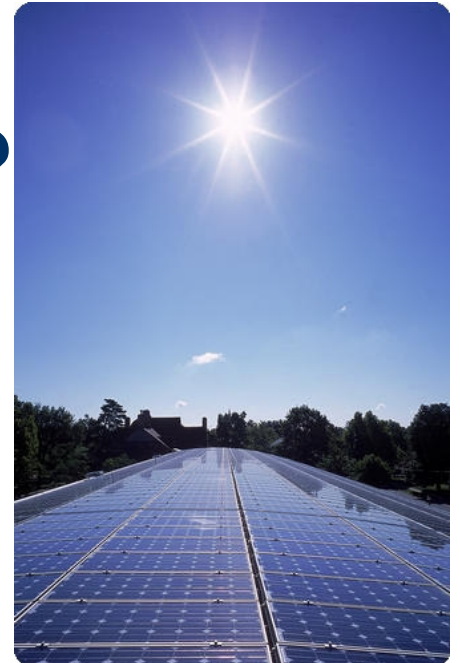


Kicking the Dirt – How Energy is Changing Land Use and Values

Elizabeth M. Kiley, MAI

Kiley Company
Real Estate Appraisers

What effect is the push for renewable energy having on planning, highest and best use, and land values?







- Lack of access
- Lack of water
- Lack of utilities
- Lack of population





Military Base



Keane Wonder Mine – now vacant





Open-pit borax mine (1970s) near Dante's View Road



Target Practice





Supply... Who Owns It?



California Desert BLM District Offices

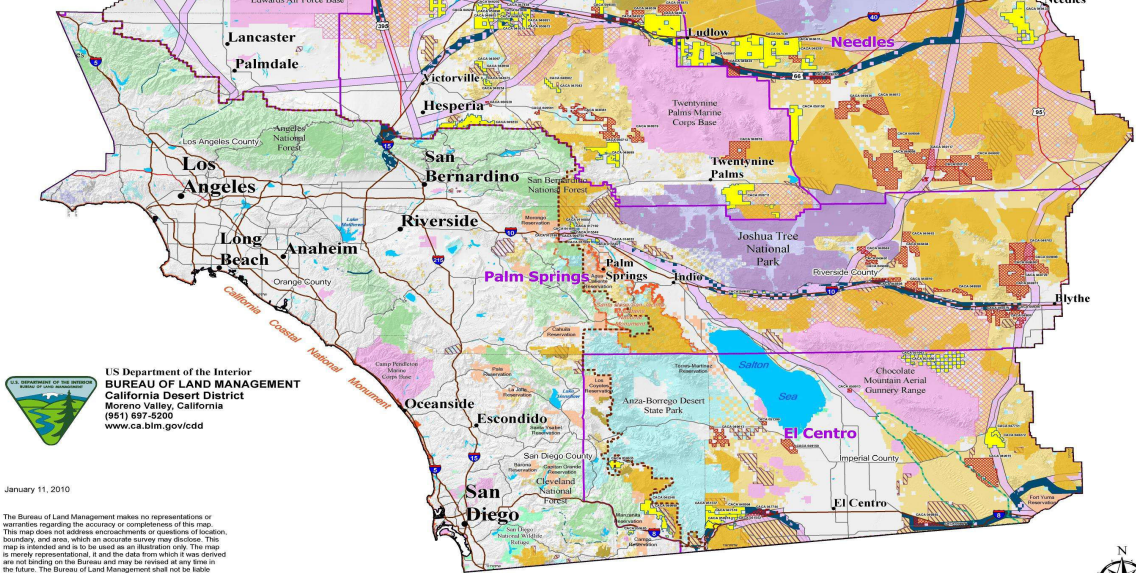
Renewable Energy Projects and Utility Corridors

Projects as of January 11, 2010

- Legend**
- Solar Energy Facilities
 - Wind Energy Facilities
 - State Boundary
 - BLM Field Offices
 - California Desert Conservation Area Boundary
 - County Lines
 - DWMA
 - ACEC other than DWMA
 - BLM Wilderness
 - NPS Wilderness
 - USFS Wilderness
 - BLM Wilderness Study Areas
 - National Monument Boundary
 - Imperial Sand Dunes Recreation Area Management Plan
 - CDD Designated Utility Corridor
 - Section 368 Utility Corridor

- Land Status**
- Bureau of Land Management
 - US Forest Service
 - National Park Service
 - Bureau of Reclamation
 - US Fish and Wildlife Service
 - Military
 - Indian Trust Assets
 - Other Federal
 - State
 - County/State/Regional
 - Private/Other
 - Perennial Water

- Roads**
- Interstate Highway
 - State Highway
 - U.S. Highway




US Department of the Interior
BUREAU OF LAND MANAGEMENT
 California Desert District
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www.ca.blm.gov/cdd

January 11, 2010
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 This map cannot be made Section 508 compliant.
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What has changed?



Drill Baby, Drill!

Environmental Issues



Improved Technology



Blame it on the Government...



Timeline for Electricity from Renewable Resources

- 2006: Senate Bill 107 codified the accelerated 20% by 2020 deadline into law
- 2008: Governor Schwarzenegger issues Executive Order requiring 20% renewables by 2010 and 33% by 2020

Government Incentives

- American Recovery and Reinvestment Act
 - \$314 Million



New Land Market



Where are we now?

It's all about you...

- Southern California Edison
- Department of Water and Power

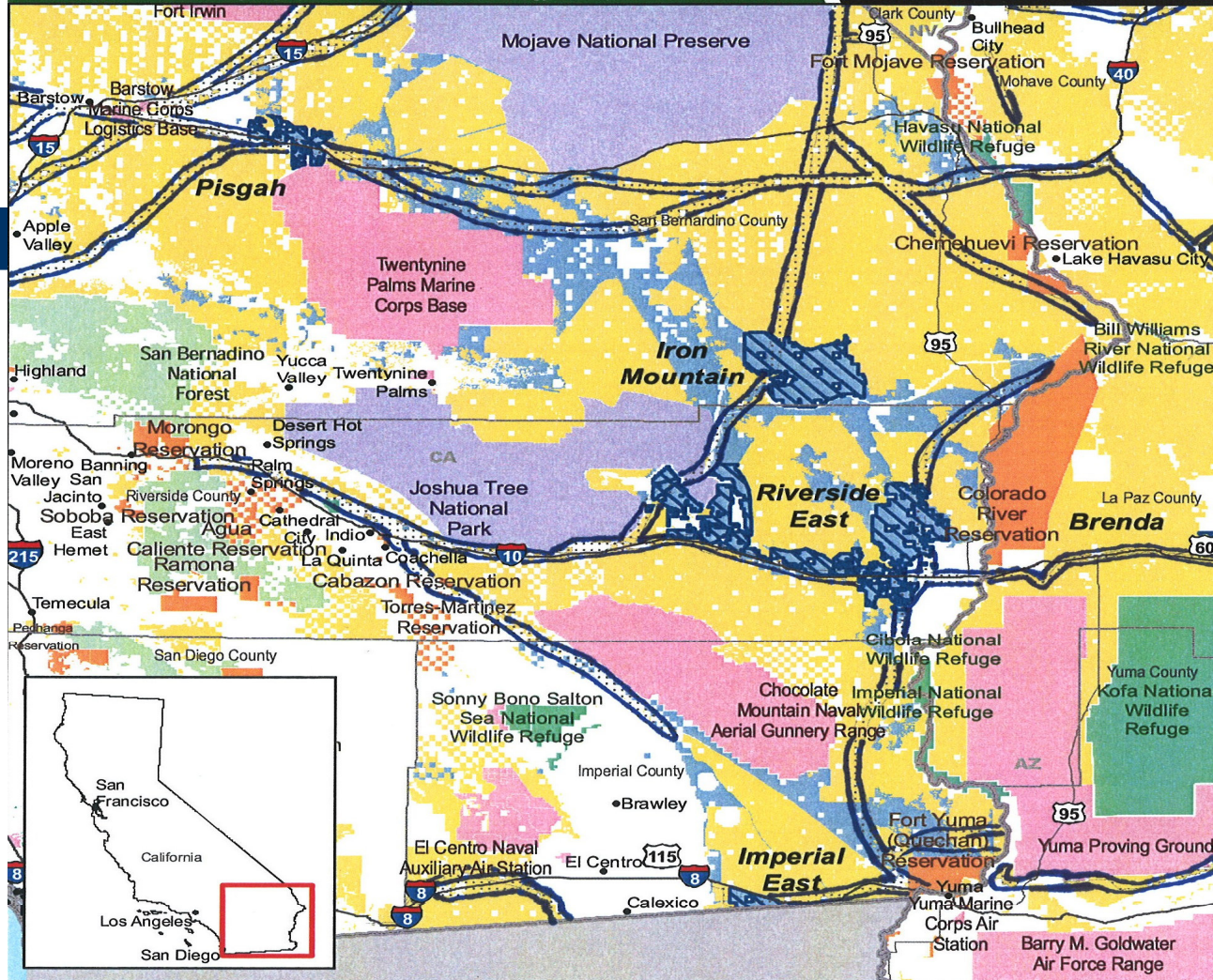


Solar Energy Study Areas in California

Map Prepared July 21, 2009



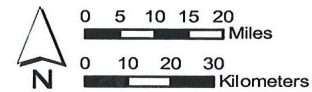
Property of the U.S. Departments of Energy and the Interior
for Use in Preparation of their Programmatic Environmental Impact Statement
to Develop and Implement Agency-Specific Programs for Solar Energy Development



Surface Management Agency
As of 3/26/2009

Tribal Lands	DOD	NPS
BLM	DOE	OTHER
BOR	FWS	USFS

- State Line
- County Boundary
- ▨ Solar Energy Study Area (As of 6/5/2009)
- ⋯ Existing Designated Corridor (See Note 2) (As of 7/21/2009)
- ▨ BLM Lands Being Analyzed for Solar Development in PEIS (As of 6/5/2009)



NOTE 1: Revisions to the National Landscape Conservation System included in Public Law 111-11 are not yet reflected in this map.

NOTE 2: Designated Corridors are developed for federal land use planning purposes only and are not applicable to state-owned or privately-owned land.

SOL139

New Solar Thermal Projects - California Energy Commission

Project Name and Applicant	Location	Size & Technology (megawatts)	Lead Agency	Status*
Victorville 2 Hybrid Power Project City of Victorville	Victorville	563 MW 513 MW natural gas 50 MW solar trough	Energy Commission	APPROVED AFC filed 2/28/07 Approved 7/16/08
Projects Approved - MW		50 MW		
Ivanpah Solar Solar Partners/Brightsource	San Bernardino County	400 MW solar tower	Energy Commission	Under Review AFC filed 8/31/07
Carrizo Energy Solar Farm Carrizo Energy LLC	San Luis Obispo County	Withdrawn	Energy Commission	Withdrawn
Beacon Solar Energy Project Beacon Solar LLC	Kern County	250 MW solar trough	Energy Commission	Under Review AFC filed 3/14/08
Imperial Valley Solar Project (Formerly SES Solar Two Project) Imperial Valley Solar LLC	Imperial County	750 MW Stirling engine	Energy Commission	Under Review AFC filed 6/30/08
City of Palmdale Hybrid Gas-Solar City of Palmdale	Palmdale	617 MW 555 MW natural gas 62 MW solar trough	Energy Commission	Under Review AFC Filed 8/4/08
San Joaquin Solar 1 & 2 San Joaquin Solar LLC	Fresno County	106.8 MW solar trough / biomass hybrid	Energy Commission	Under Review AFC Filed 11/26/2008
Calico Solar Project (Formerly SES Solar One Project) Calico Solar LLC/Tessera Solar (formerly Stirling Energy Systems)	San Bernardino County	850 MW Stirling engine	Energy Commission	Under Review AFC Filed 12/2/2008
Genesis Solar Genesis Solar LLC / NextEra™ Energy Resources LLC	Riverside County	250 MW solar trough	Energy Commission	Under Review AFC Filed 8/31/2009
Abengoa Mojave Solar Project Abengoa Solar Inc.	San Bernardino County	250 MW solar trough	Energy Commission	Under Review AFC Filed 8/10/2009
Solar Millennium Palen Solar Millennium LLC	Riverside County	484 MW solar trough	Energy Commission	Under Review AFC Filed 8/24/2009
Solar Millennium Blythe Solar Millennium LLC	Riverside County	1,000 MW solar trough	Energy Commission	Under Review AFC Filed 8/24/2009
Solar Millennium Ridgecrest Solar Millennium	Kern County	250 MW solar trough	Energy Commission	Under Review AFC Filed 9/1/2009
Rice Solar Energy Project Rice Solar LLC / SolarReserve LLC	Riverside County	150 MW central tower	Energy Commission	Under Review AFC Filed 10/21/2009
Projects Under Review - MW		4,802.8 MW		
* AFC = Application For Certification is the license application filed with California Energy Commission for thermal power plants 50 megawatts or larger.				

Megawatt

One megawatt is enough electrical capacity to power 1,000 average California homes per year



Geothermal Energy





photo: Bernard Peyton

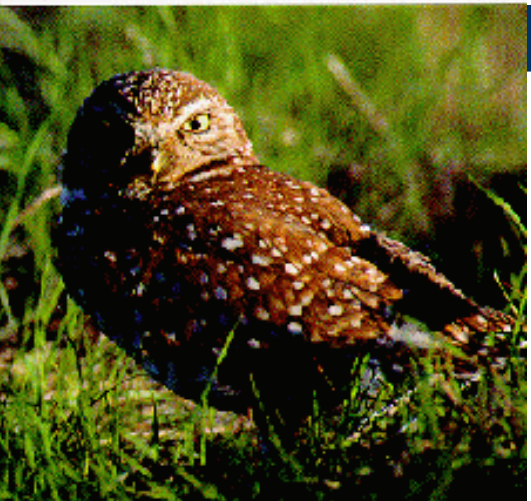


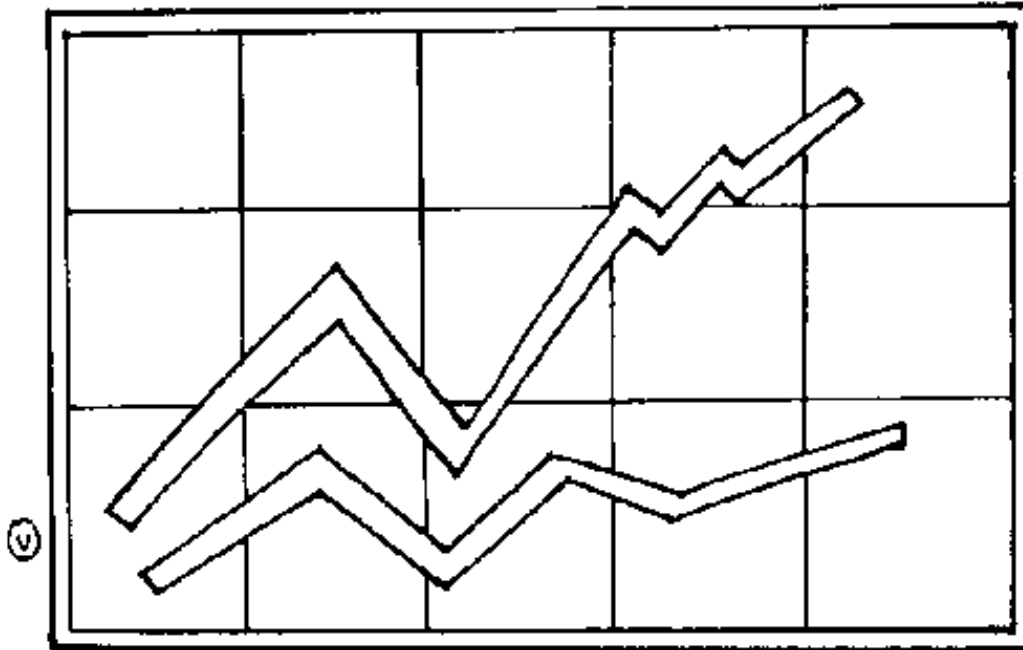
photo: B. "Moose" Peterson/WFRP



photo: B. "Moose" Peterson/WFRP



What is happening to land values?



What is changing in land use?

California Desert BLM District Offices

Renewable Energy Projects and Utility Corridors

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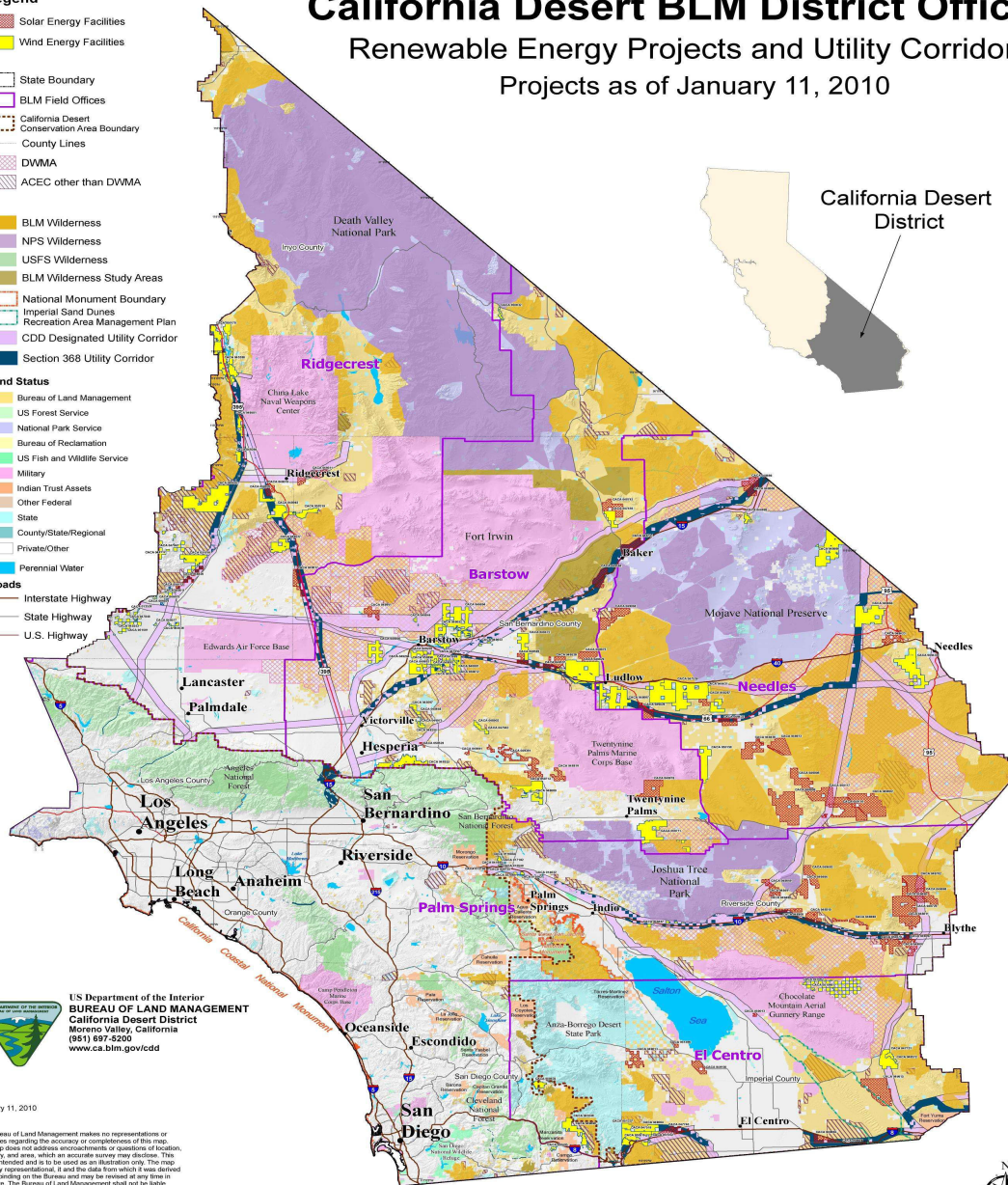


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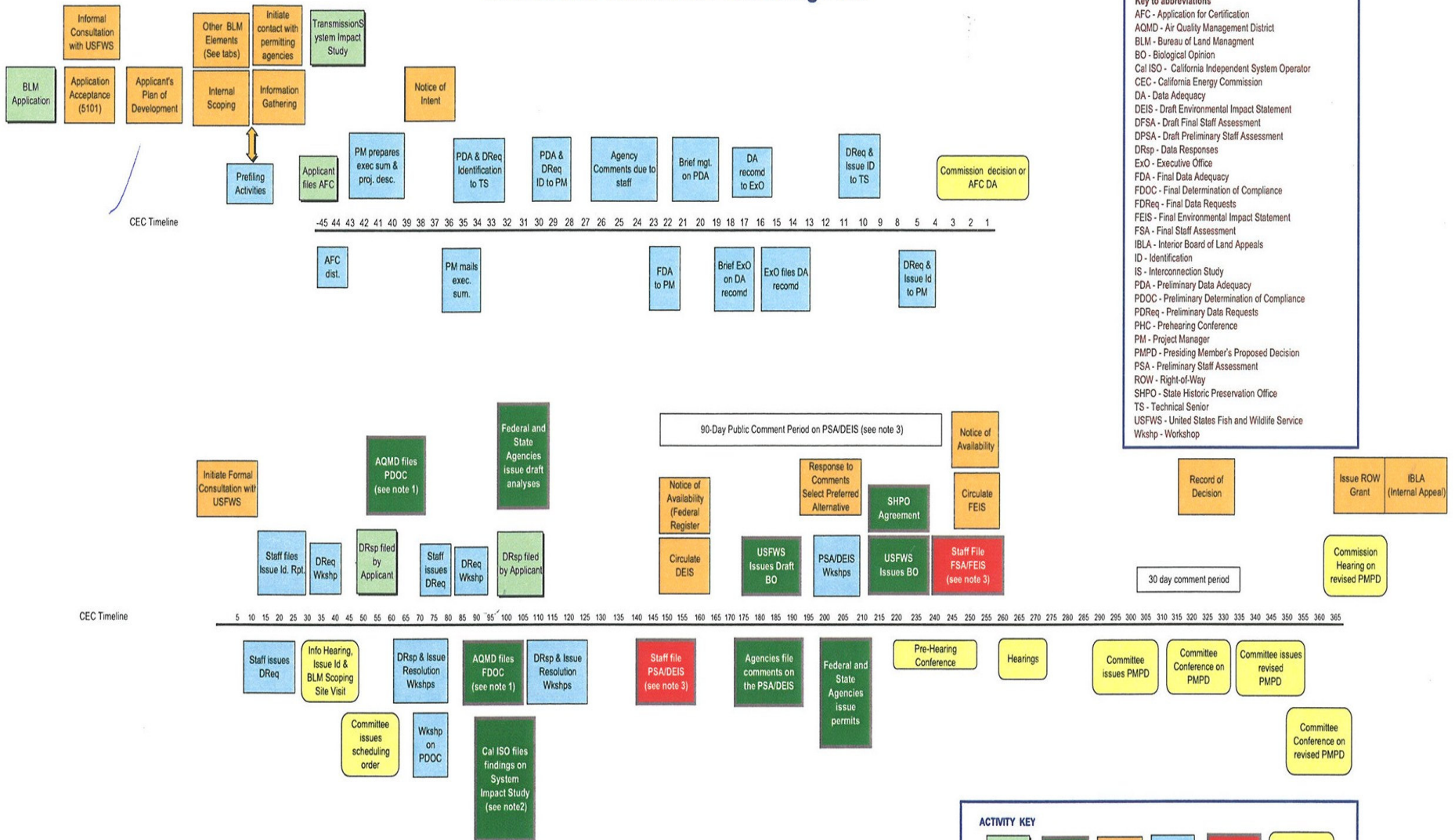
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BLM & CEC Combined Processing Plan



- Key to abbreviations**
- AFC - Application for Certification
 - AQMD - Air Quality Management District
 - BLM - Bureau of Land Management
 - BO - Biological Opinion
 - Cal ISO - California Independent System Operator
 - CEC - California Energy Commission
 - DA - Data Adequacy
 - DEIS - Draft Environmental Impact Statement
 - DFSA - Draft Final Staff Assessment
 - DPSA - Draft Preliminary Staff Assessment
 - DRsp - Data Responses
 - ExO - Executive Office
 - FDA - Final Data Adequacy
 - FDOC - Final Determination of Compliance
 - FDReq - Final Data Requests
 - FEIS - Final Environmental Impact Statement
 - FSA - Final Staff Assessment
 - IBLA - Interior Board of Land Appeals
 - ID - Identification
 - IS - Interconnection Study
 - PDA - Preliminary Data Adequacy
 - PDOC - Preliminary Determination of Compliance
 - PDReq - Preliminary Data Requests
 - PHC - Prehearing Conference
 - PM - Project Manager
 - PMPD - Presiding Member's Proposed Decision
 - PSA - Preliminary Staff Assessment
 - ROW - Right-of-Way
 - SHPO - State Historic Preservation Office
 - TS - Technical Senior
 - USFWS - United States Fish and Wildlife Service
 - Wkshp - Workshop



- Notes:**
- 1 The timing of the PDOC and FDOC will depend on the cooperation of the AQMD. AB970 requires agencies to provide final permits in 100 days. In past practice, the districts have typically filed the PDOC 180 days, and the FDOC 240 days, after the AFC is accepted.
 - 2 Timing of the Cal ISO comments will depend on when the Transmission Interconnection Study is initiated by the applicant.
 - 3 Includes California Desert Conservation Area Plan Amendment which requires a 90-day public comment period.

Older Sales

Location	Date Sold	Size-Acres	Use	Price Per Acre
Banning	July-08	430	Vacant/Residential/SCE	\$1,802
Hinkley	February-08	3484	Investor - next to power plant	\$1,625
Barstow	May-08	640	Mining	\$3,125
Hinkley	May-07	2594	Commercial solar with water	\$11,563
Thousand Palms	November-07	286		\$3,494

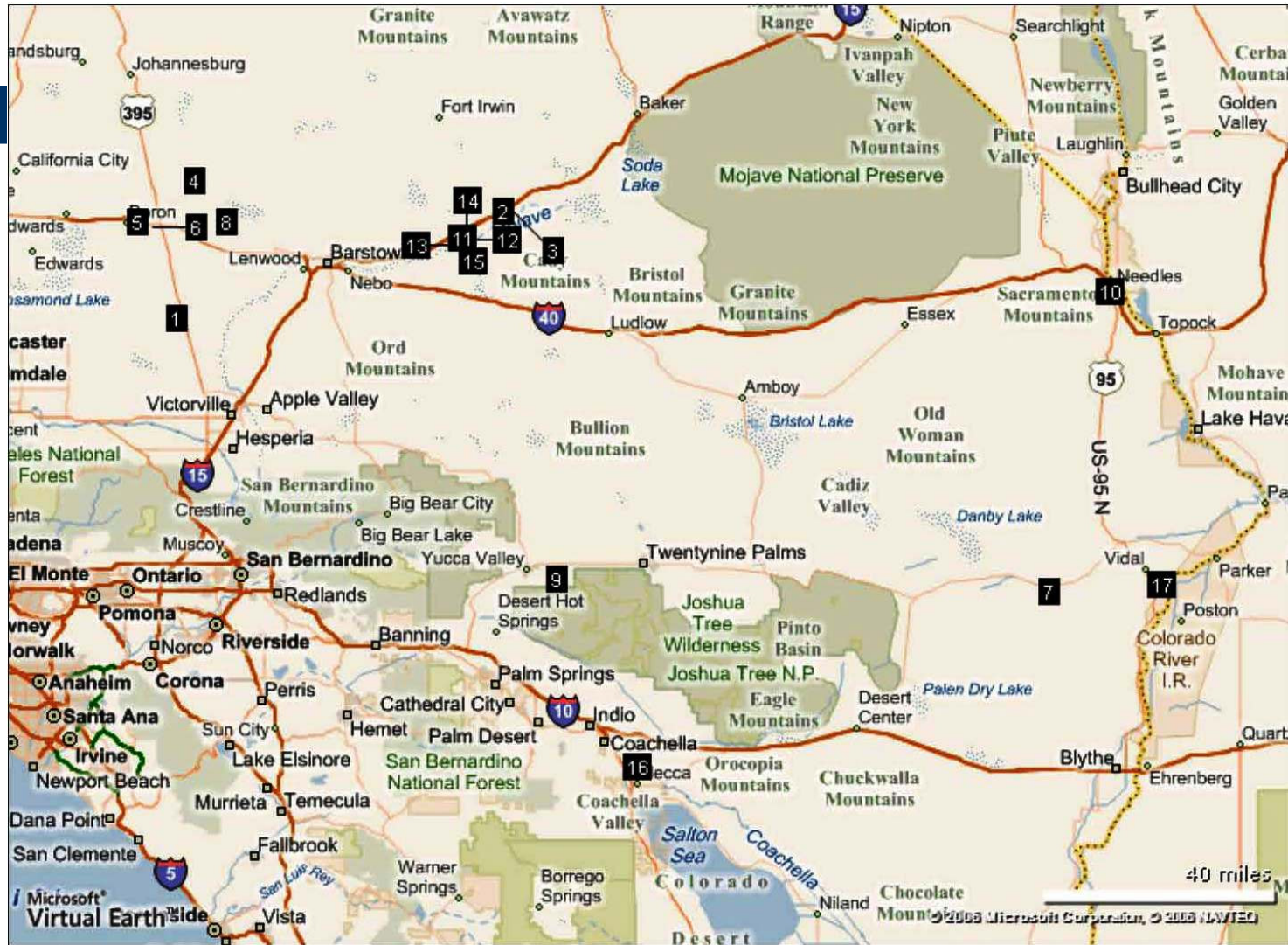
Pending Sales

	Address	City	Use	Size-Acres	Asking Price Per Acre	Sale Info
1	8000 Princess Pat Mine Road	Adelanto		240	\$9,166	Pending
2	Field Road	Barstow		295	\$3,724	Pending
3	I-15	Barstow		840	\$1,547	Escrow
4	Highway 395	Barstow		640	\$1,500	Under Contract
5	Kramer Junction	Boron		317	\$7,500	Escrow
6	Kramer Junction	Boron		453	\$9,456	Escrow
7	(East) Midland Road	Desert Center		3324	Not available	Pending
8	15000 Lockhart Road	Hinkley		305	\$5,727	Pending
9	Sunset Boulevard and Skyline Drive	Joshua Tree		955	\$4,083	Escrow
10	Parkway Drive and Lillyhill Drive	Needles		630	\$7,142	Escrow
11	I-15 at Harvard Road	Newberry Springs		480	\$14,999	Escrow
12	I-15 at Harvard Road	Newberry Springs		160	\$14,896	Escrow
13	I-15	Newberry Springs		120	\$15,049	Escrow
14	I-15	Newberry Springs		180	\$20,146	Escrow
15	Riverside Drive at Troy Road	Springs		158	\$3,115	Under Contract
16	59375 Lincoln Street	Thermal		157	\$39,950	Escrow
17	Highway 95	Vidal		280	\$1,071	Escrow

Listings

Location	Status	Size-Acres	Use	Price Per Acre
Newberry Springs	For Sale	225	Solar	\$10,000
Adelanto	For Sale	640	Solar	\$2,657
Adelanto	For Sale	240	Solar or airfield	\$9,166
N. Palm Springs	For Sale	675	Existing wind	\$14,814
Barstow	For Sale	515.94	Solar - Power	\$2,519
* no legal access				
Barsow	For Sale	295	Solar	\$3,724
Hinkly	For Sale	1,144	Solar	\$3,933
Newberry Springs	For Sale	640	Wind	\$3,966
Within 2.5 miles of major transmission corridor - other sites approximate				
Ludlow	For Sale	321	Mitigation	\$2,992
Palm Desert	For Sale	480	Solar	\$4,000
Barstow	For Sale	646		\$2,321
Barstow	For Sale	160	Wind	\$4,062

Locations of pending sales



Alphabet Soup

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Broker Reports

- Interest is increasing
- Have not closed any long term deals, yet
- They have two pending sales of large mitigation properties, where solar developers are buying land as mitigation for other projects
- Buyers want disturbed land
- Solar over 200 acres
- \$1 million per mile to construct transmission lines

See you in the future!





Case Study

Coldwater Ranch

80 Acres

68th Avenue West of Lincoln Street

Mecca, CA

North of the Salton Sea

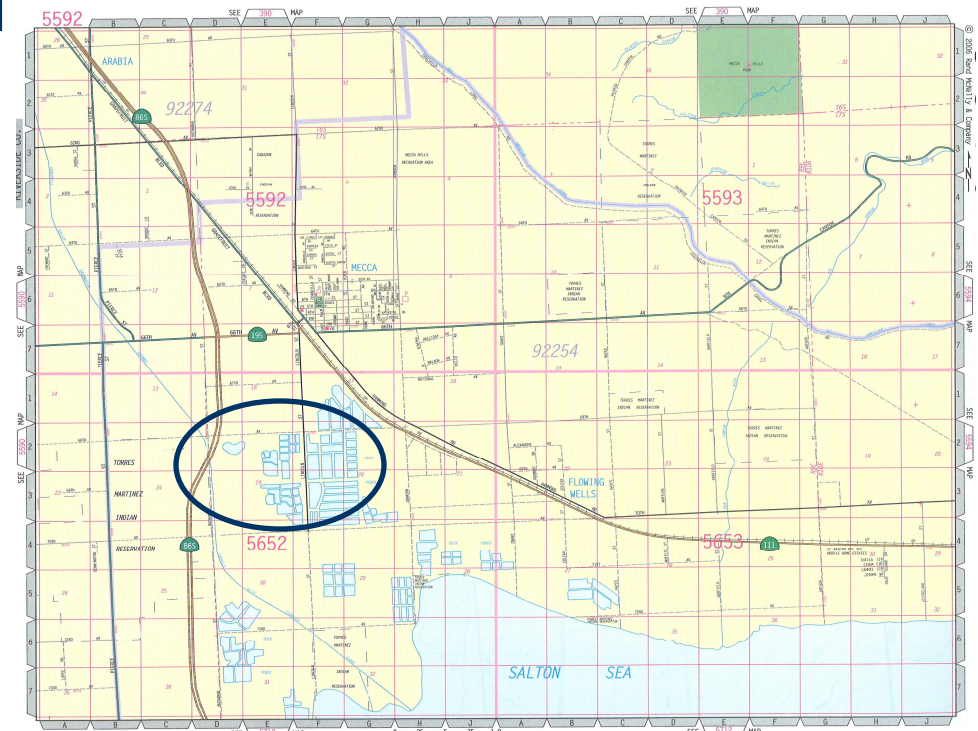
Current Use

- Duck Club
 - Well
 - Ponds
 - Dikes
 - SFR



Potential Uses

- Agriculture – Corn/Alfalfa
- Fish Farm – Catfish
- Water Banking
- Geothermal?
- Residential?



Key Factors

- Physical
 - Level-size
 - Has water and hot water
 - Near freeway, main road
 - Path of Residential Development

Details of a Deal

California City

588 Acres

Off Highway 14

Los Angeles County

Solar Potential



- Asking Price: \$4,900 per acre
- Option Price: \$5,000 per acre (slightly above asking price)
- Option to purchase: Long term - 5 years typical
- With option payments:
 - Price increases slightly, if more than 2 years
- Buyer is working on getting approvals:
 - Power purchase agreement with D.W.P
 - County approvals