



2013 California Desert Vegetation
Map in Support of the Desert
Renewable Energy Conservation
Plan

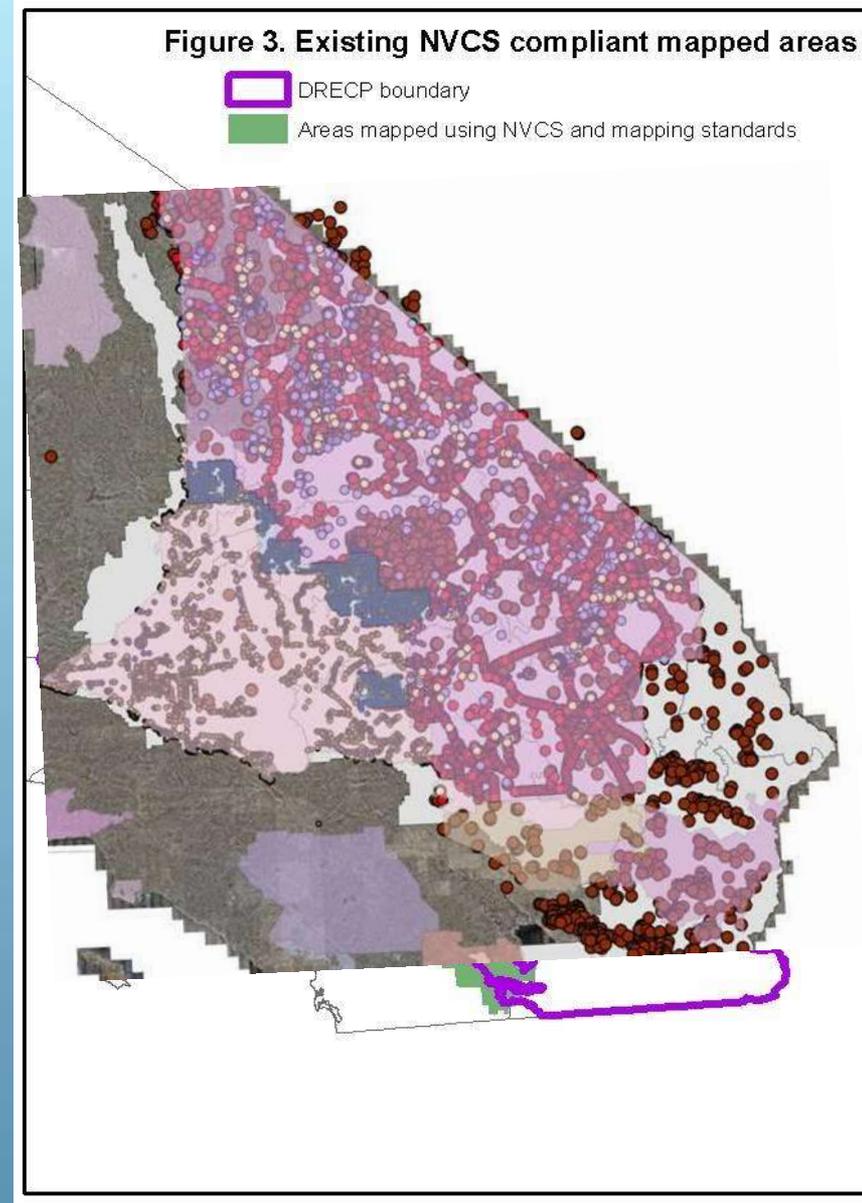
Western and Central Mojave Desert
And East Riverside Map completion
Mojave Desert Ecosystem Program

April 17, 2013

<http://www.dfg.ca.gov/biogeodata/vegcamp/>

2010 Existing mapping and classification data

- Mojave Desert Ecosystem Initiative 1998-2000 (C. Mojave)
- Anza-Borrego Desert SP (1996-1998)
- W. Riverside Co. (2001-2004)
- Joshua Tree NP (1998-2003)
- Classification data from NECO collected 1996-1998



5,969,650 acre mapping project began in December 2010, interim map published July 2012, Final will be posted very soon



Details

- The map was produced using heads up digitizing based on 2010 National Agricultural Imagery Program (NAIP) imagery
- Variable minimum mapping unit (MMU):
 - upland vegetation (10 acres)
 - wetlands and certain wash types (1 acre)
 - human land use polygons (2.5 acres).

Mapping done at NVCS alliance level classification largely based on previous work

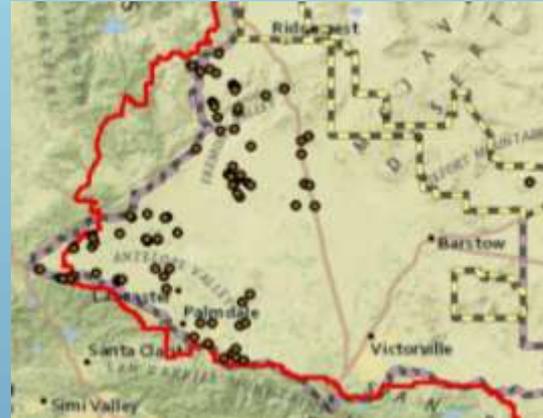


Organizational Structure of Natural Communities in the Plan

Organizational Level	Scale	Description
General Natural Communities	Broad-scale	Coarse level comprised of broad, logical aggregations of communities (e.g., "Riparian Communities") used primarily for organization purposes.
Natural Community Groups	Mid-level	Intermediate level categories consistent with the NVCS "group" level. Mapping data for this level available for the entire Plan Area. Common analytical unit used for BGOs, existing setting, conservation and effects analyses.
Natural Community Elements	Fine-grained	Finest level categories comprised of alliances. Mapping data only available in the new mapping area; field plot point data available throughout plan area. Used in conjunction with NC Groups for conservation priority setting, rulesets, monitoring.

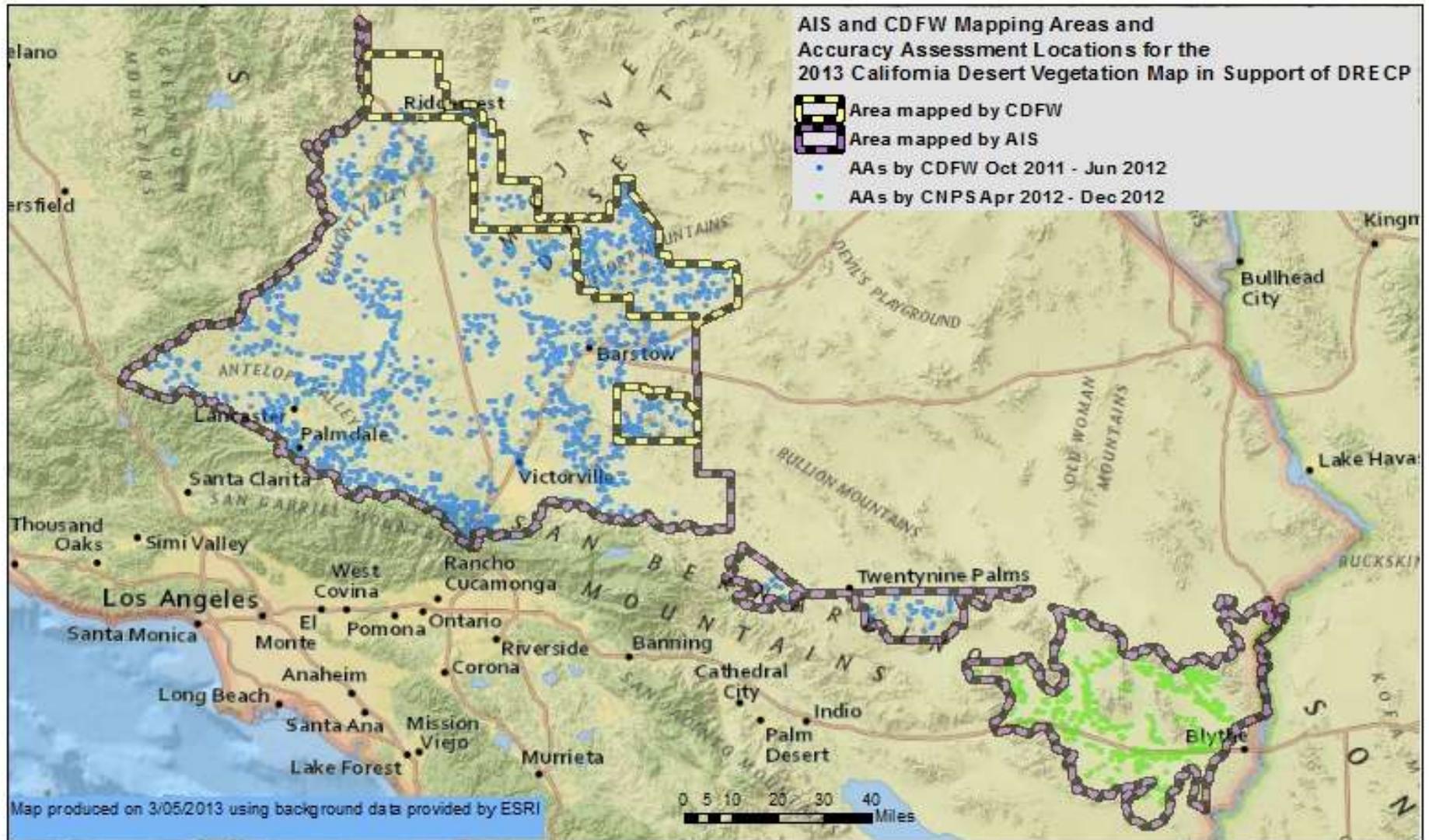
Field data:

- Reconnaissance (6600 points)
- Rapid assessments documenting new types (110)



Accuracy assessment (3,078 points)

Overall accuracy by type 82-83%



Joshua Tree Cover: Percent bird's eye cover of *Yucca brevifolia* within a vegetation stand broken into the following classes:

code	Range
0	None
1	present but <1% and unevenly scattered
2	present and between 1 and 5% evenly distributed (this will also be in the Joshua Tree Alliance)
3	> 5% generally dense clonal stands or possibly occasionally in dense woodlands of spreading tree morphs (rare)
9	Not applicable when PI is 9210, 9220, 9300, 9310, 9800, 9801, 9802, 9803, 9804, 9805



HardwoodCover: Percent bird's eye cover of hardwoods within a vegetation stand broken into the following classes:

code	range
0	none
1	>0 - 1%
2	>1-5%
3	>5-15%
4	>15-25%
5	>25-50%
6	>50-75%
7	>75-100%
9	Not applicable when PI is 9210, 9220, 9300, 9310, 9800, 9801, 9802, 9803, 9804, 9805



Shrub Cover: Percent bird's eye cover of shrubs within a vegetation stand broken into the following classes:

code	range
0	none
1	>0 - 1%
2	>1-5%
3	>5-15%
4	>15-25%
5	>25-50%
6	>50-75%
7	>75-100%
9	Not applicable when PI is 9210, 9220, 9300, 9310, 9800, 9801, 9802, 9803, 9804, 9805



Herbaceous Cover: Percent bird's eye cover of herbaceous within a vegetation stand broken into the following classes:

code	range
0	no visible or expected cover
1	<2% herbaceous
2	2-9% herb cover
3	10-39% herb cover
4	=>40% (only in dense wetlands)
9	Not applicable when PI is 9210, 9220, 9300, 9310, 9800, 9801, 9802, 9803, 9804, 9805



Exotics: Level of impact by exotic invasive species broken into the following classes:

code	range
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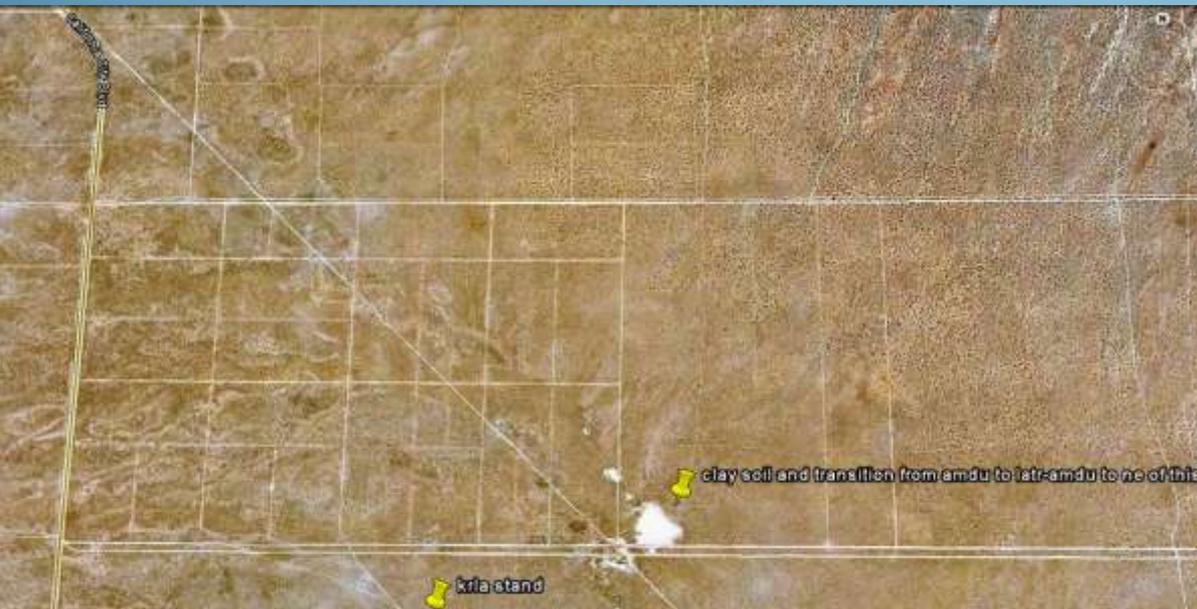
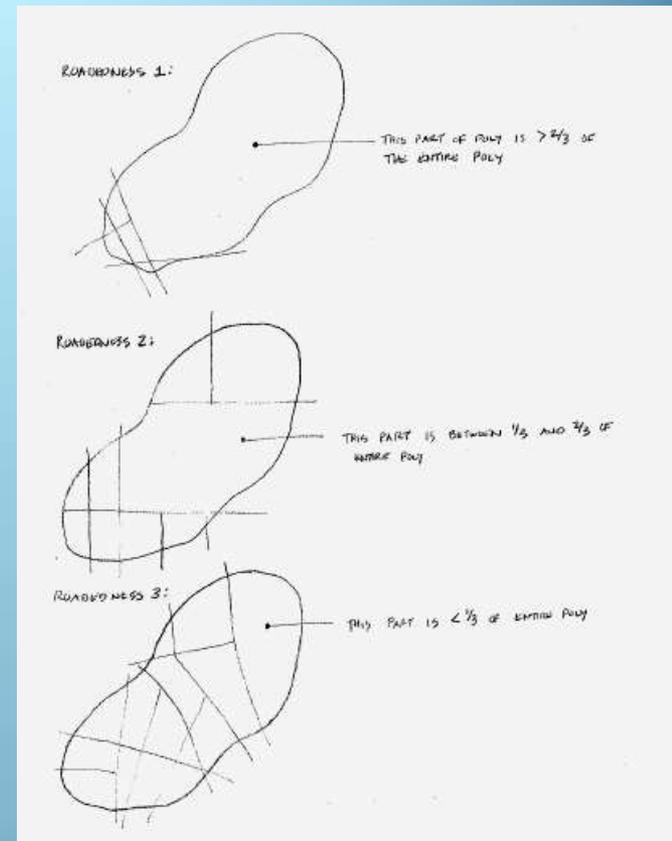
- 0 Based on field data: no evidence of exotics in sampling
- 1 patches of exotics visible, but cover not significant
- 2 exotics (particularly herbaceous) significant and cover may exceed dominant vegetation strata
- 3 stand characterized by exotics (veg type is exotic)
- 9 Not applicable when PI is 9300, 9310, 9320, 9800, 9801, 9802, 9803, 9804,9805



Roadedness:

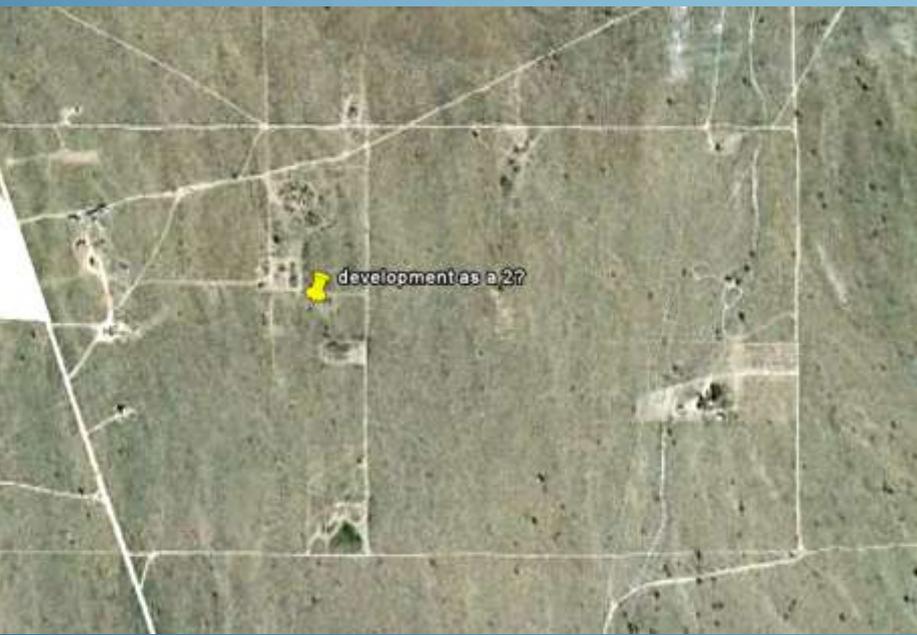
Level of impact by paved and unpaved road, OHV trails, railroads etc.. Conceptually, this attribute can be used to determine if the polygon is largely unroaded. It was coded by estimating what percent of the entire polygon is represented by the largest portion that does not have any roads through it.

code	range
0	no roads through polygon (the poly is essentially whole)
1	from 2/3 to just below the entire poly is "whole"
2	from 1/3 to 2/3 of the poly is "whole"
3	less than 1/3 of the poly is "whole"
9	Not applicable when PI is 9210, 9220, 9300, 9310, 9800, 9801, 9802, 9803, 9804, 9805, 9320 (non OHV)



Development: Level of impact by structures (buildings, tanks, paved parking lots, trailers, utility and mining structures) and anthropogenic debris (junked vehicles, trash, collapsed structures). This is for areas where low mmu settlement cannot be pulled out, or the development does not meet the criteria of a settlement.

code	range
0	none visible
1	low: less than 2% of polygon affected
2	moderate: between 3%- 5%of the polygon affected
3	high: > 5% of polygon affected
9	Not applicable when PI is 9210, 9220, 9801



Anthropogenic Alteration:

Level of impact on vegetation by anthropogenic clearing of vegetation through tillage, scraping, grazing, etc.. This captures past disturbances in the landscape still visible through their impact on vegetation, with the caveat that the disturbance must be marked by a visible boundary, like a fence-line.

code	range
0	none visible
1	less than 33% of polygon affected and/or impact is seen but not affecting veg. density (as broken down here) or type
2	between 33%-66% of the polygon affected
3	> 66% of polygon affected
9	Not applicable when PI is 9801



Vegetation mapping in DRECP area

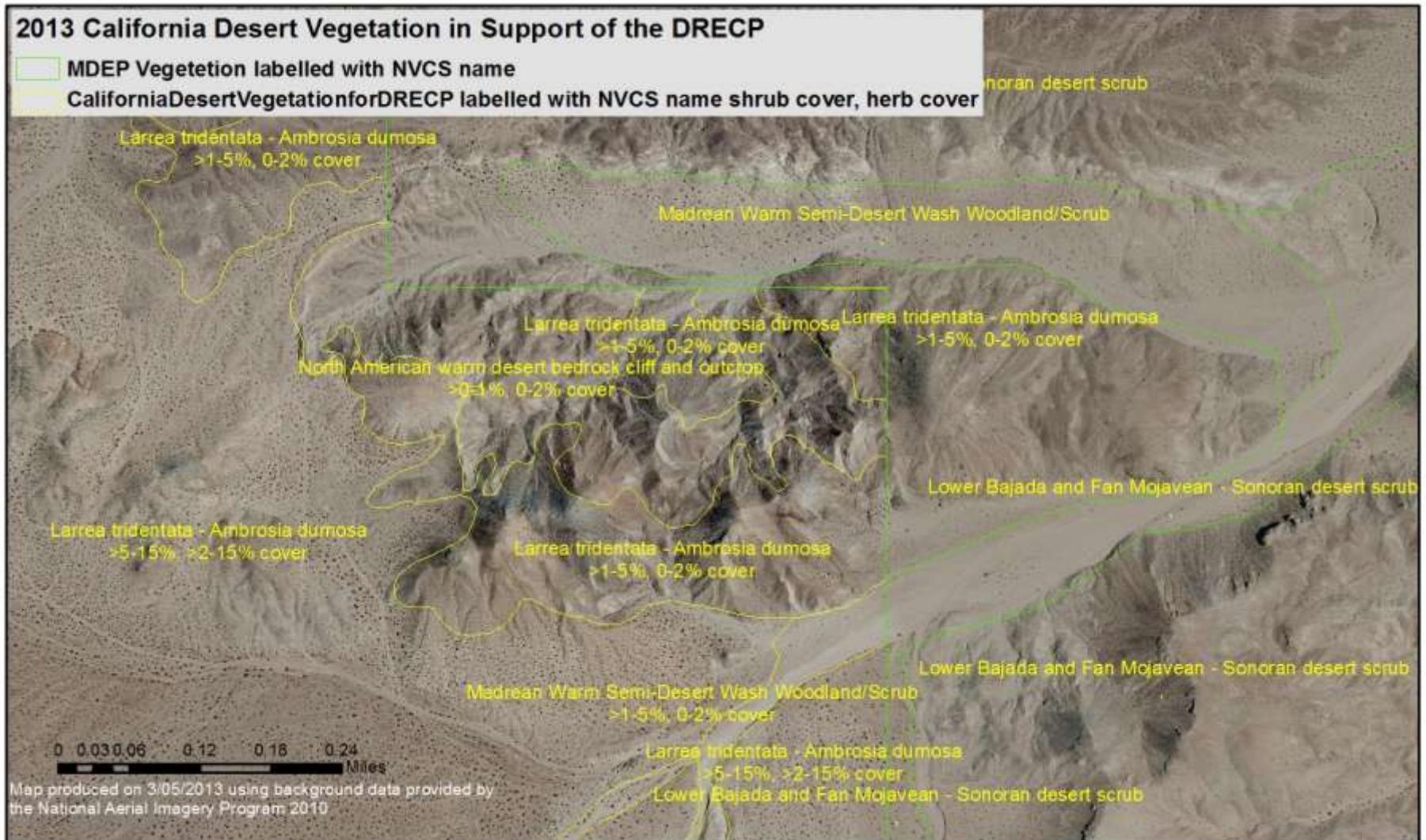


MDEP vegetation map (2004) is more coarsely drawn and classified

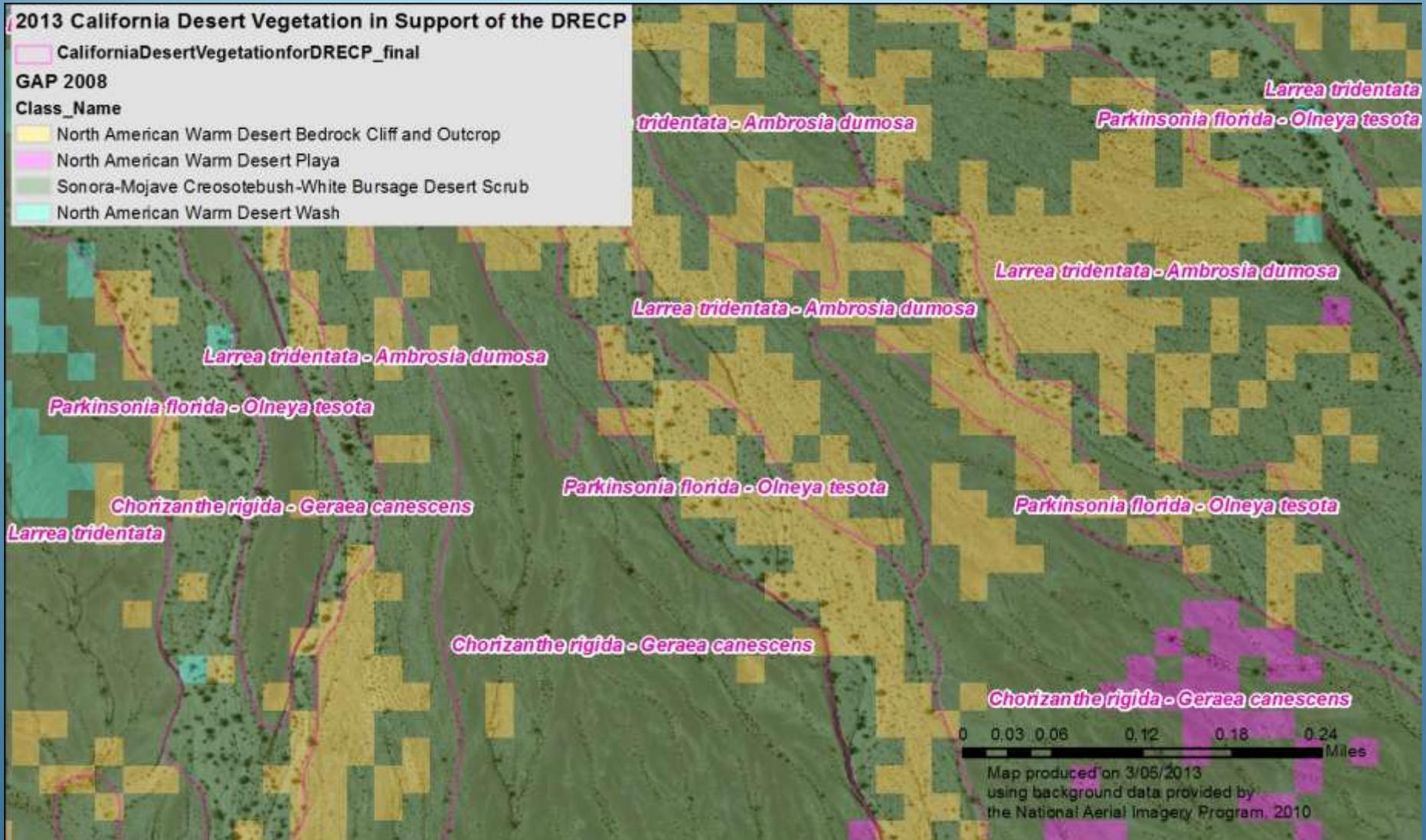
2013 California Desert Vegetation in Support of the DRECP

MDEP Vegetation labelled with NVCS name

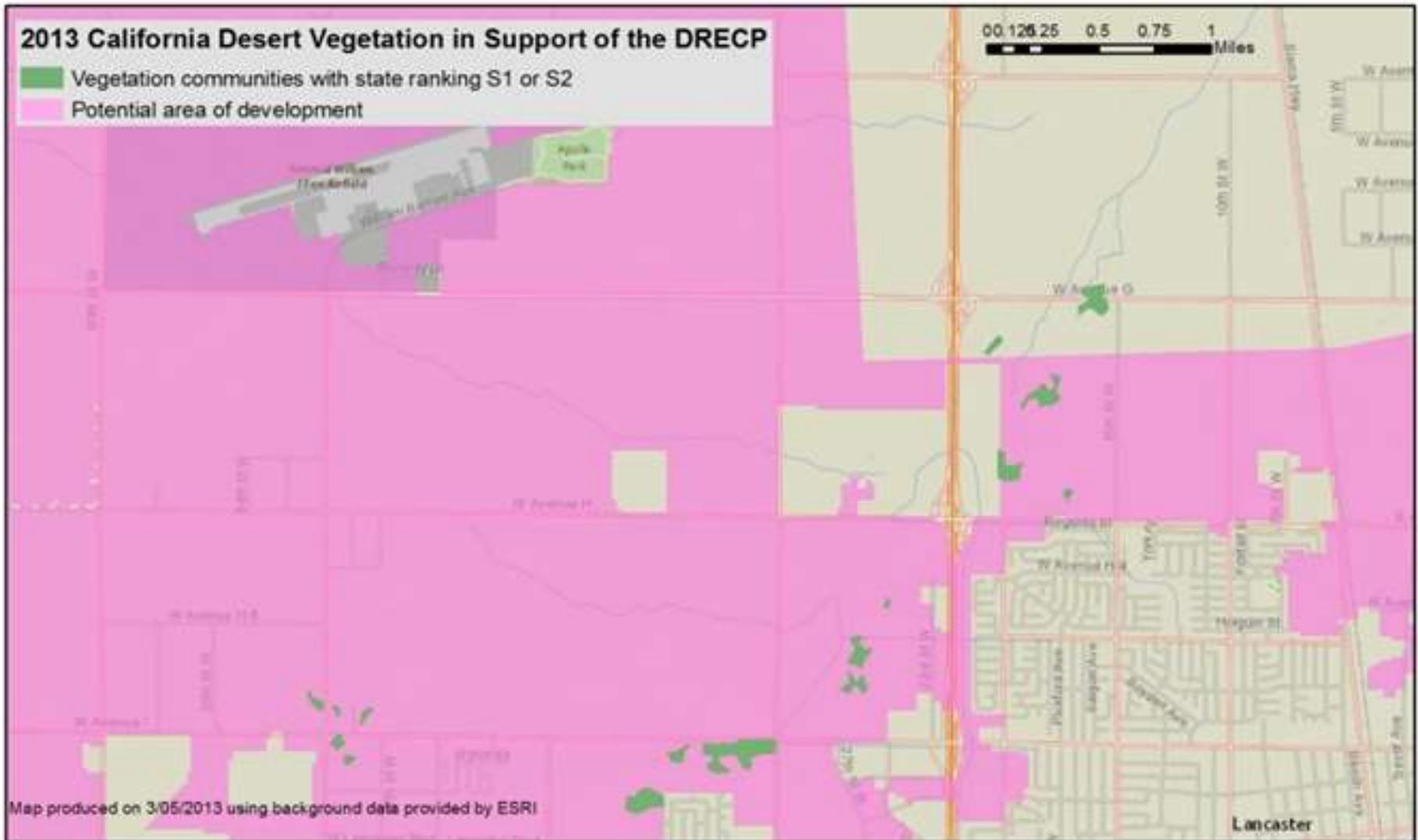
California Desert Vegetation for DRECP labelled with NVCS name shrub cover, herb cover



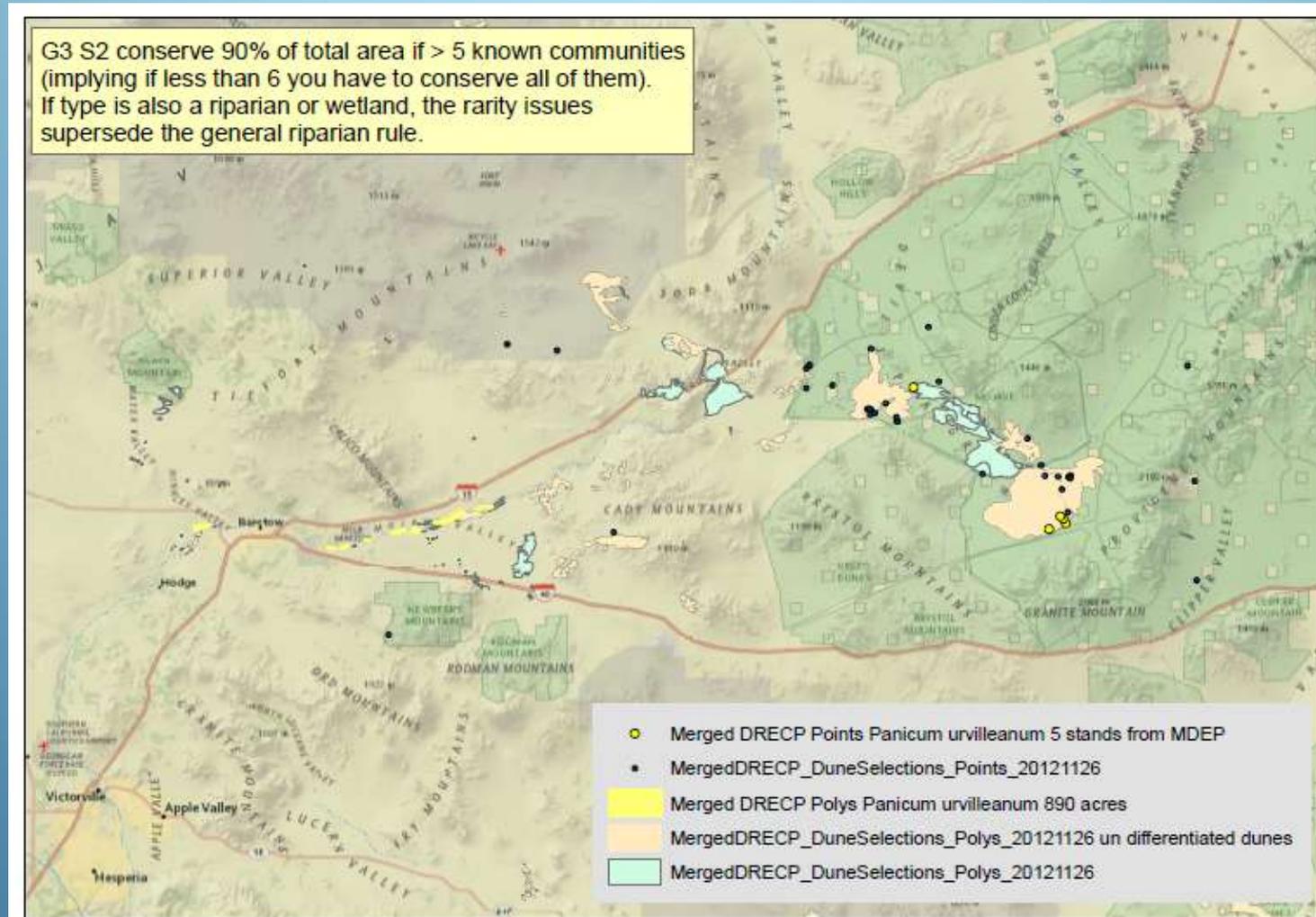
GAP '08 data used for land cover outside mid/fine-scale mapped vegetation



Example of S1-S2 Communities in portion of W Mojave Desert



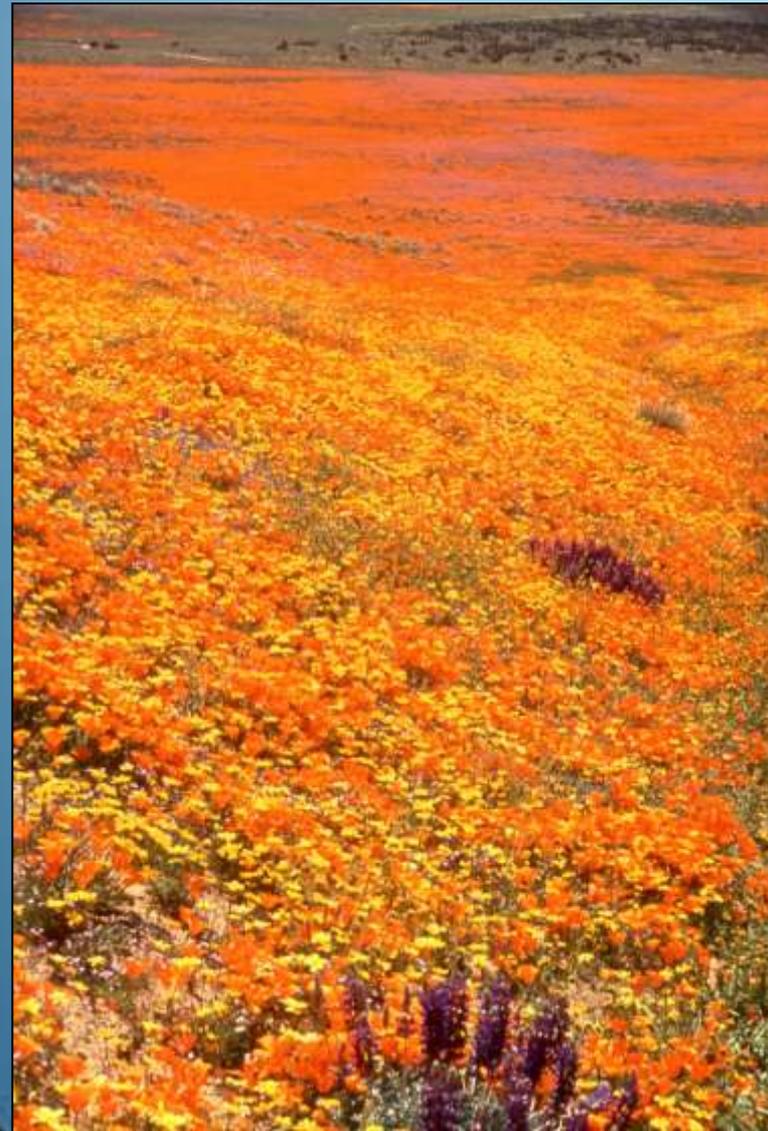
Example of using combined plot data and new mapping for conservation assessment of rare dune communities



0 3.75 7.5 15 22.5 30 Miles

Panicum urvilleanum

Recognition of locally significant, regionally rare natural communities



Antelope Valley Conservation Support

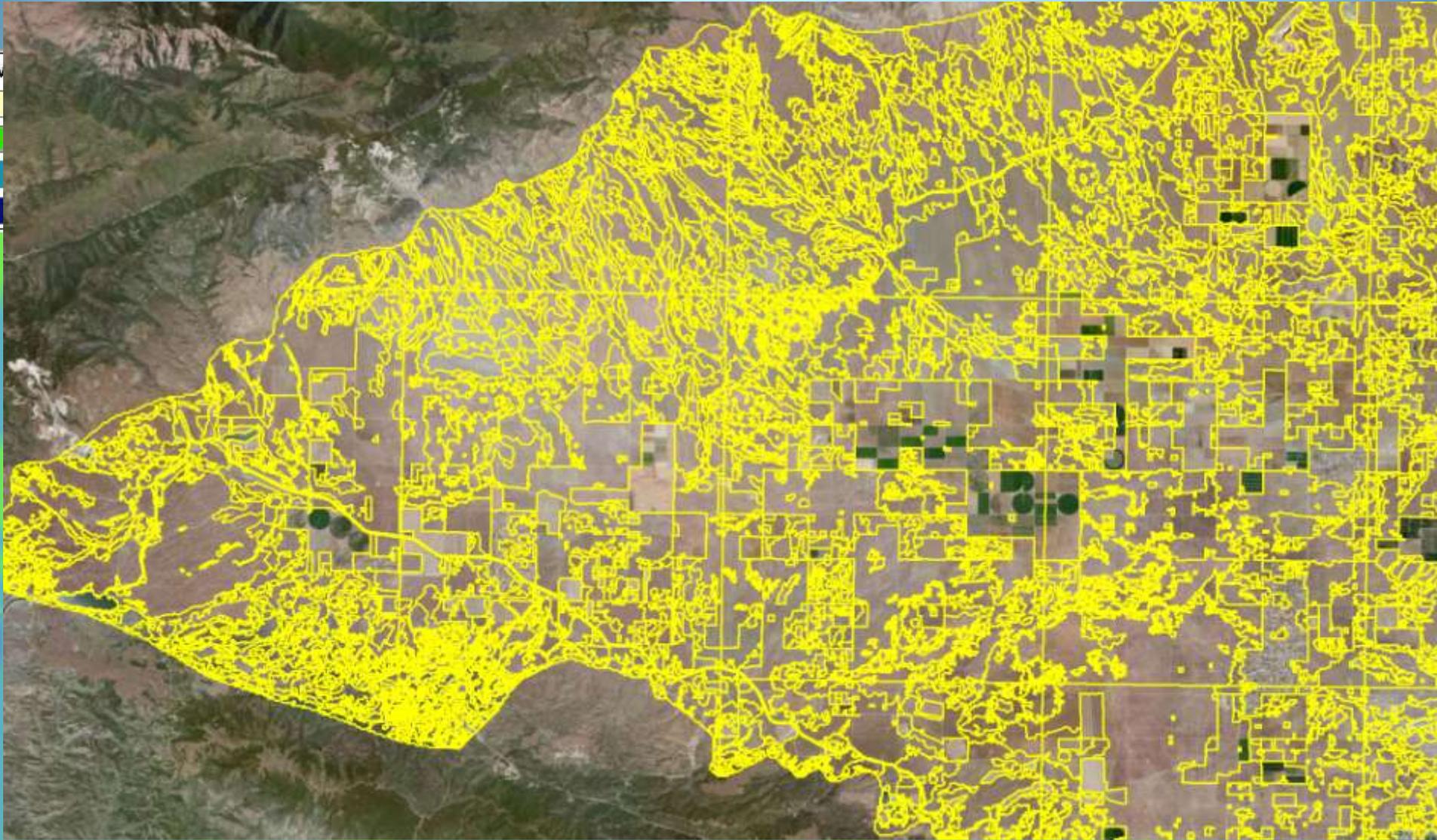


Image U.S. Geological Survey

© 2011 Google

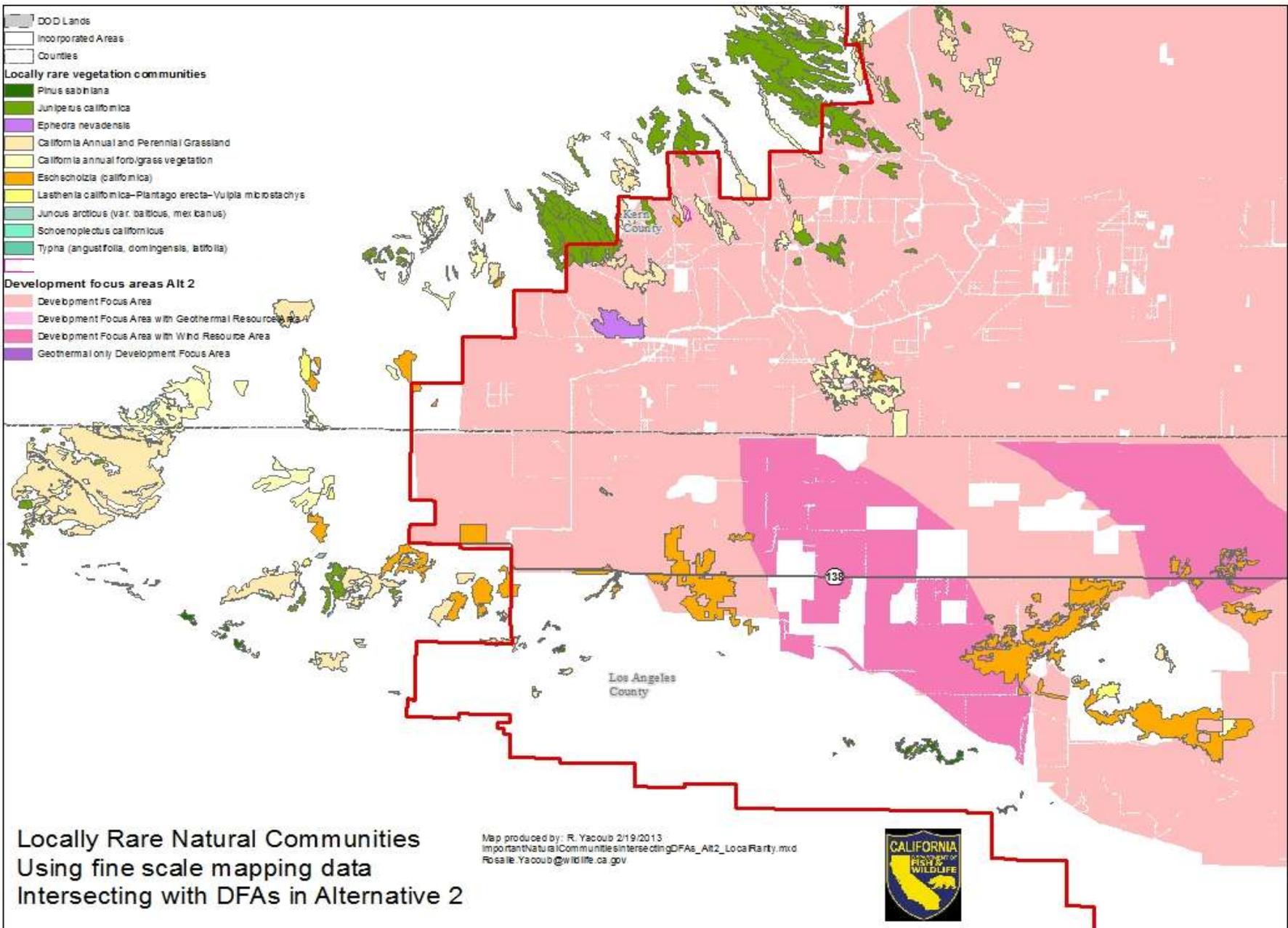
GO

7.59 mi



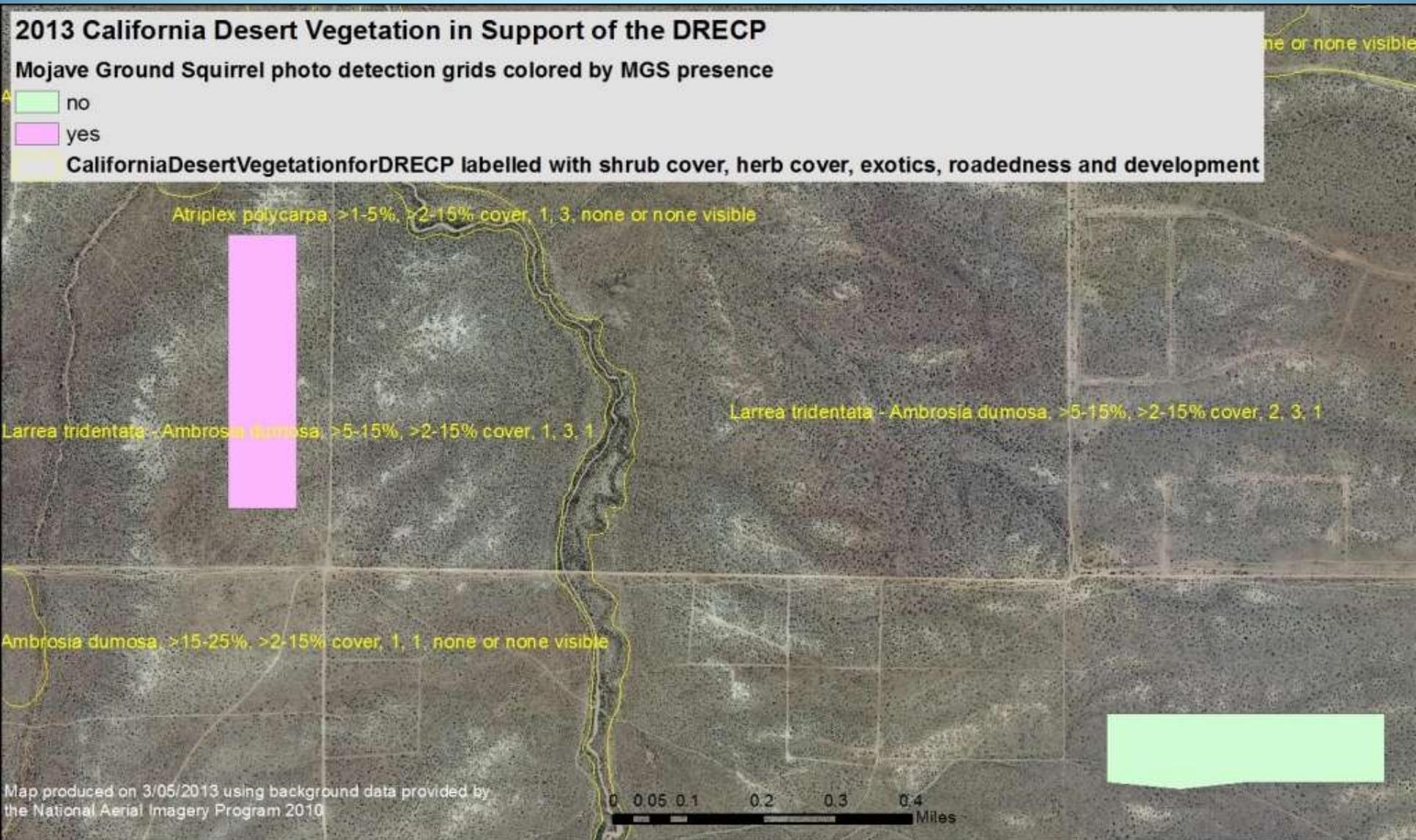
11 S 365362.63 m E 3852363.95 m N elev. 2681 ft

Highlighted Locally Rare Communities in Plan



Locally Rare Natural Communities
Using fine scale mapping data
Intersecting with DFAs in Alternative 2

Uses of Additional Map Attributes



Mojave Vegetation Mapping Contacts

For individual layers and final fine-scale mapping

Rosie Yacoub: Rosalie.yacoub@wildlife.ca.gov

<http://www.dfg.ca.gov/biogeodata/vegcamp/>

For DRECP seamed mapping data that includes natural communities, rare alliances, and locally rare occurrences specific to NCCP/DRECP planning contact

Serge Glushkoff: Serge.Glushkoff@wildlife.ca.gov

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