

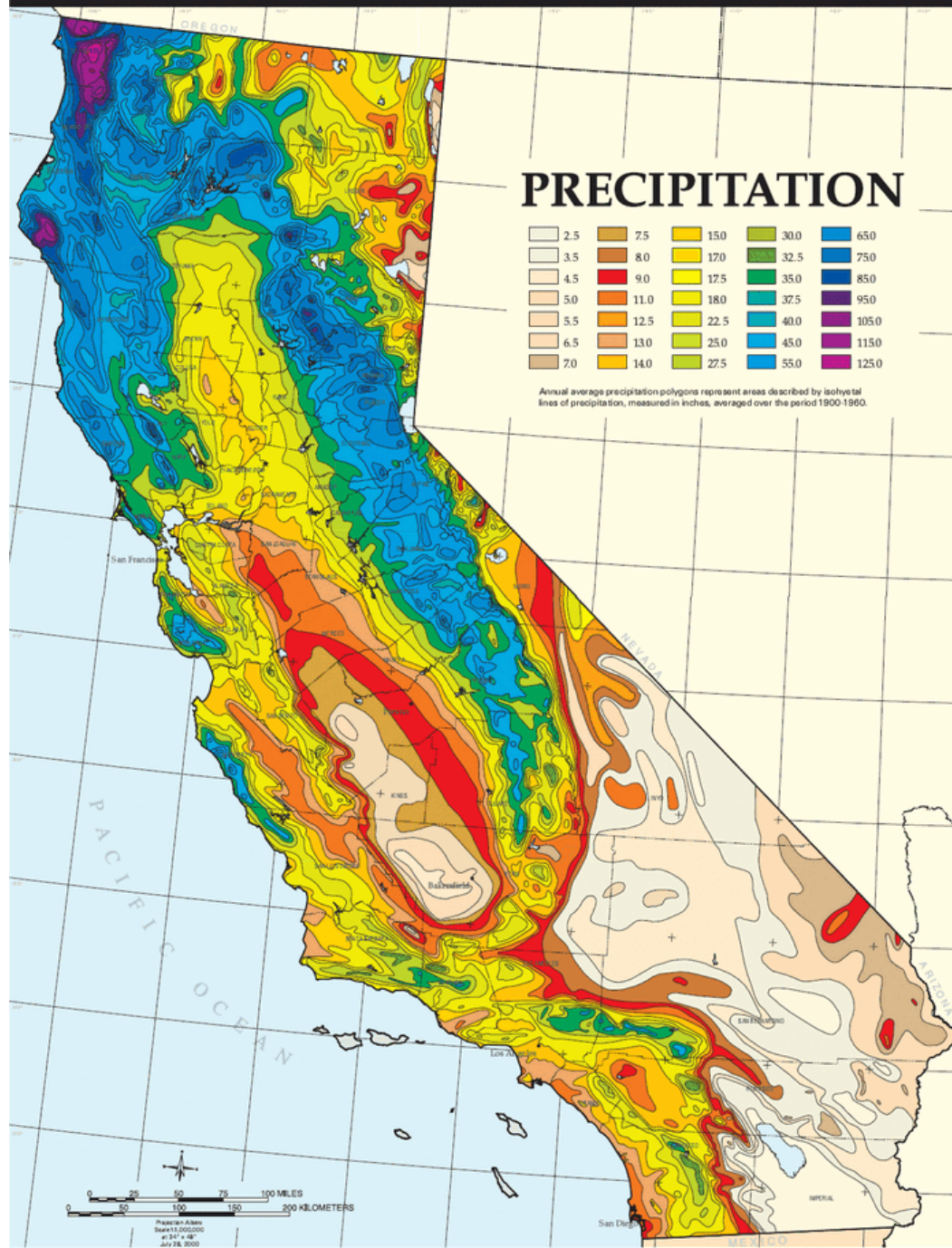
Osaka University: Green Access Project II
8 March 2015

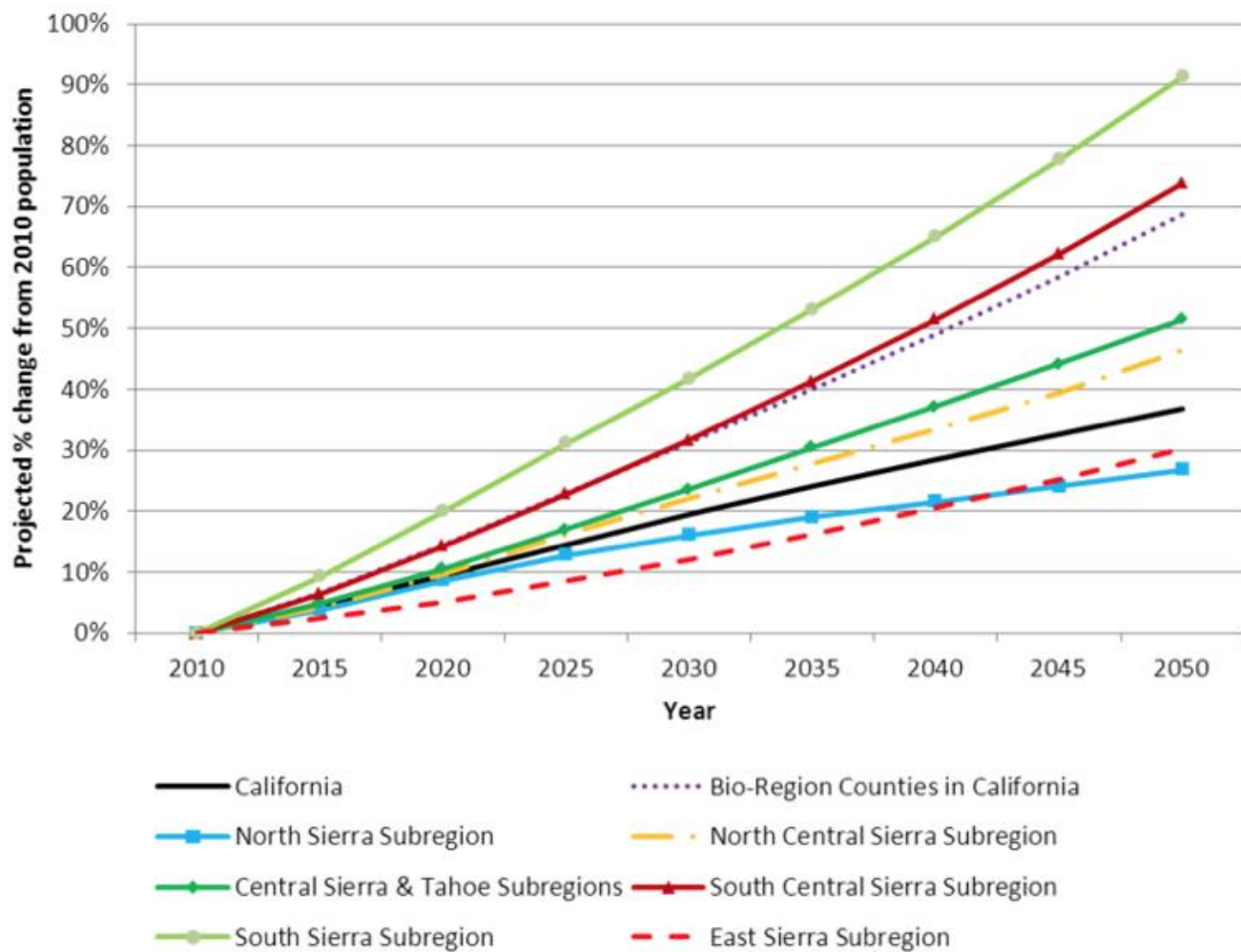
CITIZEN PARTICIPATION IN THE GREAT CALIFORNIA DROUGHT

ANTONIO ROSSMANN

John and Elizabeth Boalt Lecturer in Land Use and Water
Resources Law

BerkeleyLaw
UNIVERSITY OF CALIFORNIA





Estimated population projections 2010-2050 for the state of California, the aggregate of counties that make up the Sierra Nevada bio-region (California counties only), and the aggregates of counties that make up Sierra Nevada sub-regions (Source: California Department of Finance).

Figure 4-8 Model simulation of potential changes in snowpack during 21st century

Snowpack Changes:

Evolution of Average Annual Snow Water Equivalent
as a Percentage of Average 1995-2005 Values

(effect of temperature changes only; historical P, baseline T from WY 1965-1987)



Climate Research Division

2030 SWE

2060 SWE

2090 SWE

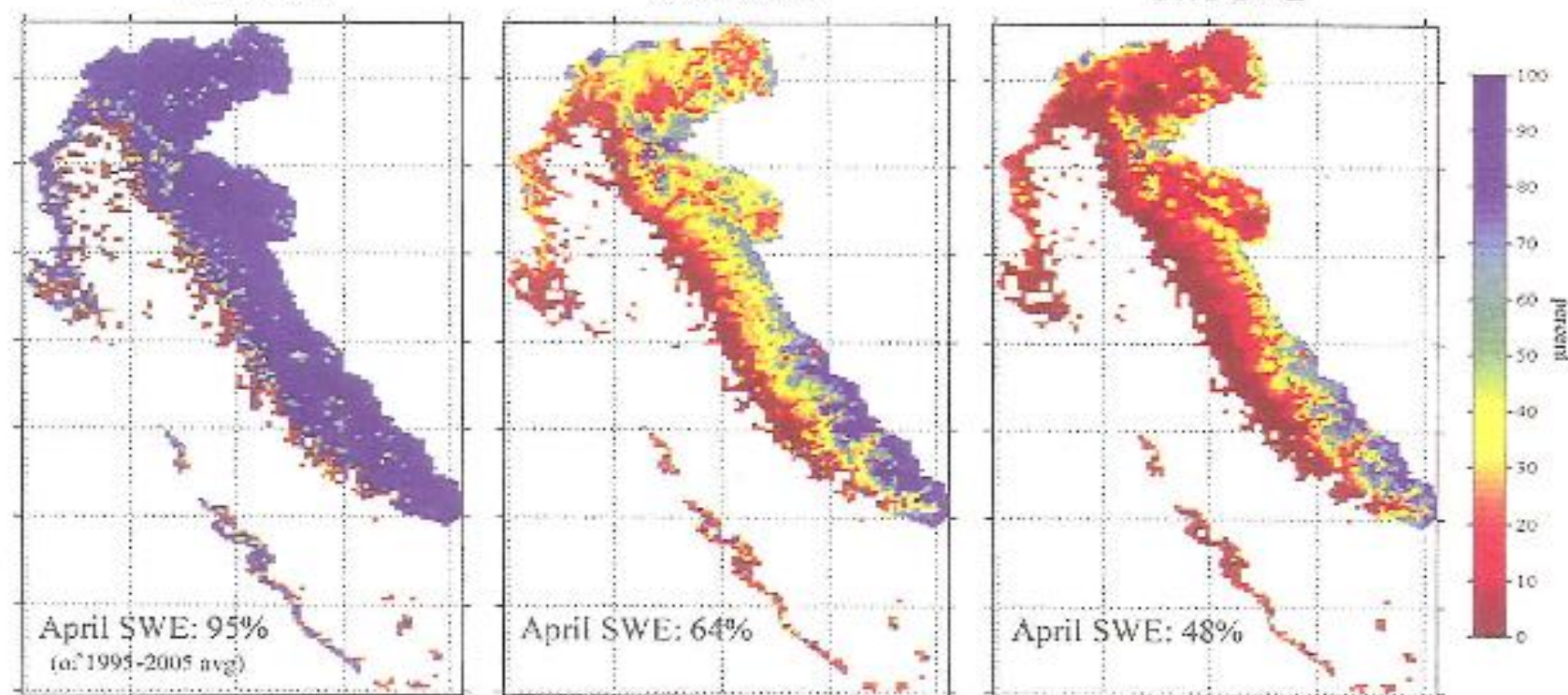
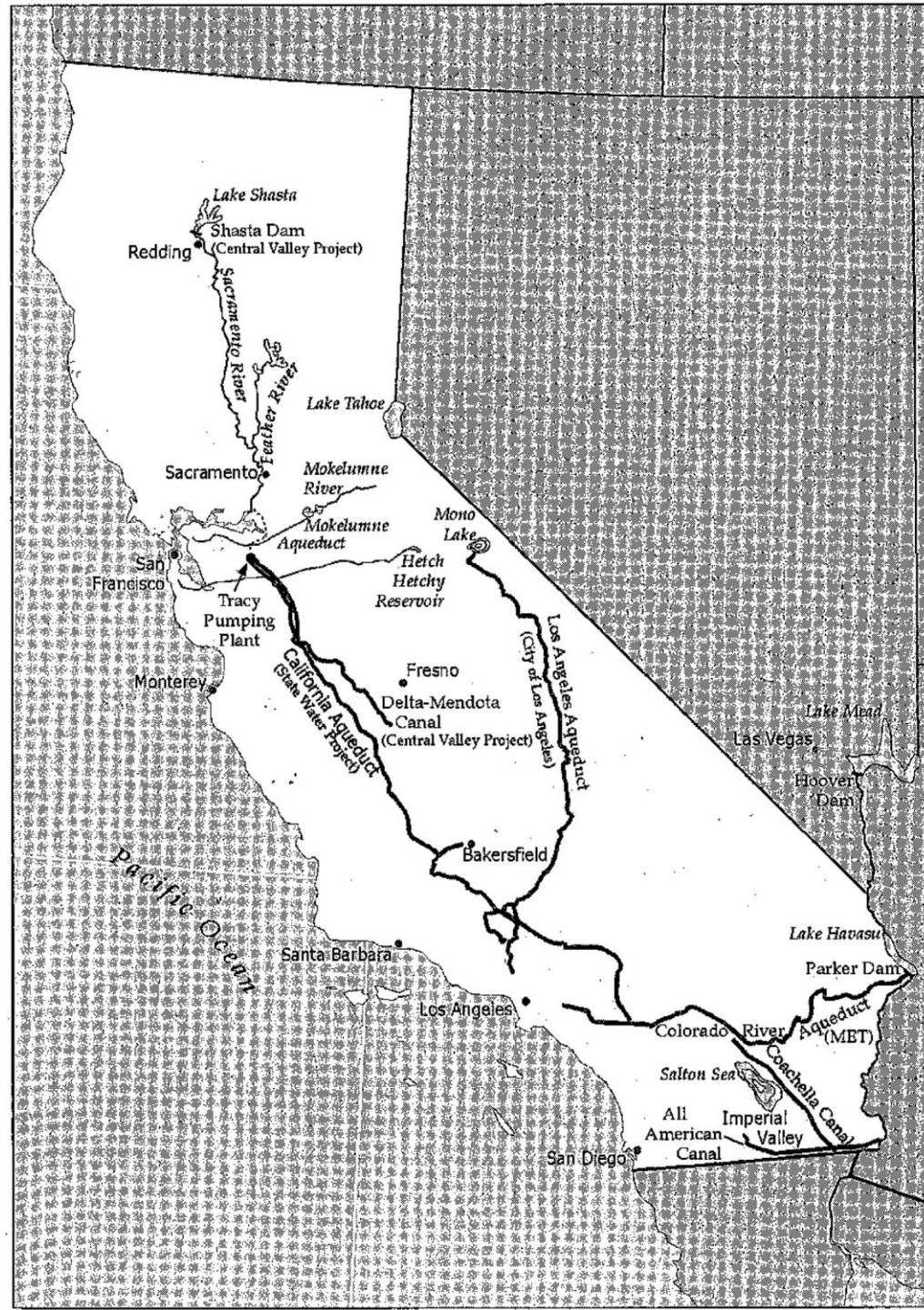


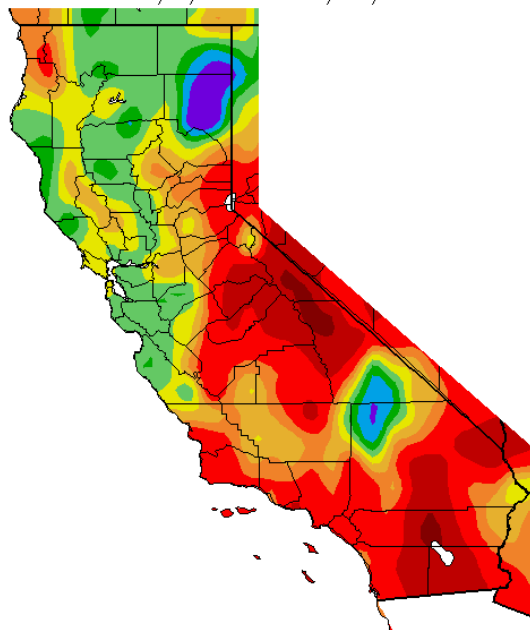
figure by N. Knowles

(Cyan entered avg monthly T anomaly to 1995-2005 monthly avg from PCM B00-14 run, used to force BDWSM with WY 65-87 conditions, 1965-01)

California relies on snowpack as a major part of annual water storage. Computer modeling of global climate change scenarios predict significant reductions in future snowpack. A 52 percent reduction in the annual April through July runoff would occur for a 2.1 degree C (3.8 F) of warming. (Source; Knowles and Cyan 2001)

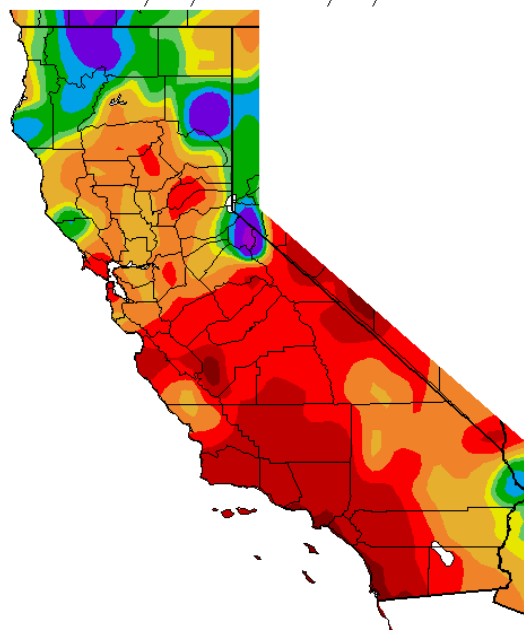


Percent of Average Precipitation (%)
10/1/2014 – 2/17/2015



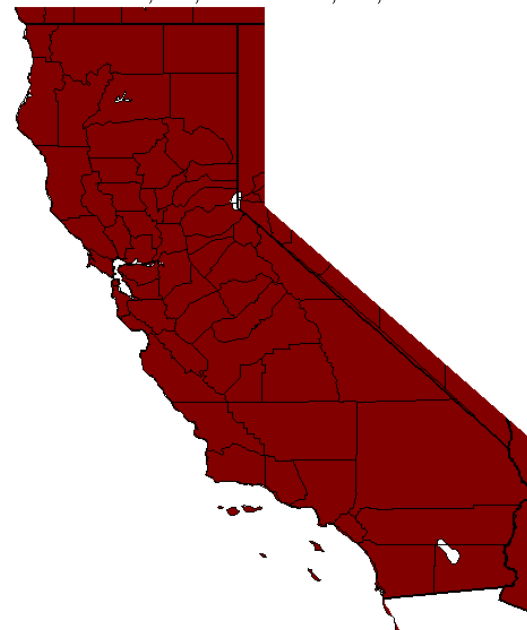
Generated 2/18/2015 at WRCC using provisional data.
NOAA Regional Climate Centers

Percent of Average Precipitation (%)
1/19/2015 – 2/17/2015



Generated 2/18/2015 at WRCC using provisional data.
NOAA Regional Climate Centers

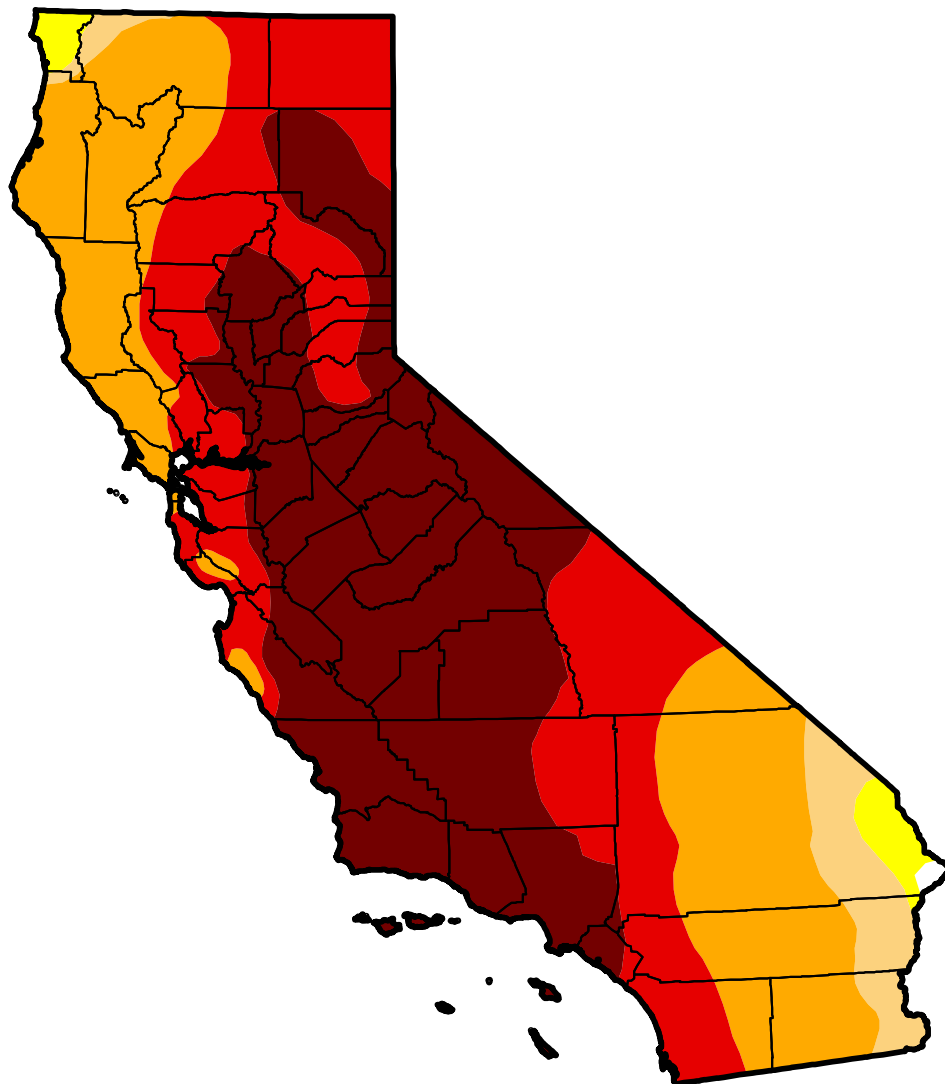
Percent of Average Precipitation (%)
2/11/2015 – 2/17/2015



Generated 2/18/2015 at WRCC using provisional data.
NOAA Regional Climate Centers

U.S. Drought Monitor California

February 24, 2015
(Released Thursday, Feb. 26, 2015)
Valid 7 a.m. EST



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.16	99.84	98.10	93.44	67.46	39.92
Last Week <i>2/17/2015</i>	0.16	99.84	98.10	93.44	67.46	41.20
3 Months Ago <i>11/25/2014</i>	0.00	100.00	99.72	94.42	79.69	55.08
Start of Calendar Year <i>12/30/2014</i>	0.00	100.00	98.12	94.34	77.94	32.21
Start of Water Year <i>9/30/2014</i>	0.00	100.00	100.00	95.04	81.92	58.41
One Year Ago <i>2/25/2014</i>	0.00	100.00	94.56	90.82	73.83	26.21

Intensity:

 D0 Abnormally Dry	 D3 Extreme Drought
 D1 Moderate Drought	 D4 Exceptional Drought
 D2 Severe Drought	

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:
Richard Heim
NCDC/NOAA



<http://droughtmonitor.unl.edu/>

» **Congress:** A bill funding the Department of Homeland Security without immigration-related concessions goes to the White House. A6



Doug Mills / New York Times

» **Raiders:** Oakland should go after defensive lineman Ndamukong Suh. B1

Paul Chinn / The Chronicle

Business Report

» **Guy gifts:** Redwood City's Man Crates ships sealed boxes of gifts to hard-to-please fellows. C1

Datebook

» **Photography:** Documenting the most graceful trees from around the world. E1

San Francisco Chronicle

SFCHRONICLE.COM AND SFGATE.COM | Wednesday, March 4, 2015 | PRINTED ON RECYCLED PAPER | \$1.00 ★★★★★

Dozen wells shut down for pumping pollution

Oil wastewater injected into drinkable aquifers

By David R. Baker

State officials have ordered oil companies to shut 12 more wells that injected oil-field wastewater into drinkable aquifers beneath California's drought-stricken Central Valley, regulators reported Tuesday.

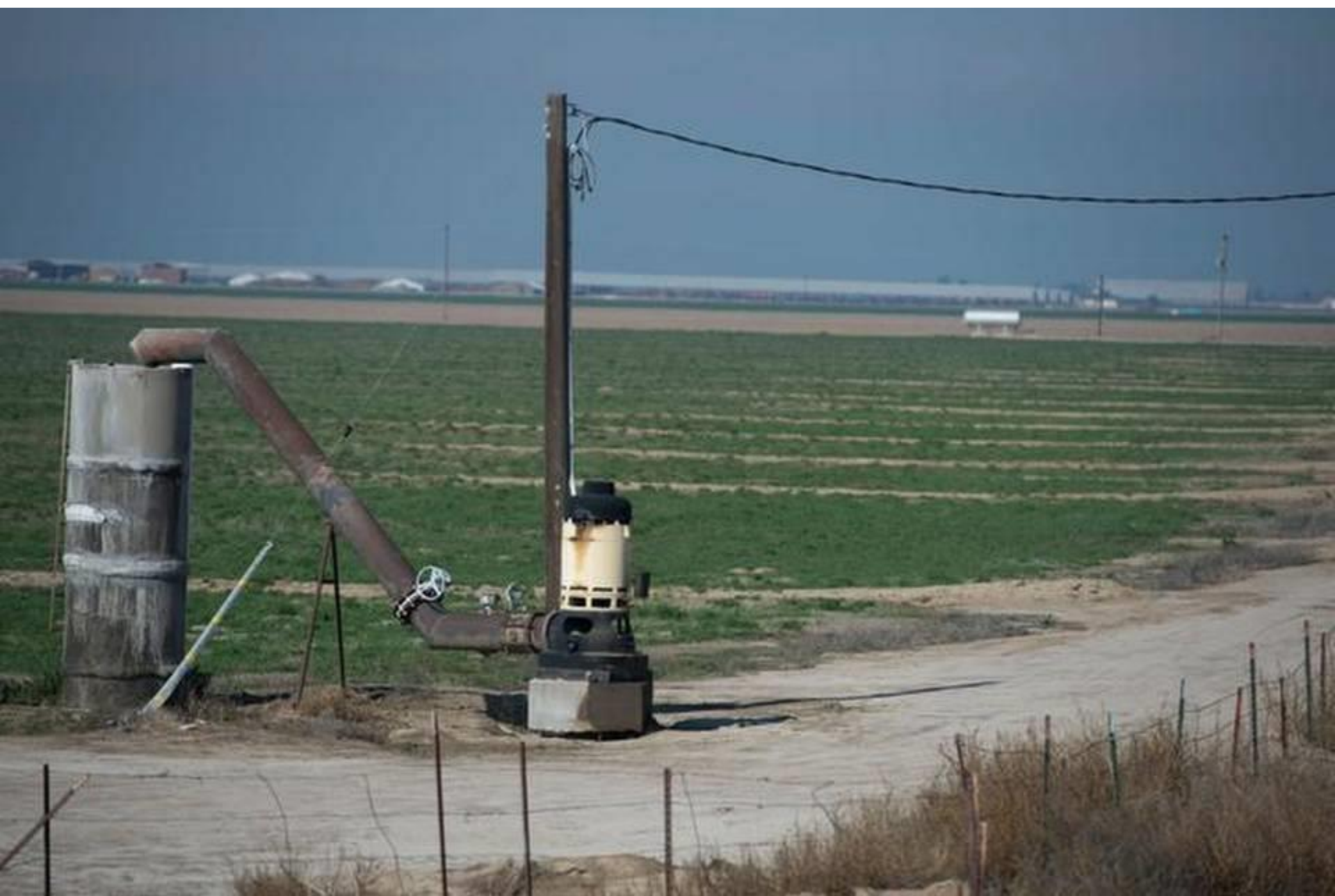
The wells, used to dispose of water left over from oil production, are clustered in Kern County, the heart of the state's petroleum industry. All have pumped water laced with oil and trace chemicals into aquifers that could be used for drinking or irrigation in the valley's fields and orchards.

They are the result of three decades of bureaucratic confusion among state and federal regulators that allowed oil companies to drill hundreds of disposal wells into aquifers that were supposed to be protected by

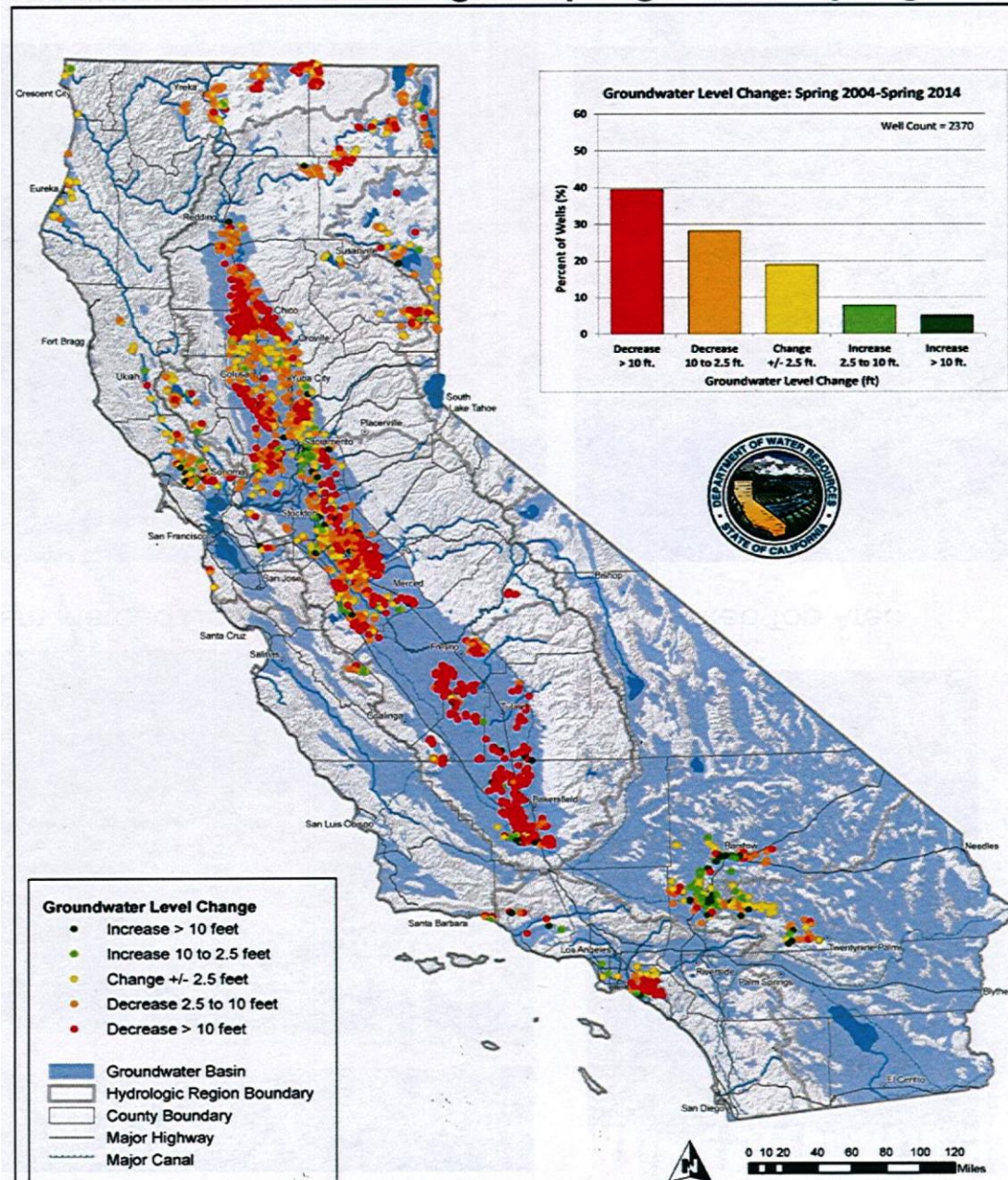
Aquifer continues on A11

State's snow levels reach historic lows



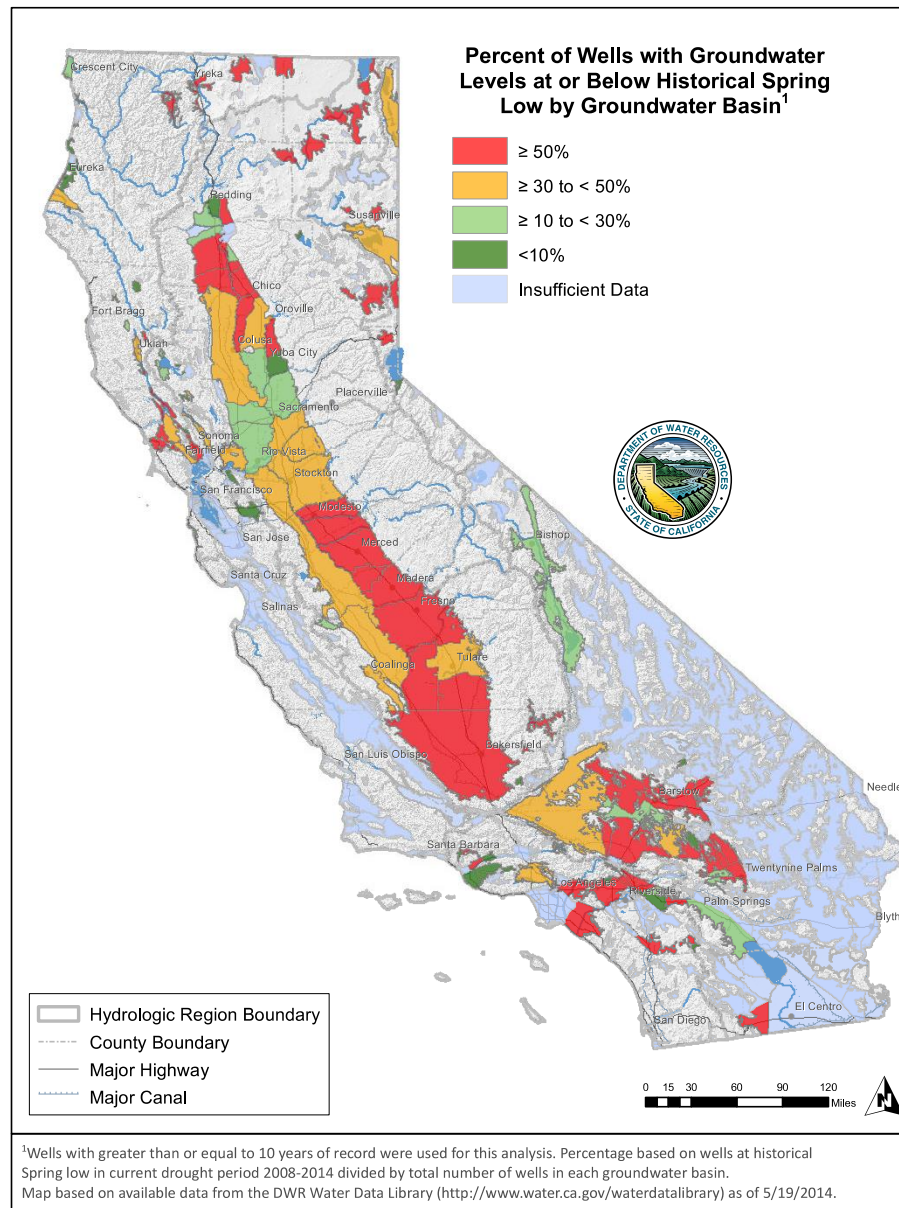


Groundwater Level Change* - Spring 2004 to Spring 2014



*Groundwater level change determined from water level measurements in wells. Map and chart based on available data from the DWR Water Data Library as of 04/28/2014. Document Name: S2014-S2004_20140428 Updated: 04/28/2014 Data subject to change without notice.

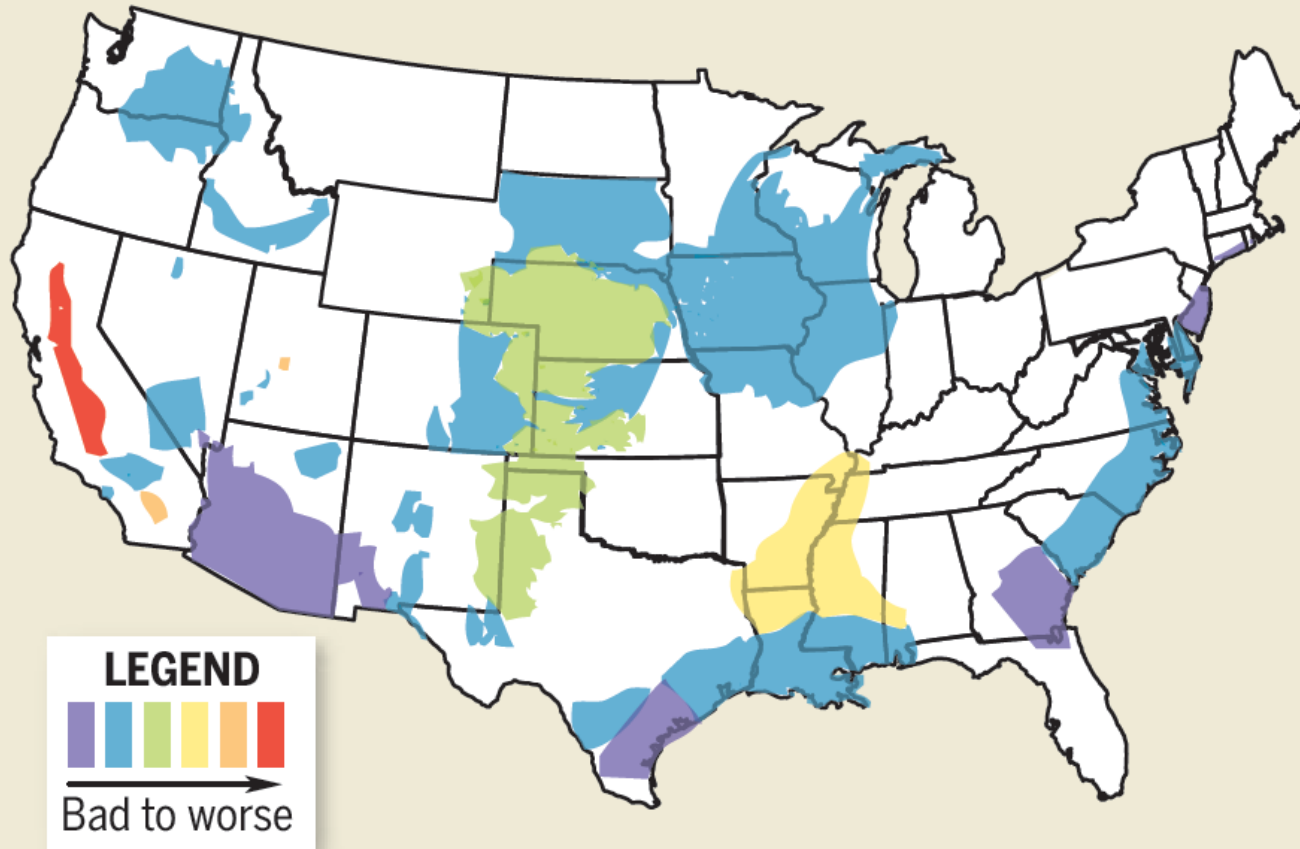
FIGURE 2
Percent of Wells with Groundwater Levels at or
Below Historical Spring Low by Groundwater Basin



WATER LEVELS

Underground water levels are sinking faster in California's Central Valley than in any of 39 other endangered aquifer systems studied throughout the United States.

Groundwater Depletion Intensity 2001-2008



Source: Groundwater journal January-February 2015, US Geological Survey







MONDのこだわり CHOCOLATE

モンドへのこだわり

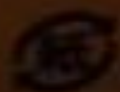
(国農務省)が定める最高基準より
基準でアーモンドを選別。

おいしい2層のチョコレート

7の2層のチョコレートを使用
すばいおいしさを表現。



農場フィルム



農場、自然
産物、安心

- 種類別名称: チョコレート
- 原材料名: 砂糖、アーモンド、全粉乳、カカオマス、植物油、ココアバター、乳糖、光沢剤、乳化剤(大豆由来)、香料
- 内容量: 86g ●賞味期限: この面の右側に記載 ●保存方法: 28℃以下の涼しいところに保存してください。
- 製造者: 株式会社 **ロッテ**
〒160-0023 東京都新宿区西新宿3-20-1
(製造所固有記号はこの面の右側に記載)

原材料に含まれるアレルギー物質(27品目中)

乳、大豆

●本品は卵、小麦、カシューナッツを含む製品と共通の設備で製造しています。 ●チョコレートは高温になると、表面が溶けてその脂肪分が白く固まる事があります(ファットブルームといいます)。召し上がってもさしつかえありませんが、風味の上では劣ります。 ●開封後はお早めにお召し上がりください。 ●不都合品はお取りかえします。

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L4p

アーモンド



4 903333 126712

栄養成分

エネルギー
(1粒)
たんぱく質
脂質
炭水化物
ナトリウム
カカオ
(31%)









AR

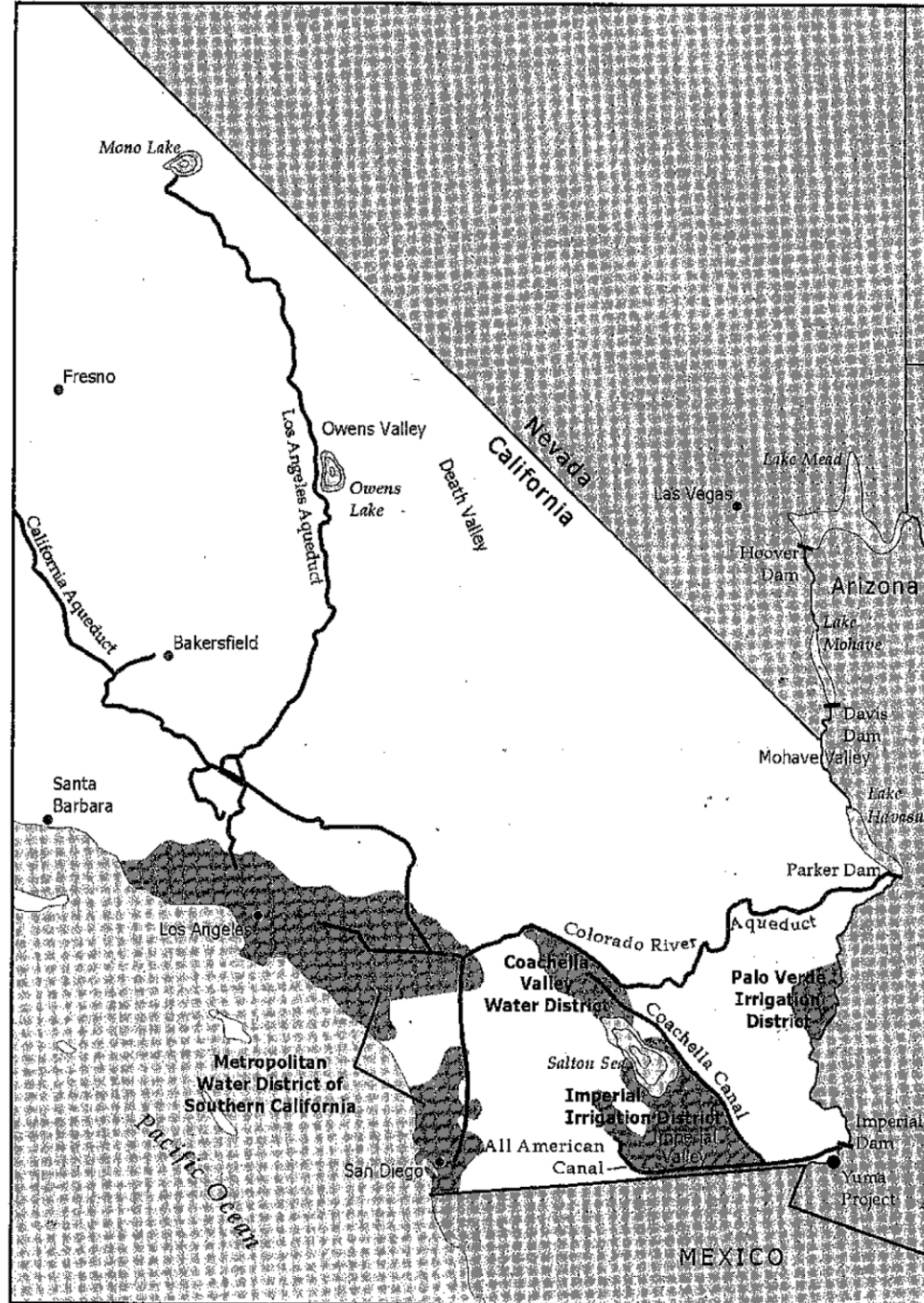
GOVERNOR'S COMMISSION
TO REVIEW CALIFORNIA WATER RIGHTS LAW



FINAL REPORT



DECEMBER 1978



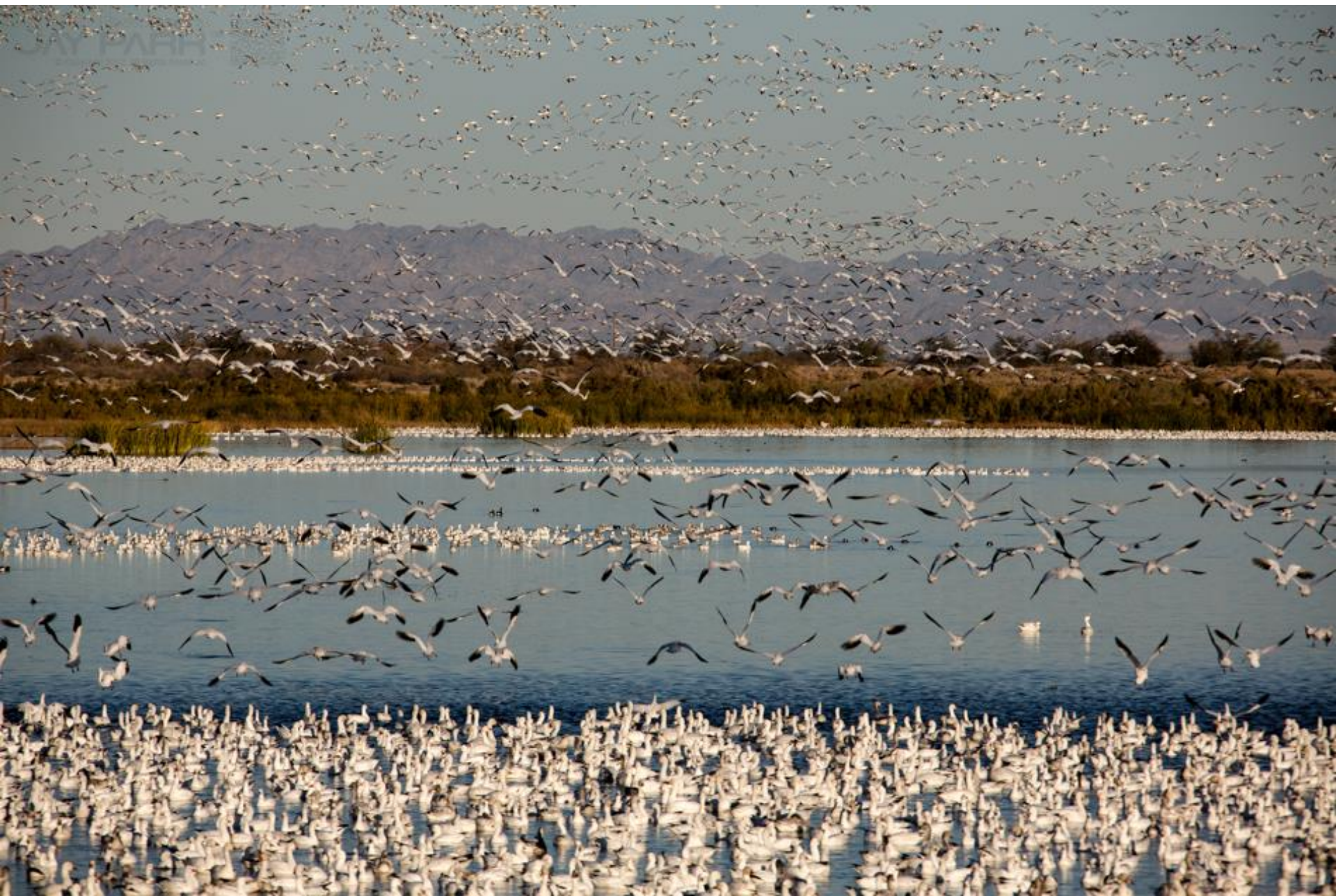




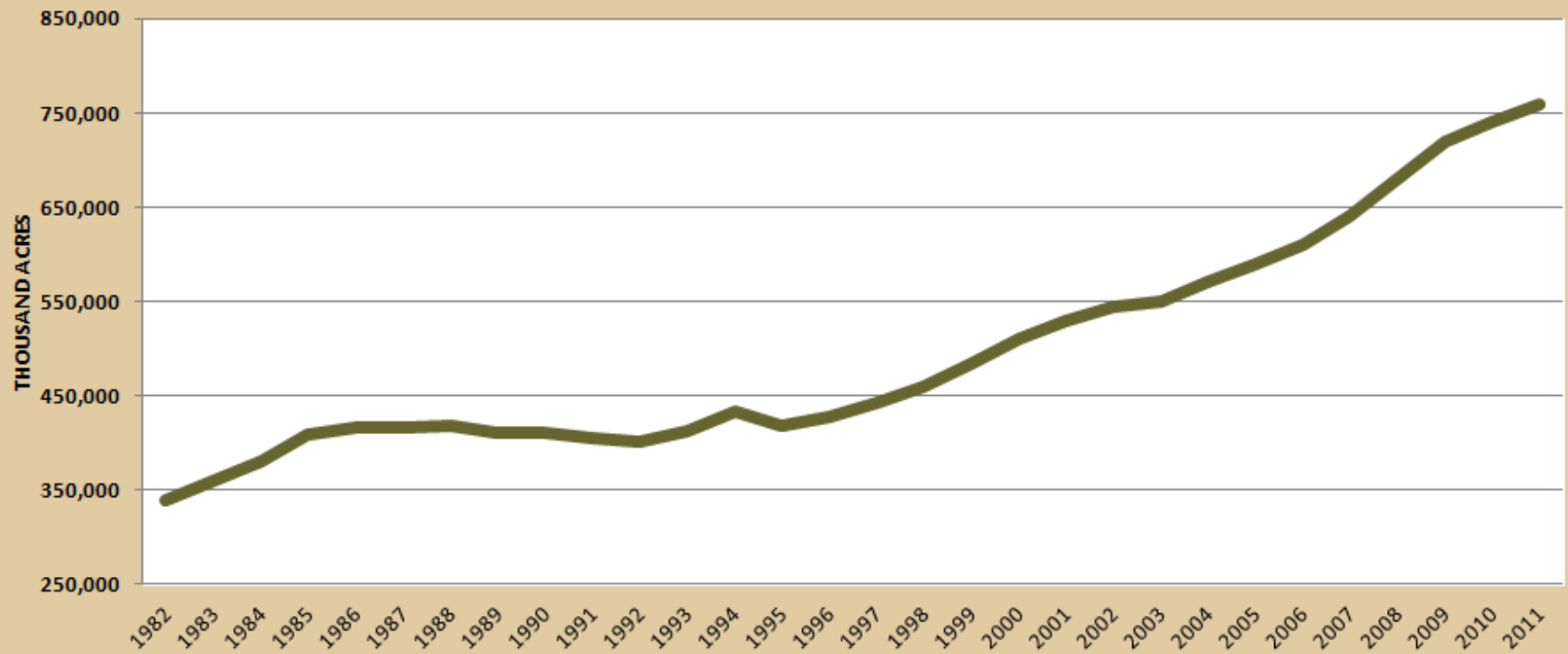
Table H-1 SWP Water Delivered by Category, 1962–2009 (Acre-feet)

Year	Table A Water			Other SWP Water Deliveries					
	Municipal and Industrial	Agricultural	Total	Article 21/Unscheduled		Other Water ^a	Feather River Diversions ^b	Fish & Wildlife/ Recreation Water	Total Deliveries
				Municipal and Industrial	Agricultural				
1962	—	—	—	—	—	9,704	7,499	—	17,203
1963	—	—	—	—	—	13,212	16,049	—	29,261
1964	—	—	—	—	—	21,743	17,891	—	39,634
1965	—	—	—	—	—	35,985	27,425	—	63,410
1966	—	—	—	—	—	59,599	33,361	—	92,960
1967	5,563	5,791	11,354	0	0	45,225	24,639	—	81,218
1968	86,541	85,168	171,709	10,000	111,534	1,214	903,367	—	1,197,824
1969	63,956	129,064	193,020	0	72,397	8,692	832,454	—	1,106,563
1970	83,415	150,578	233,993	0	131,848	25,401	804,320	—	1,195,562
1971	93,776	263,564	357,340	0	294,581	35,438	825,886	8	1,513,253
1972	186,796	425,005	611,801	0	422,322	53,848	875,529	6,489	1,969,989
1973	297,497	395,391	692,888	0	294,916	29,540	851,285	1,155	1,869,784
1974	423,982	450,093	874,075	0	412,453	31,493	963,956	2,118	2,284,095
1975	670,492	553,498	1,223,990	356	620,329	46,995	924,696	3,377	2,819,743
1976	631,876	741,126	1,373,002	4,147	547,538	103,546	1,018,653	1,745	3,048,631
1977	354,930	218,966	573,896	0	0	410,991	624,497	1,111	1,610,495
1978	782,625	529,740	1,312,365	0	16,215	177,245	836,864	1,691	2,344,380
1979	692,888	711,404	1,404,292	0	646,830	431,693	933,067	1,766	3,417,648
1980	726,545	784,946	1,511,491	52,200	350,017	40,269	925,750	2,131	2,881,858
1981	1,053,273	835,852	1,889,125	18,920	889,508	283,310	993,785	4,688	4,079,336
1982	916,014	822,042	1,738,056	140	214,994	144,267	819,586	4,646	2,921,689
1983	482,749	701,370	1,184,119	0	13,019	172,030	633,778	7,849	2,010,795
1984	725,799	861,794	1,587,593	3,663	259,254	366,273	891,128	7,040	3,114,951
1985	983,341	929,424	1,912,765	9,638	292,206	474,417	924,049	4,033	3,617,108
1986	998,611	1,009,295	2,007,906	2,595	21,755	177,176	843,040	3,865	3,056,337
1987	1,079,983	1,033,932	2,113,915	6,949	107,958	375,810	882,301	7,672	3,494,605
1988	1,308,071	1,068,302	2,376,373	0	0	520,375	884,877	4,889	3,786,514
1989	1,602,543	1,251,204	2,853,747	0	0	474,559	830,500	8,135	4,166,941
1990	1,876,072	706,079	2,582,151	0	90	424,697	875,099	9,262	3,891,299
1991	536,669	12,444	549,113	3,521	0	543,582	565,395	4,879	1,666,490
1992	955,687	455,112	1,410,799	1,156	0	166,992	613,978	2,605	2,195,530
1993	1,069,258	1,243,978	2,313,236	0	0	256,853	822,589	2,609	3,395,287
1994	1,134,992	614,359	1,749,351	48,150	64,475	236,739	874,018	8,200	2,980,933
1995	801,570	1,165,523	1,967,093	17,984	46,346	85,560	860,077	2,575	2,979,635
1996	1,143,638	1,371,186	2,514,824	12,091	16,556	252,346	1,005,148	3,907	3,804,872
1997	1,220,200	1,040,183	2,260,383	2,814	18,618	322,000	993,211	4,146	3,601,172
1998	865,795	860,724	1,726,519	9,982	10,306	127,405	872,738	2,108	2,749,058
1999	1,405,311	1,333,592	2,738,903	61,191	96,879	85,312	1,108,672	4,324	4,095,281
2000	1,968,161	1,231,745	3,199,906	170,302	138,483	333,384	1,085,886	4,030	4,931,991
2001	1,168,333	365,930	1,534,263	10,261	33,174	535,147	1,077,997	2,929	3,193,771
2002	1,849,052	715,805	2,564,857	9,502	27,663	272,277	1,131,880	3,694	4,009,873
2003	2,102,557	787,658	2,890,215	5,397	29,629	233,069	1,006,995	2,846	4,168,151
2004	1,951,657	643,342	2,594,999	103,890	112,949	341,922	1,171,835	2,865	4,328,460
2005	1,877,647	948,563	2,826,210	186,787	544,296	92,858	1,074,706	1,506	4,726,363
2006	1,973,268	998,583	2,971,851	293,358	327,981	119,405	1,112,551	1,936	4,827,082
2007	1,572,198	509,019	2,081,217	185,825	124,148	449,935	1,217,990	2,581	4,061,696
2008	1,015,241	218,999	1,234,240	2,729	0	488,818	1,109,563	2,778	2,838,128
2009	883,893	348,860	1,232,753	6,032	0	527,207	1,147,396	2,047	2,915,435
Total	41,622,465	29,529,233	71,151,698	1,239,580	7,311,267	10,465,558	38,877,956	146,235	129,192,294

^a Includes water conveyed for SWP and non-SWP water contractors.

^b Includes amounts of water diverted according to various water rights agreements.

BEARING ACREAGE IN CALIFORNIA



Prepared by Hilltop Ranch, Inc. Source: Almond Board of California, USDA, NASS/CFO.

Top 20 Commodities for 2010-2012

Commodity	Value and Rank					
	2010		2011		2012	
			\$1,000			
Milk and Cream	5,928,150	1	7,680,751	1	6,899,743	1
Grapes	3,209,040	2	3,859,202	3	4,450,626	2
Almonds (shelled)	2,903,380	3	4,007,860	2	4,347,200	3
Cattle & Calves	2,068,412	5	2,825,870	4	3,298,548	4
Nursery	2,357,232	4	2,274,840	5	2,551,200	5
Berries, All Strawberries	1,813,557	6	1,943,727	6	2,121,574	6
Hay, All	1,033,152	10	1,783,200	7	1,782,705	7
Lettuce, All	1,605,283	7	1,615,329	8	1,447,933	8
Walnuts	1,028,160	11	1,336,900	9	1,363,000	9*
Tomatoes	1,246,286	8	1,146,224	10	1,169,666	10
Pistachio	1,158,840	9	879,120	13	1,113,020	11
Flowers and Foliage	1,015,083	12	1,011,530	11	985,400	12
Rice	930,849	13	900,277	12	770,697	13
Oranges, All	720,899	15	656,338	16	764,783	14
Chickens	721,723	14	691,506	15	720,215	15
Cotton Lint, All	592,416	17	823,915	14	650,018	16
Broccoli	684,659	16	580,526	18	644,747	17
Carrots 1/	546,210	18	641,250	17	503,006	18
Lemons	362,588	21	352,154	23	435,752	19
Eggs, Chicken	367,788	20	381,265	20	393,245	20

1/ Carrot, All value for 2009 and 2010. Carrot, Fresh value for 2011.

*calculated using 2012 production x 2011 price



Senate Bill No. 1168

CHAPTER 346

An act to amend Sections 10927, 10933, and 12924 of, to add Sections 113 and 10750.1 to, and to add Part 2.74 (commencing with Section 10720) to Division 6 of, the Water Code, relating to groundwater.

[Approved by Governor September 16, 2014. Filed with
Secretary of State September 16, 2014.]

LEGISLATIVE COUNSEL'S DIGEST

SB 1168, Pavley. Groundwater management.

(1) The California Constitution requires the reasonable and beneficial use of water. Existing law establishes various state water policies, including the policy that the people of the state have a paramount interest in the use of all the water of the state and that the state is required to determine what water of the state, surface and underground, can be converted to public use or be controlled for public protection.

This bill would state the policy of the state that groundwater resources be managed sustainably for long-term reliability and multiple economic, social, and environmental benefits for current and future beneficial uses. This bill would state that sustainable groundwater management is best achieved locally through the development, implementation, and updating of plans and programs based on the best available science.

(2) Existing law requires the Department of Water Resources, in conjunction with other public agencies, to conduct an investigation of the state's groundwater basins and to report its findings to the Legislature not later than January 1, 2012, and thereafter in years ending in 5 and 0. Existing law requires the department to identify the extent of monitoring of groundwater elevations that is being undertaken within each basin or subbasin and to prioritize groundwater basins and subbasins based on specified considerations, including any information determined to be relevant by the department.

This bill would specify that this relevant information may include adverse impacts on local habitat and local streamflows. This bill would require the department to categorize each basin as high-, medium-, low-, or very low priority and would require the initial priority for each basin to be established no later than January 31, 2015. This bill would authorize a local agency to request that the department revise the boundaries of a basin and would require the department, by January 1, 2016, to adopt regulations on the methodology and criteria to be used to evaluate the proposed revision. This bill would require the department to provide a copy of its draft revision of a basin's boundaries to the California Water Commission and would require the commission to hear and comment on the draft revision.

A G E N D A
BOARD OF SUPERVISORS

Regular Meeting

TUESDAY, MARCH 03, 2015

Closed Session – 9:00 a.m.

Regular Meeting – 10:00 a.m.

Public Hearing Wright Solar Project – 1:30 p.m.

At Large Interviews – 2:30 p.m.

MERCED COUNTY
ADMINISTRATION BUILDING
2222 "M" STREET
BOARD ROOM, THIRD FLOOR
MERCED, CALIFORNIA 95340
(209) 385-7366

CHAIRMAN JOHN PEDROZO.....DISTRICT 1
HUBERT "HUB" WALSH, JR.....DISTRICT 2
DARON McDANIEL.....DISTRICT 3
DEIDRE F. KELSEY.....DISTRICT 4
JERRY O'BANION.....DISTRICT 5

JAMES L. BROWN
COUNTY EXECUTIVE OFFICER

JAMES N. FINCHER
COUNTY COUNSEL

*All supporting documentation is available for public review in the Office of the Clerk of the Board of Supervisors located in the County Administration Building, Third Floor, 2222 "M" Street, Merced, California, 95340
During regular business hours, 8:00 a.m. – 5:00 p.m., Monday through Friday.*

The Agenda is available online at www.co.merced.ca.us

Any material related to an item on this Agenda submitted to the Clerk after distribution of the Agenda packet is available for public inspection in the Office of the Clerk of the Board

Members of the public are advised that all pagers, cellular telephones and any other communication devices are to be turned off upon entering the Board Chambers

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INQUIRE WITHIN THE BOARD OF SUPERVISORS OFFICE**

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ORDINANCE NO. [REDACTED]

**AN ORDINANCE TO PREVENT THE MINING AND EXPORT OF GROUNDWATER
WITHIN THE UNINCORPORATED AREAS OF MERCED COUNTY**

(ADDING CHAPTER 9.27 OF THE MERCED COUNTY CODE)

**THE BOARD OF SUPERVISORS OF THE COUNTY OF MERCED, STATE OF
CALIFORNIA, ORDAINS AS FOLLOWS:**

SECTION 1: Chapter 9.27 of Title 9 of the Merced County Code, for
Groundwater Mining and Export Ordinance of Merced County, approved by the Board of
Supervisors as Ordinance [REDACTED], is added as follows:

**CHAPTER 9.27
GROUNDWATER MINING AND EXPORT**

9.27.010	Title.
9.27.020	Findings.
9.27.030	Definitions.
9.27.040	Prohibition.
9.27.050	Exemptions.
9.27.060	Implementation.
9.27.065	Groundwater monitoring and reporting.
9.27.070	Authority.
9.27.080	Penalty for violation.
9.27.090	Severability and effect.

Chapter 9.27 GROUNDWATER MINING AND EXPORT

9.27.010 Title.

The ordinance codified in this chapter may be cited as the "Groundwater Mining
and Export Ordinance of Merced County."

9.27.020 Findings and Declarations.

The Merced County Board of Supervisors makes the following findings in support
of the enactment of this ordinance:

1. The protection of the health, welfare, and safety of the residents of the
county require that the groundwater resources of Merced County be protected from
adverse impacts resulting from both the mining of groundwater resources and the
export of those resources outside each respective county groundwater basin; and

TRUST