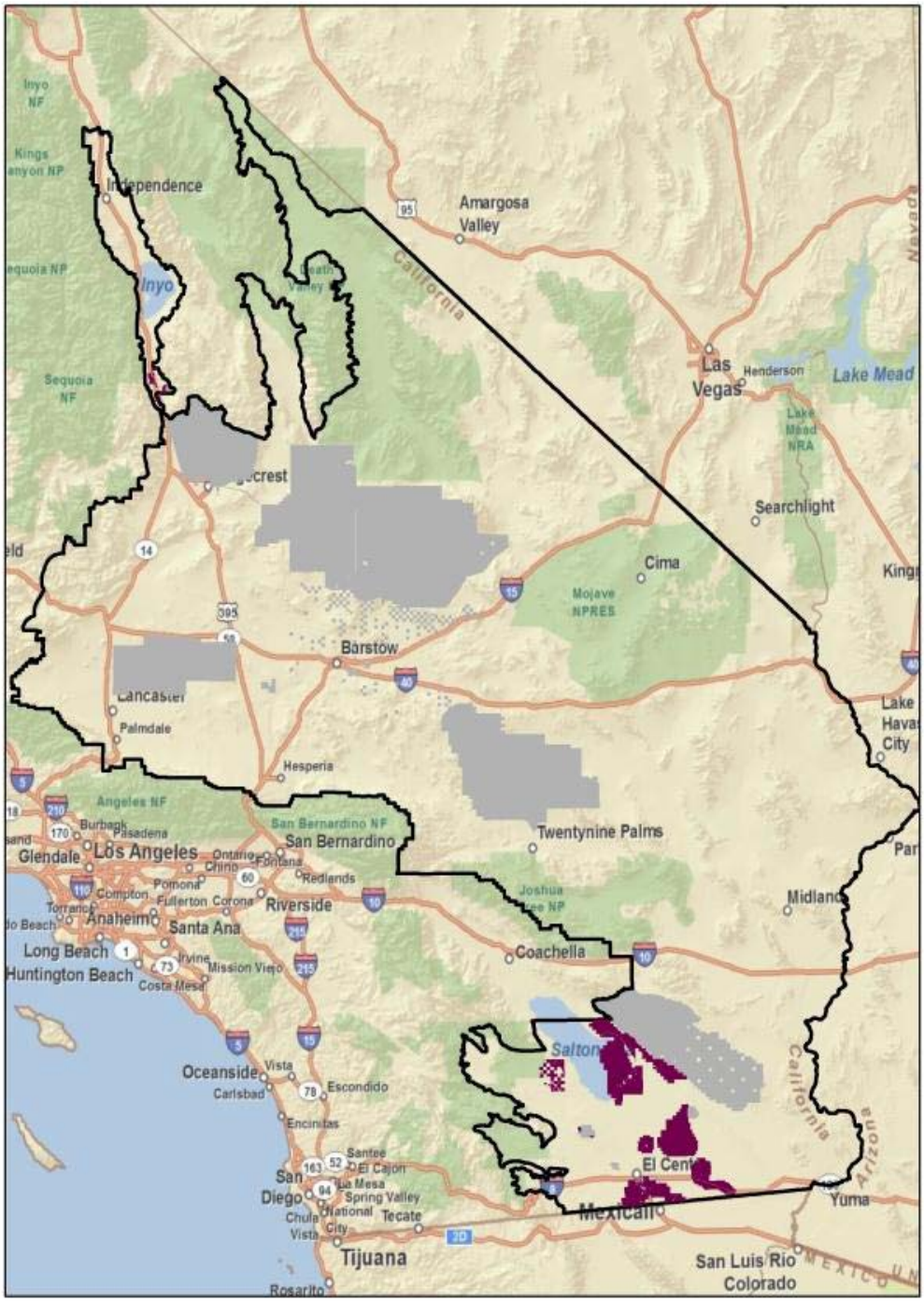
Preliminary Maps for Discussion - DRECP Stakeholder Discussion Purposes Only - 4/20/2012



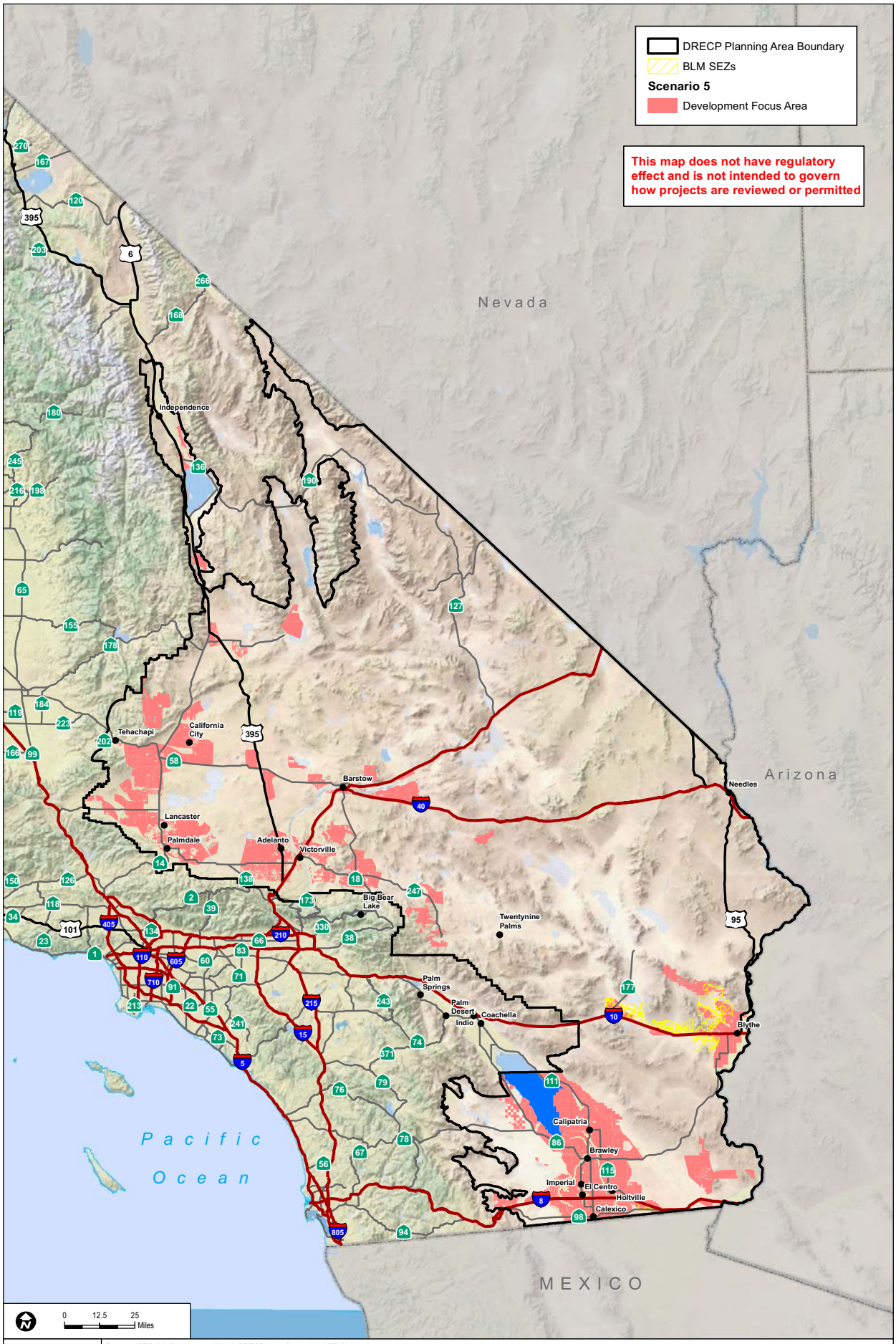
Scenario 4: Solar DFAs



Scenario 4: Wind DFAs



Scenario 4: Geothermal DFAs



Sources: CEC (2010); Agencies (2011); DRECP Land Ownership (ICFI 2011); USGS (2010); DRECP Land Cover (ICFI 2011); ESRI (2010); BLM (2012)

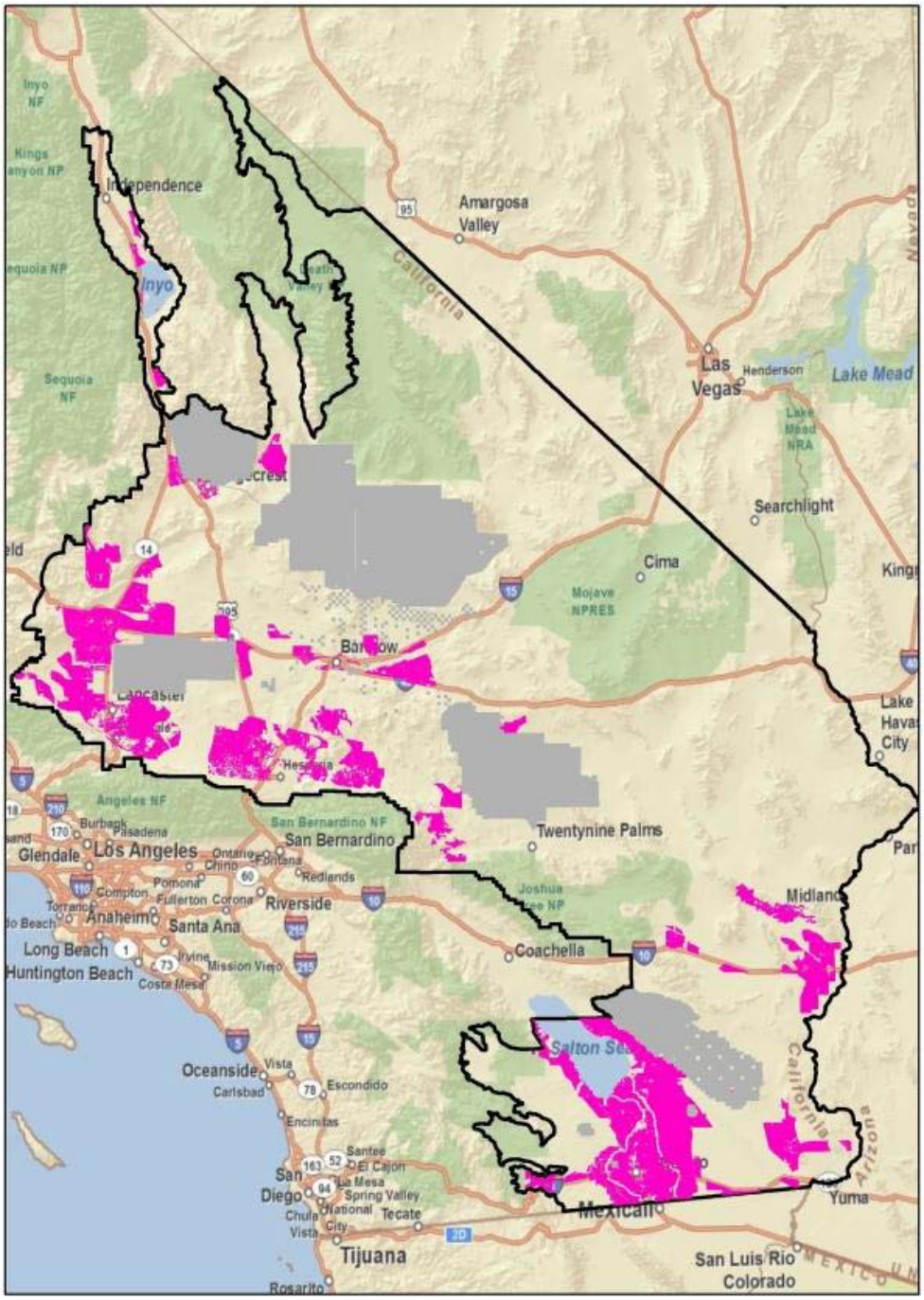
DUDEK
ICF INTERNATIONAL

April 2012

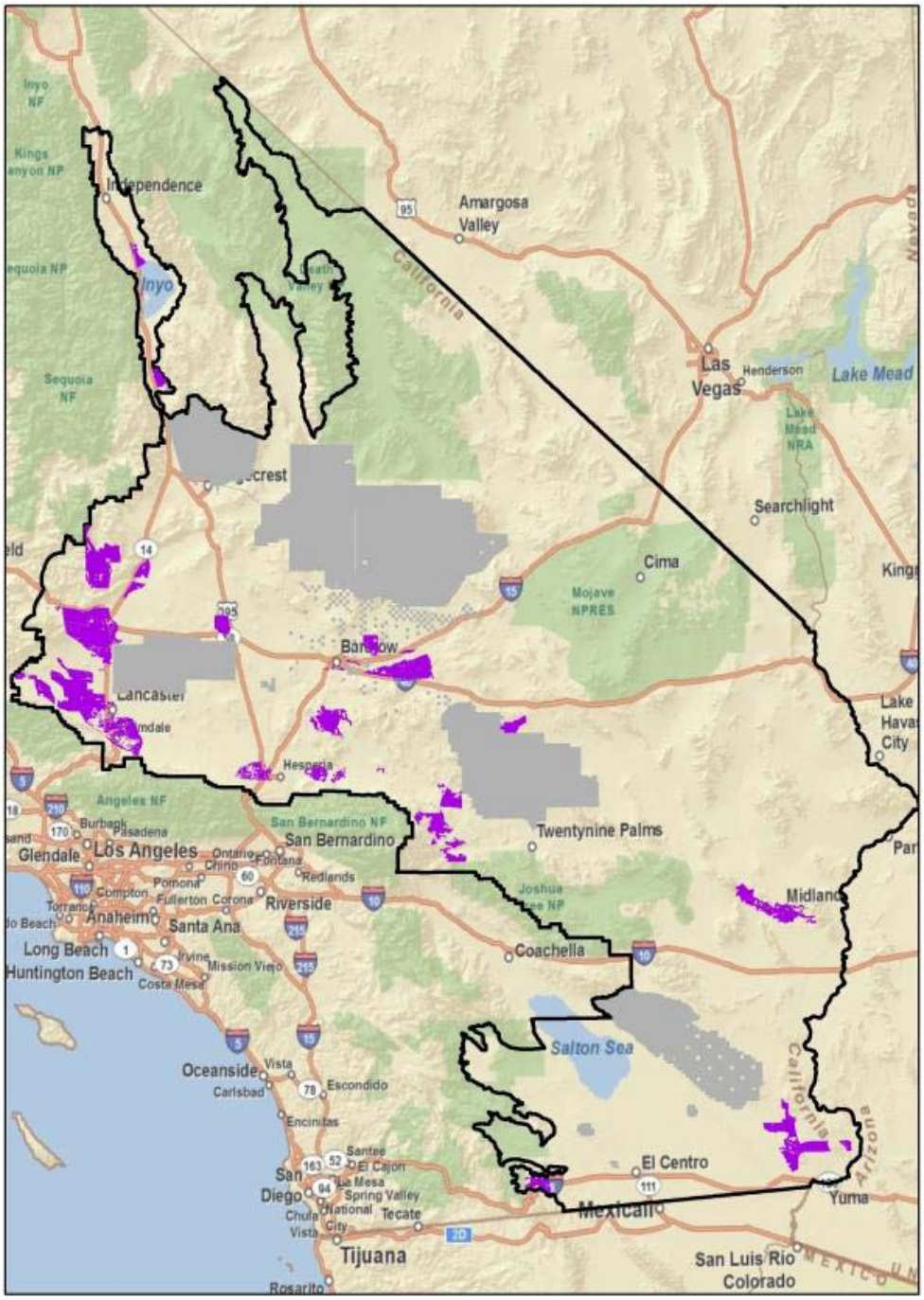
FIGURE 5
Scenario 5

DESERT RENEWABLE ENERGY CONSERVATION PLAN

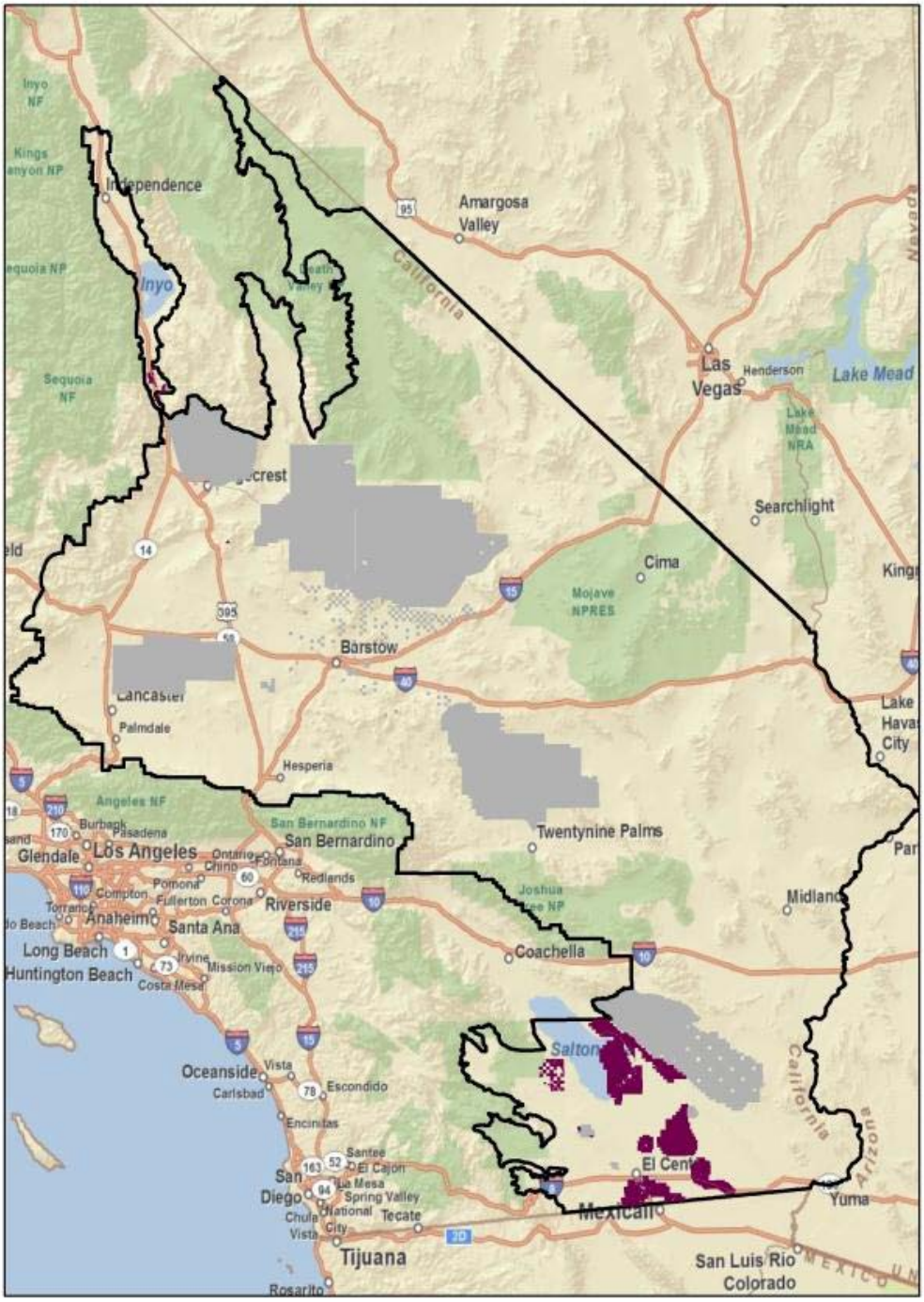
Preliminary Maps for Discussion - DRECP Stakeholder Discussion Purposes Only - 4/20/2012



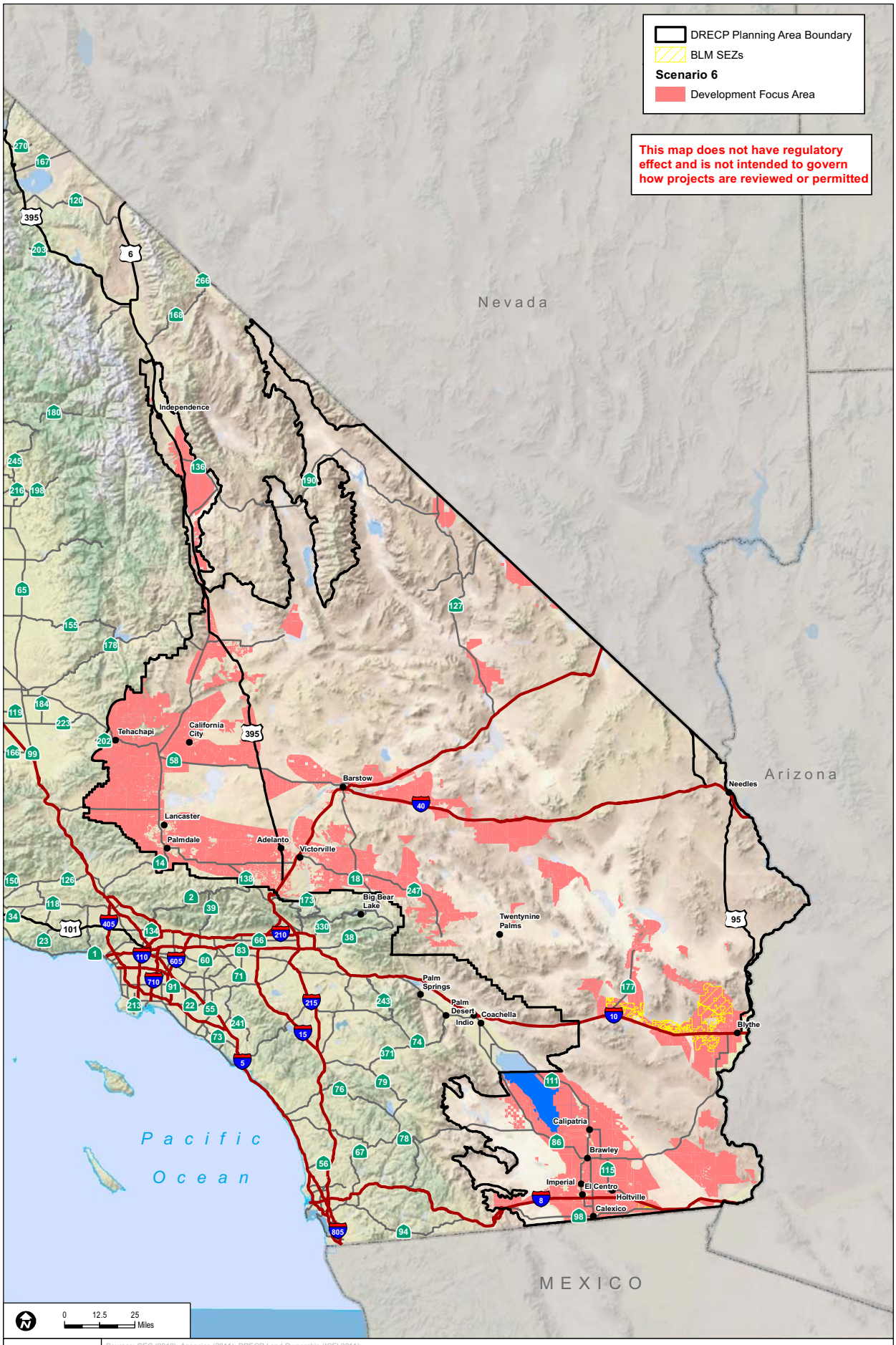
Scenario 5: Solar DFAs



Scenario 5: Wind DFAs



Scenario 5: Geothermal DFAs



Sources: CEC (2010); Agencies (2011); DRECP Land Ownership (ICFI 2011); USGS (2010); DRECP Land Cover (ICFI 2011); ESRI (2010); BLM (2012)

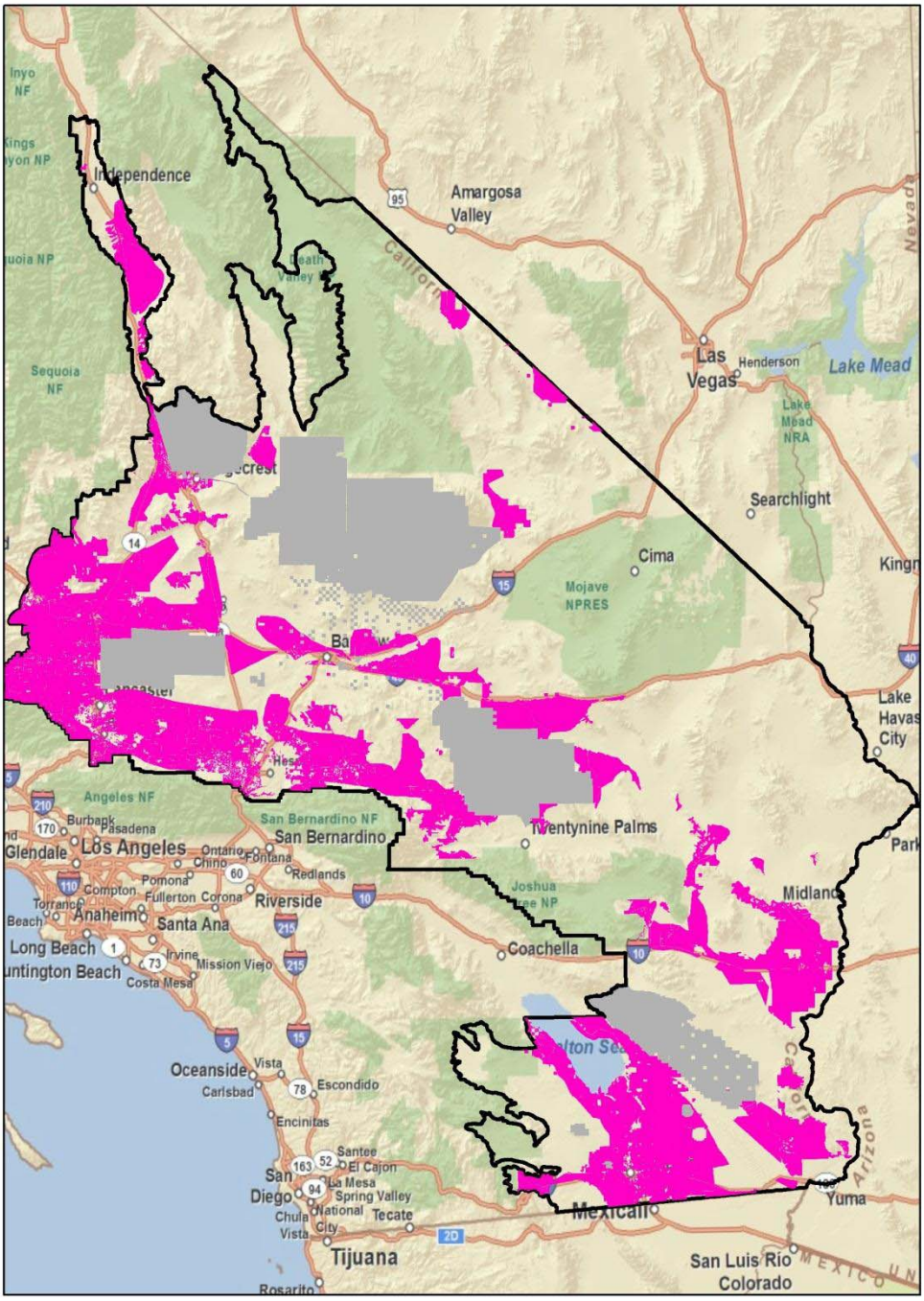
DUDEK
ICF INTERNATIONAL

April 2012

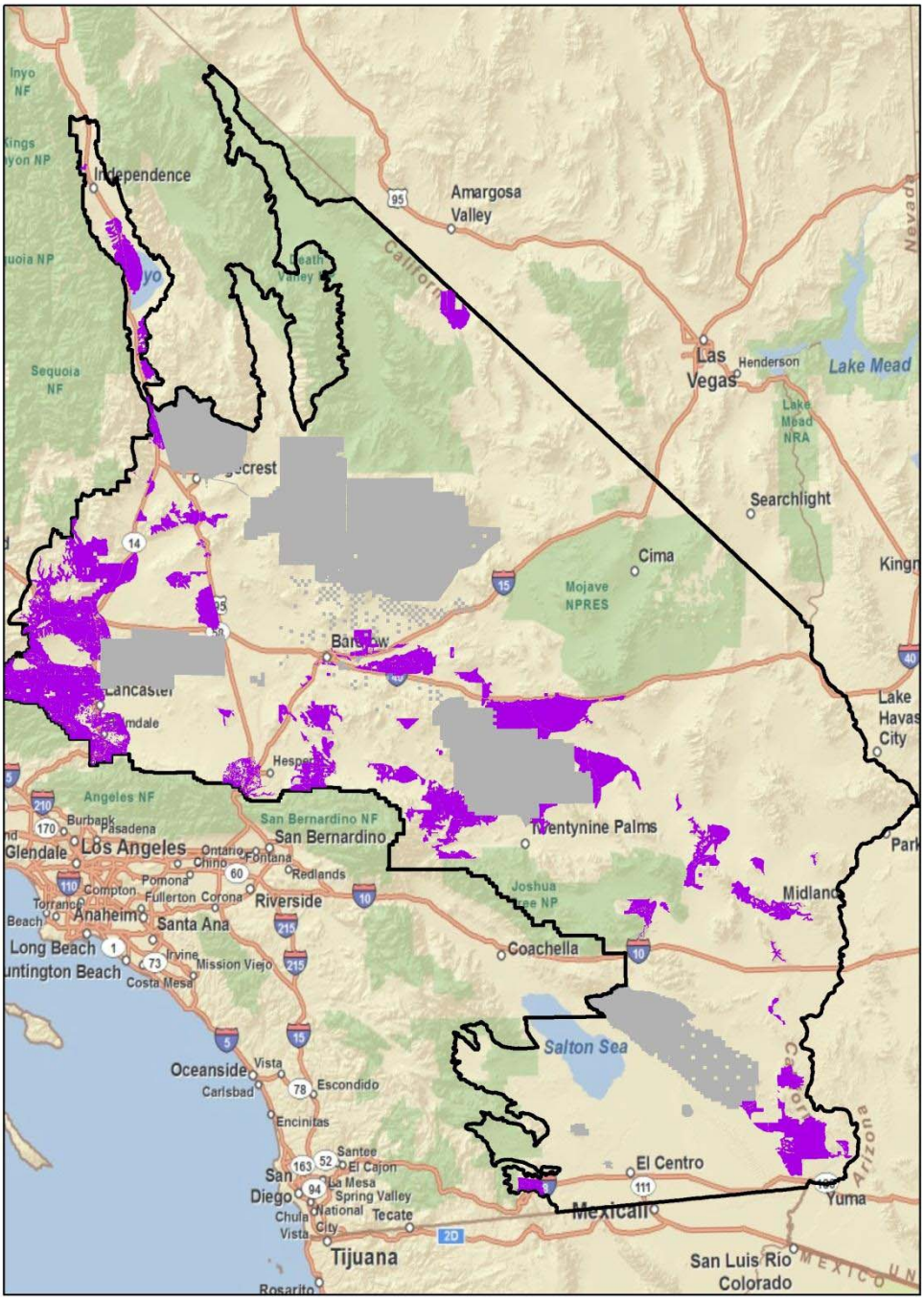
FIGURE 6
Scenario 6

DESERT RENEWABLE ENERGY CONSERVATION PLAN

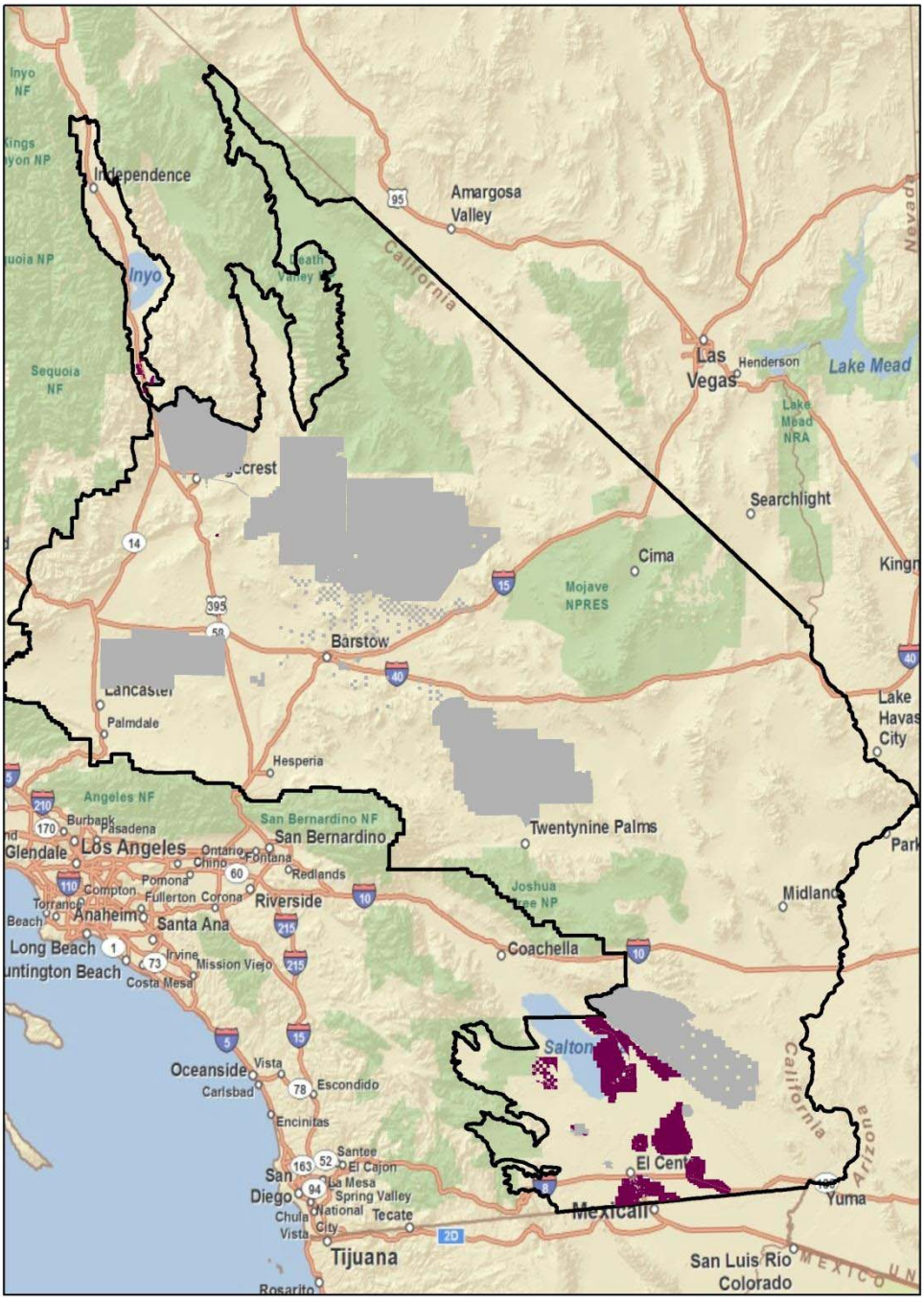
Preliminary Maps for Discussion - DRECP Stakeholder Discussion Purposes Only - 4/20/2012



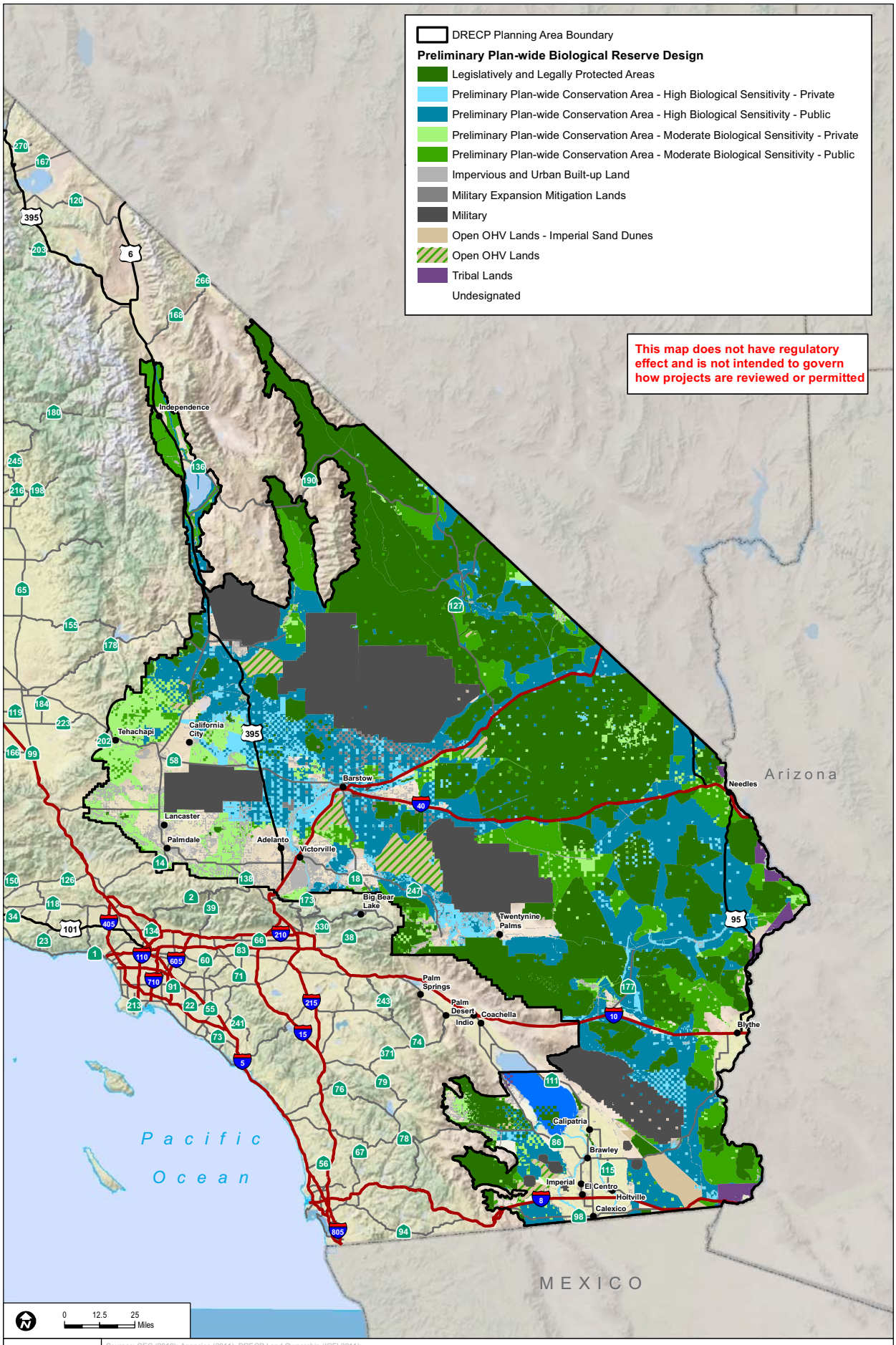
Scenario 6: Solar DFAs



Scenario 6: Wind DFAs



Scenario 6: Geothermal DFAs



Sources: CEC (2010); Agencies (2011); DRECP Land Ownership (ICFI 2011); USGS (2010); DRECP Land Cover (ICFI 2011); ESRI (2010)

DUDEK
ICF INTERNATIONAL

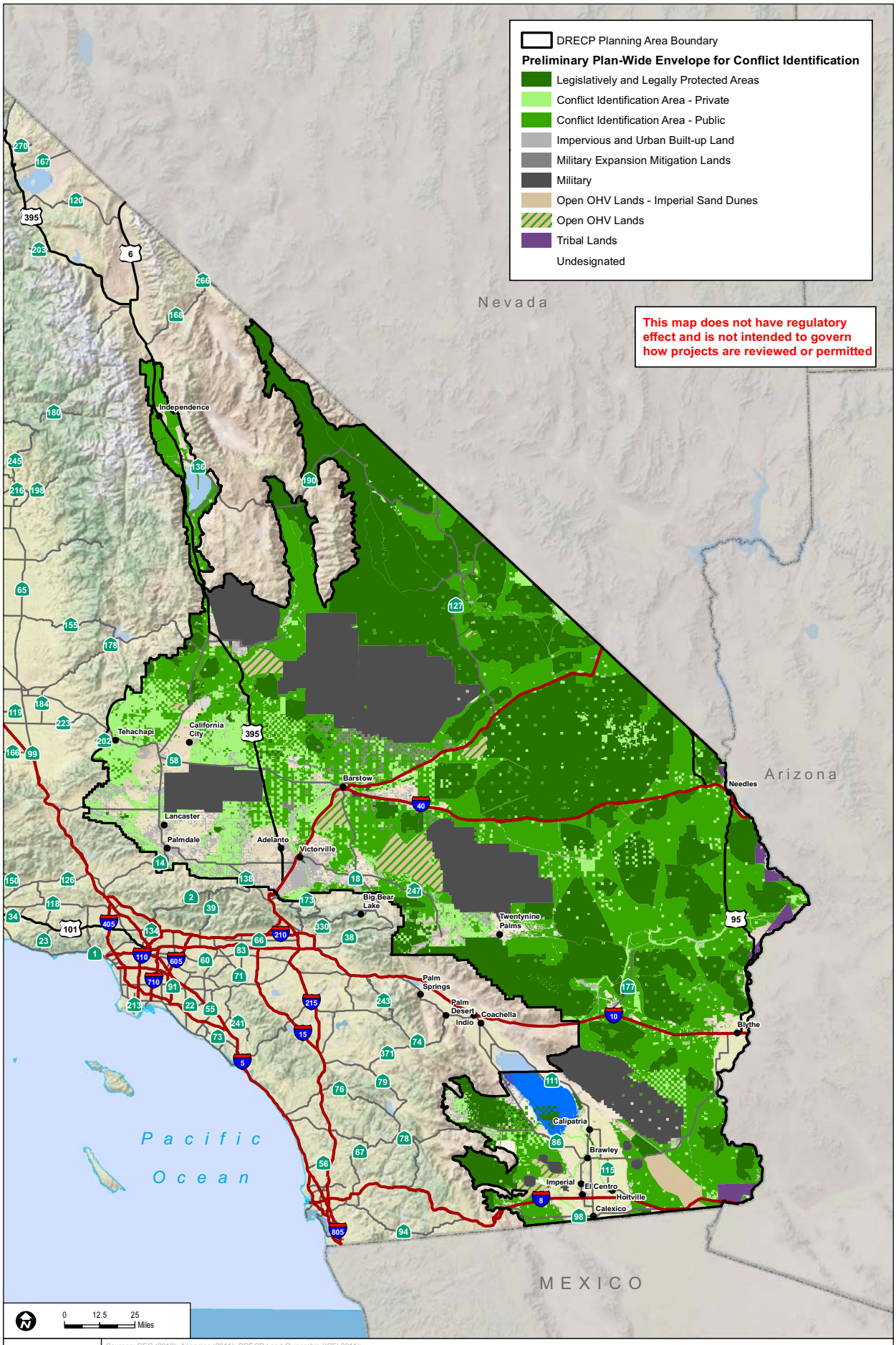
April 2012

FIGURE 1

Preliminary Plan-wide Biological Reserve Design

DESERT RENEWABLE ENERGY CONSERVATION PLAN

Preliminary Maps for Discussion - DRECP Stakeholder Discussion Purposes Only - 4/20/2012



Sources: CEC (2010); Agencies (2011); DRECP Land Ownership (ICFI 2011); USGS (2010); DRECP Land Cover (ICFI 2011); ESRI (2010)

DUDEK
ICF INTERNATIONAL

April 2012

FIGURE 1

Preliminary Plan-Wide Envelope for Conflict Identification

DESERT RENEWABLE ENERGY CONSERVATION PLAN

Preliminary Maps for Discussion - DRECP Stakeholder Discussion Purposes Only - 4/20/2012

DESERT RENEWABLE ENERGY CONSERVATION PLAN

PowerPoint Presentation:

"Overview of Preliminary Plan-Wide Biological Reserve Design and Renewable Energy Development Scenarios"

DESERT RENEWABLE ENERGY CONSERVATION PLAN

Overview of Preliminary Plan-Wide Biological Reserve Design and Renewable Energy Development Scenarios

DRECP Stakeholders Meeting

April 25/26, 2012

1

DESERT RENEWABLE ENERGY CONSERVATION PLAN

Overview

- Plan-wide Biological Reserve Design Process
- Preliminary Plan-Wide Biological Reserve Design
- Non-Biological Issues
- Preliminary Plan-Wide Envelope for Conflict Identification
- Development Scenarios
- Conflict Identification
- Next Steps

2

Plan-wide Biological Reserve Design Process

- Plan-wide biological reserve design is a key element of the **conservation strategy** because it establishes the biogeographic context within which DRECP conservation and management actions (proportional contribution) would occur to meet the biological goals and objectives of the Plan.
- **Plan-wide Biological Goals and Objectives** have been developed at the landscape, natural community, and species levels
  - March 2012 BGOs Memorandum, as discussed during the March 28, 2012 BGOs Workshop

Overview of Preliminary Plan-Wide Biological Reserve Design and Renewable Energy Development Scenarios
DESERT RENEWABLE ENERGY CONSERVATION PLAN

Plan-wide Biological Reserve Design Process

The DRECP reserve design process has four primary steps:

1. Evaluate ***baseline conservation and management*** in the Plan Area
2. Establish ***Plan-wide BGOs***
3. Apply systematic conservation planning using a ***reserve selection algorithm*** called Marxan with Zones
4. Delineate a ***preliminary plan-wide biological reserve design*** based on the Marxan modeling results and other data and expert-based information

Plan-wide Biological Reserve Design Process:

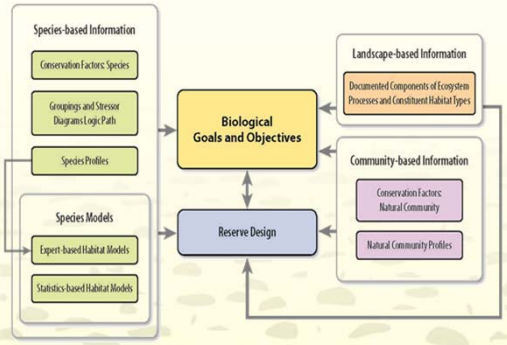
Evaluation of ***baseline conservation and management***

- **Gap Analysis**
- **Identifying Legally and Legislatively Protected Areas (LLPAs)**
- **Identifying Other Map Categories:**
  - Military
  - Military Expansion Mitigation Lands
  - Open OHV Areas
  - Tribal Lands

Plan-wide Biological Reserve Design Process:

Establish ***Plan-wide BGOs***

- Plan-wide Biological Goals and Objectives developed from:
  - Factors Critical to Species and Community Conservation
  - Conservation Planning ("Stressor") Diagram
  - Species profiles and habitat models
  - Natural community descriptions and map
  - Ecological and physical processes descriptions



Plan-wide Biological Reserve Design Process:

Application of the ***Marxan Reserve Selection Algorithm***

- Marxan (Watts et al. 2009) is a computer-based reserve selection algorithm recommended in the DRECP Independent Science Advisors report (DRECP ISA 2010), that is being used as a tool to develop an "optimized" Plan-wide biological reserve design for the DRECP.
- Marxan is one of many conservation planning tools used to develop the DRECP conservation strategy and Plan-wide biological reserve design.

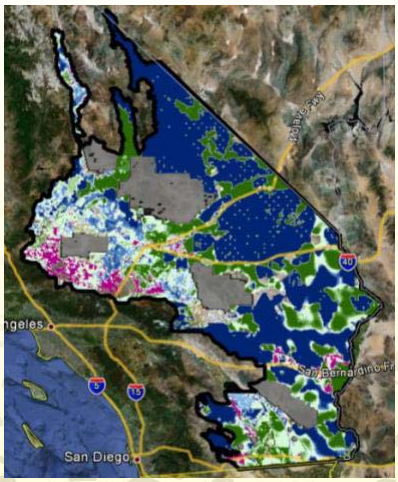
7

Overview of Preliminary Plan-Wide Biological Reserve Design and Renewable Energy Development Scenarios
DESERT RENEWABLE ENERGY CONSERVATION PLAN

Plan-wide Biological Reserve Design Process:

Application of the ***Marxan Reserve Selection Algorithm***

- **Marxan Scenario 5: Biology and Renewables, DFA Zone Limited**
  - **Blue:** LLPAs and Additional Conservation Areas Zone
  - **Green:** Conservation Areas Zone
  - **Pink:** Marxan DFA Zone
  - **Gray:** Military



Plan-wide Biological Reserve Design Process:

Delineation of the ***preliminary plan-wide biological reserve design***

- Marxan results ≠ Preliminary Plan-wide Reserve Design
- Preliminary Plan-wide Biological Reserve Design refinements and expert-based choices (Post-Marxan) also considers:
  - **Species Habitat Distribution and Occurrences:** concentrations, major populations, essential locations
  - **Natural Communities:** representation and capture of rare and sensitive types
  - **Large Habitat Blocks/Core Areas**
  - **Habitat Linkages and corridors**
  - **Physiographic and Environmental Representativeness:** elevation gradients, slope, aspect, temperature, rainfall, including climate change
  - **Ecological Processes:** landscapes supporting aeolian processes, alluvial and fluvial processes, geomorphological processes

Preliminary Plan-Wide Biological Reserve Design

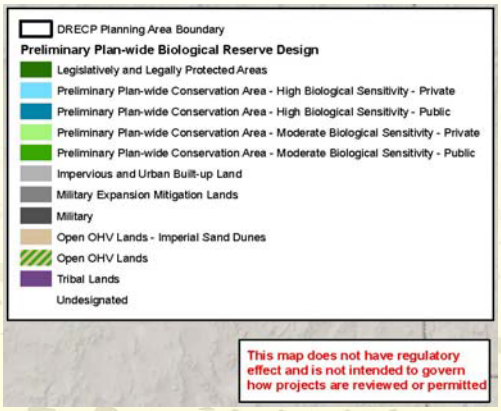
Definition of the **Preliminary Plan-wide Biological Reserve Design**:

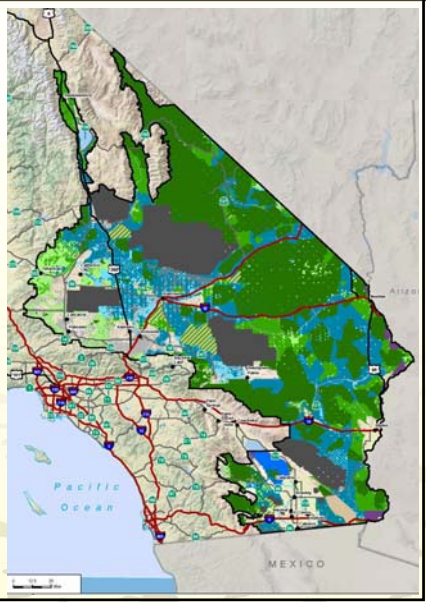
- Is a spatial expression of the preliminary plan-wide biological goals and objectives
- Is an idealized spatial expression of a preliminary plan-wide DRECP biological conservation strategy
- Recognizes that implementation of the conservation strategy could vary depending on land status and ownership
- Establishes context for consideration and analysis of the DRECP proportional contribution
- Is the area from which the DRECP proportional contribution will be derived

Overview of Preliminary Plan-Wide Biological Reserve Design and Renewable Energy Development Scenarios

DESERT RENEWABLE ENERGY CONSERVATION PLAN

Preliminary Plan-Wide Biological Reserve Design





Overview of Preliminary Plan-Wide Biological Reserve Design and Renewable Energy Development Scenarios

DESERT RENEWABLE ENERGY CONSERVATION PLAN

Preliminary Plan-Wide Biological Reserve Design

Map Color Legend	Map Legend Name	Description
	Legislatively and Legally Protected Areas	Existing protected lands; emphasis on existing protection and management of biological resource values. No renewable energy development covered by DRECP.
Public Private	Preliminary Plan-wide Conservation Area – Higher Biological Sensitivity	Based on Marxan Scenario 5 additional conservation area zone (blue areas), desert tortoise (conservation areas and least cost corridors), Mohave ground squirrel conservation areas and range, flat-tailed horned lizard management areas, major rivers, desert linkage network, and expert input. Higher biological sensitivity signifies areas where biological resources are more sensitive to perturbation or where biological resources are concentrated or where highly sensitive biological resources occur. In general, fewer uses or less intensive uses are compatible with these areas.
Public Private	Preliminary Plan-wide Conservation Area – Moderate Biological Sensitivity	Based on Marxan Scenario 5 conservation area zone (green areas) and other biological resource information, including species occurrence and model data, natural community data, landscape-level information, and expert input. In general, moderate biological sensitivity signifies areas where biological resources are moderately sensitive to perturbation or where biological resources are less concentrated or where moderately sensitive biological resources occur. In general, more uses or more intensive uses are compatible with these areas.
	Military and Military Expansion Mit. Lands	No renewable energy development or conservation covered by DRECP currently displayed or considered (subject to change pending DOD input).
	Open OHV (Imperial) Open OHV	Biological conservation is area dependent.
	Tribal	No renewable energy development or conservation covered by DRECP currently displayed or considered (subject to change pending tribal input).
	Impervious and Urban Built-up Land	Utility-scale renewable energy development and conservation unlikely.
	Undesignated	Conservation unlikely.

12

Non-Biological Issues

- Non-biological resources and uses in the Plan Area are also being considered during DRECP development
- Focused on BLM lands for purposes of initial conflict identification at the Plan-wide level
- Some non-biological resources and uses are not mappable or are still in the process of being mapped
- Non-biological resources and uses on non-BLM lands were not considered during this preliminary Plan-wide assessment

Overview of Preliminary Plan-Wide Biological Reserve Design and Renewable Energy Development Scenarios
DESERT RENEWABLE ENERGY CONSERVATION PLAN

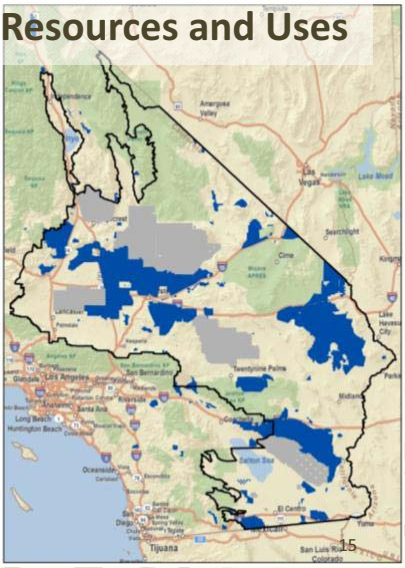
BLM Lands Non-biological Resources and Uses

- BLM interdisciplinary resource/use data, including:
  - Areas of Critical Environmental Concern (ACECs; biological and cultural)
  - Special Recreational Management Areas (SRMAs)
  - Grazing allotments
  - Herd management areas
- Non-biological resources and uses still in the process of being incorporated include:
  - Minerals
  - Finer-grained cultural, tribal, and recreation information

BLM Lands Non-biological Resources and Uses

BLM Areas of Critical Environmental Concern (ACECs)

ACECs are areas within BLM lands where special management attention is required to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes, or to protect life and safety from natural hazards.



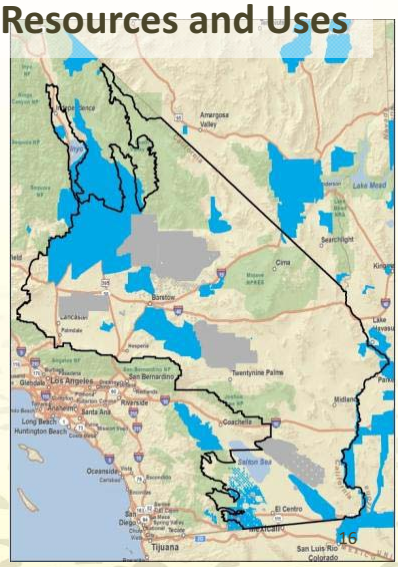
Overview of Preliminary Plan-Wide Biological Reserve Design and Renewable Energy Development Scenarios

DESERT RENEWABLE ENERGY CONSERVATION PLAN

BLM Lands Non-biological Resources and Uses

BLM Special Recreation Management Areas (SRMAs)

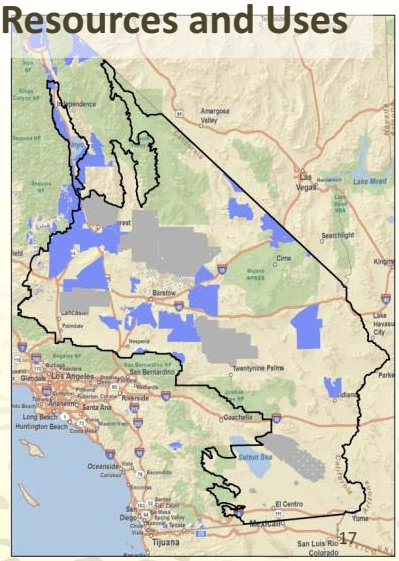
SRMAs are administrative units where the existing or proposed recreation opportunities and recreation setting characteristics are recognized for their unique value, importance, and/or distinctiveness; especially compared to other areas used for recreation.



BLM Lands Non-biological Resources and Uses

BLM Grazing Allotments

BLM Grazing Allotments includes the outer boundary of existing livestock grazing allotments administered on BLM lands.



Overview of Preliminary Plan-Wide Biological Reserve Design and Renewable Energy Development Scenarios

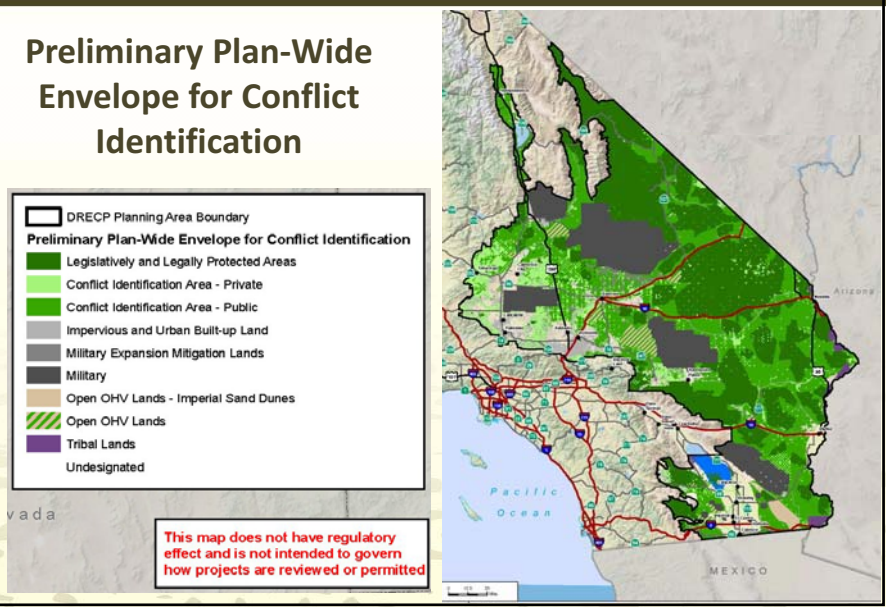
DESERT RENEWABLE ENERGY CONSERVATION PLAN

BLM Lands Non-biological Resources and Uses

BLM Herd Management Areas

A "Herd Area" is defined by the "Wild and Free-Roaming Horse and Burro Program Guidance, January 1983" as "The geographic area identified as having been used by a herd as its yearlong habitat in 1971" and a Herd Management Area" is defined as "A herd area identified in an approved land use plan where wild horses and burros will be maintained and managed"

Preliminary Plan-Wide Envelope for Conflict Identification



Overview of Preliminary Plan-Wide Biological Reserve Design and Renewable Energy Development Scenarios

DESERT RENEWABLE ENERGY CONSERVATION PLAN

Development Planning Process

- Based on CEC estimates for 2040, an expected reasonable range of generation capacity required from the DRECP area is approximately 20,000 MWs to 22,000 MWs.
- Estimated acreage of development footprint required to accommodate this level of renewable generation ranges generally from 200,000 acres to 500,000 acres.
- Refinements to this estimated acreage range are ongoing.
- Development scenarios maps depict potential development areas that are larger than estimated development footprint acreages.

20

Development Planning Process

Locating the required generation acreage in the Plan Area

- **Renewable resource** data for solar resources, wind resources, and geothermal resources.
- **BLM Solar PEIS**
  - Analysis and comments on the PR Draft PEIS and Supplemental Draft PEIS
- Renewable Energy Study Areas (**RESAs**)
  - Preliminary Conservation Strategy (October 2011)
  - Identified areas containing renewable resources that were considered lower conflict with biological resources
- **RESA refinements** based on REAT Agencies field reconnaissance
  - Delineation of areas within RESAs considered least conflict with biological resources based on expert input
- **Industry input** on the location of valuable resource development areas, included data provided by CEERT/LSA and CALWEA
- **Transmission planning** developed through the DRECP Transmission Technical Group (TTG)(subject of separate presentation)

Development Scenarios

- 6 development scenarios are presented that range* from ***"concentrated"*** to ***"dispersed"*** development within identified Development Focus Areas (**DFAs**)
  - **Scenario 1** = Most highly concentrated development scenario
    - Provides the least flexibility for renewable energy development and least potential to respond to market constraints
    - Fewest potential conflicts with biological resources and non-biological resources and uses
  - **Scenario 6** = Most dispersed development scenario
    - Provides the most flexibility for renewable energy development and the greatest potential to respond to market constraints
    - Highest potential conflicts with biological resources and non-biological resources and uses

* *The range of development scenarios reflects differences in the size and number of DFAs and their proximity to load centers*

Development Scenarios

- Renewable energy generation and development footprint acreage remains constant under all scenarios (200,000 acres to 500,000 acres)
- Distribution and percentage of development in each DFA has not yet been estimated
  - For example, the Scenarios identify upwards of 800,000 acres of DFA in the Imperial Valley region
  - Roughly 10-20% of the Imperial DFAs may be assessed for potential development footprint effects

Development Scenarios

Scenario Development Process

1. Identified the lower biological resources and non-biological resources and uses conflict areas (**Scenarios 1 and 2**)
   - The Nature Conservancy (TNC) ecoregional disturbed lands data (highly converted lands) used in Scenario 1
   - DRECP disturbed and agriculture land cover combined with RESA refinement (Agencies field reconnaissance) data used in Scenario 2
2. Incrementally added more opportunities for siting in renewable energy resource areas to increase flexibility for response to micro-siting and market constraints, focusing first on lower conflict areas (**Scenarios 3-5**)
3. Provided a scenario inclusive of the full boundary of the RESAs, Solar PEIS Solar Energy Zones (SEZs), and a substantial portion of industry-preferred development areas (**Scenario 6**)

Development Scenarios

Development Focus Areas (DFAs)

- Represent the area within which renewable energy development will be permitted under the DRECP
- Areas used to identify potential biological and non-biological conflicts with renewable energy development
- Shown as composite DFAs (Single **Pink** color), but polygons are attributed with potential renewable energy development type (i.e., solar, wind, geothermal or combination)
- Summary information is presented here; handout provides more detailed information

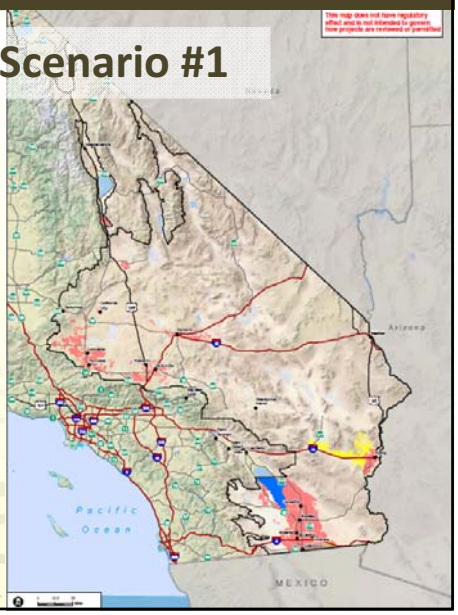
Development Scenario #1

Summary: Highly converted lands within PCS RESAs

Rationale: Renewable Energy development primarily in disturbed lands. Degraded lands (lands altered by disturbance and agricultural uses) as defined by TNC; confined to the RESAs.

Acreage Summary:

- 1,100,000 acres of DFAs
  - 84% private land
  - 12% public land
  - 4% other (municipal, district) land



Overview of Preliminary Plan-Wide Biological Reserve Design and Renewable Energy Development Scenarios

DESERT RENEWABLE ENERGY CONSERVATION PLAN

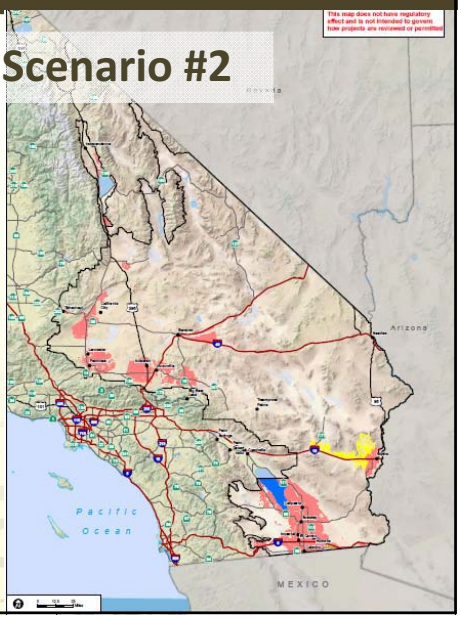
Development Scenario #2

Summary: PCS RESA refinements based on Agencies field reconnaissance

Rationale: Renewable Energy development primarily in disturbed lands. PCS RESAs as refined to reflect field reconnaissance and expert input on biological resources and non-biological resources and uses

Acreage Summary:

- 1,500,000 acres of DFAs
  - 81% private land
  - 16% public land
  - 4% other (municipal, district) land



Overview of Preliminary Plan-Wide Biological Reserve Design and Renewable Energy Development Scenarios

DESERT RENEWABLE ENERGY CONSERVATION PLAN

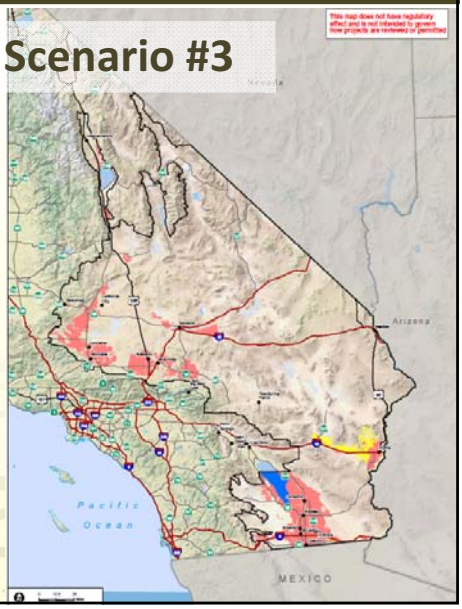
Development Scenario #3

Summary: PCS RESAs with increased development flexibility adjacent to RESAs and military concerns incorporated

Rationale: Renewable Energy development primarily in disturbed lands with increase in siting flexibility. PCS RESAs as refined to reflect field reconnaissance and expert input on biological resources and non-biological resources and uses; incorporates Military concerns

Acreage Summary:

- 1,700,000 acres of DFAs
  - 81% private land
  - 16% public land
  - 3% other (municipal, district) land



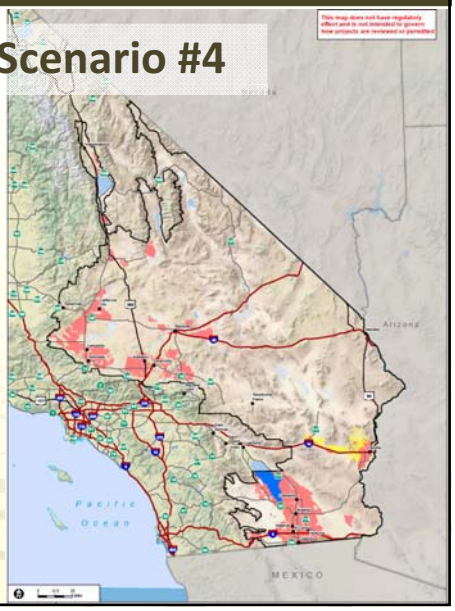
Development Scenario #4

Summary: Scenario 3 plus additional west Mojave, north Mojave, Imperial development

Rationale: Scenario 3 plus additional renewable energy development areas in west Mojave, north Mojave, and Imperial to increase flexibility while minimizing additional conflicts with bio and non-biological resources and uses.

Acreage Summary:

- 1,900,000 acres of DFAs
  - 79% private land
  - 18% public land
  - 3% other (municipal, district) land



Overview of Preliminary Plan-Wide Biological Reserve Design and Renewable Energy Development Scenarios

DESERT RENEWABLE ENERGY CONSERVATION PLAN

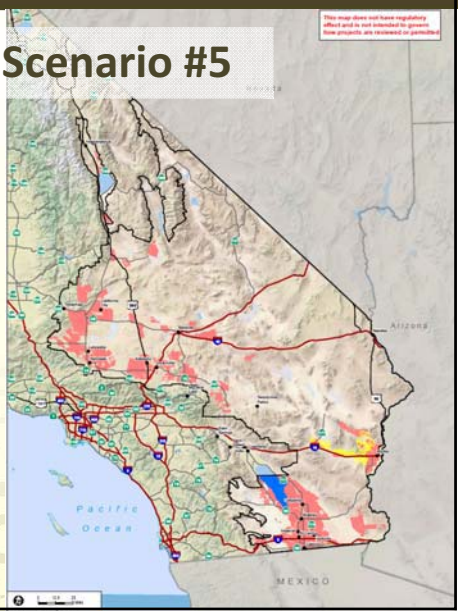
Development Scenario #5

Summary: Scenario 4 plus additional development in west Mojave, north Mojave, Blythe, Imperial

Rationale: Scenario 4 plus additional renewable energy development areas in west Mojave, north Mojave, Blythe, and Imperial with moderate to high increases in potential biological and non-biological resources and uses conflicts.

Acreage Summary:

- 2,200,000 acres of DFAs
  - 73% private land
  - 24% public land
  - 3% other (municipal, district) land



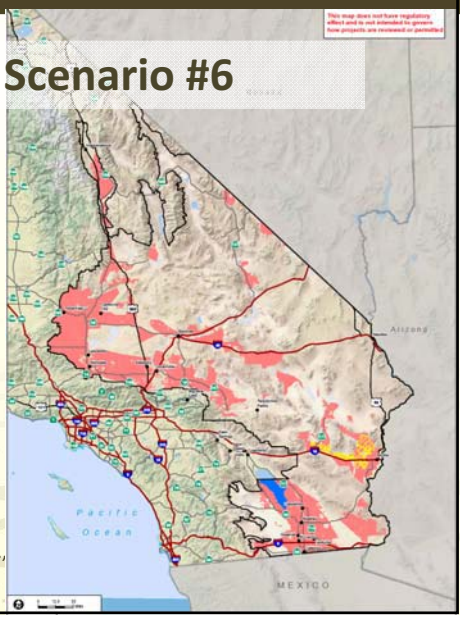
Development Scenario #6

Summary: Full RESAs and Solar SEZs potential development plus other industry identified development areas

Rationale: Potential development throughout RESAs and Solar SEZs plus other industry development areas; highest potential biological and non-biological resources and uses conflicts.

Acreage Summary:

- 4,600,000 acres of DFAs
  - 57% private land
  - 39% public land
  - 4% other (municipal, district) land (e.g., special districts, other quasi-public lands)



Overview of Preliminary Plan-Wide Biological Reserve Design and Renewable Energy Development Scenarios

DESERT RENEWABLE ENERGY CONSERVATION PLAN

Development Scenarios Conflict Identification

For each development scenario, quantitative conflict identification* is being conducted, including:

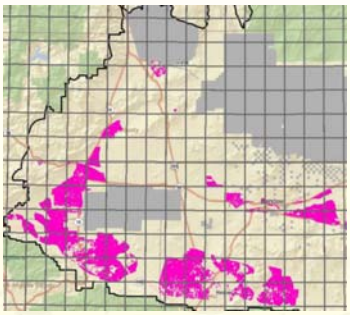
- DFAs co-occurring with the Preliminary Plan-wide Envelope
  - Drill down to identify the potential non-biological conflicts on a DFA-by-DFA basis, including ACECs, SRMAs, grazing allotments, herd management areas
- DFAs co-occurring with the Preliminary Plan-wide Biological Reserve Design
  - Drill down to identify the potential biological conflicts on a DFA-by DFA basis, including species occurrence, species habitat models, natural communities, and landscape features.

* *Conflict identification is not analysis; it is intended to portray the relative differences among development scenarios regarding potential conflicts with biological and non-biological resources and uses; detailed analysis will be needed to determine actual impacts for scenarios carried forward.*

32

Development Scenarios Conflict Identification

- Conflict identification for each scenario uses DFAs geo-referenced to the USGS 7.5-minute quadrangle grid
- Quantitative conflict identification is based on amount of overlap of DFA with biological and non-biological resources and uses
  - Not an effects analysis
  - Not equivalent to the amount of ground disturbance



DFA Scenario 3 with grid overlay

Percentage Overlap of DFAs with Envelope of Potential Conflict by Development Scenario

	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5	Scenario 6
% Conflict	12%	13%	15%	20%	31%	62%

Next Steps

- Ongoing Plan-Wide Biological Reserve Design refinements
- Ongoing Development Scenario refinements
- Select scenarios carried forward for detailed analysis
- Develop preliminary plan-wide biological reserve designs for scenarios carried forward for detailed analysis
- Identify preliminary DRECP proportional contribution for scenarios carried forward
- Conduct conservation analysis of integrated reserve design and development scenarios carried forward