

California Sportfishing Protection Alliance



**State Water Resources Control Board
20 May 2015 Workshop**

TUCP Orders: An Execution Warrant for Fisheries

- The Board's weakening of Bay-Delta standards has resulted in a population collapse of Delta species that exceeds the Pelagic Organism Decline that followed adoption of D-1641 in 2000.
- Over the last three years of surveys:
 - FMWT (4): abundance indices of Delta and longfin smelt declined by **97.4%** and **96.7%**, respectively, from 2011.
 - Kodiak Trawl (5): numbers of Delta smelt dropped by **91%**.
 - Smelt Larva Surveys (6): abundances (CPUE) of Delta and longfin smelt dropped by **96.7%** and **93.9%**, respectively.
- The Board's 2014 Sacramento River temperature management plan led to an estimated loss of **95%** of winter-run, **99%** of spring-run and **97%** of fall-run Chinook salmon.



DWR & Bureau Mismanagement Led to Crisis

- According to DWR, there have been 10 multi-year drought sequences of large-scale extent in the last 100 years, spanning 41 years.
- Below normal years occur more than half the time.
- **Agencies cannot claim to be surprised and unprepared for something that occurs more than 40% of the time.**
- **Crisis exists because of egregious malfeasance!**
- DWR and Bureau have learned that the State Board will bail them out by weakening standards and the fishery agencies will go along.

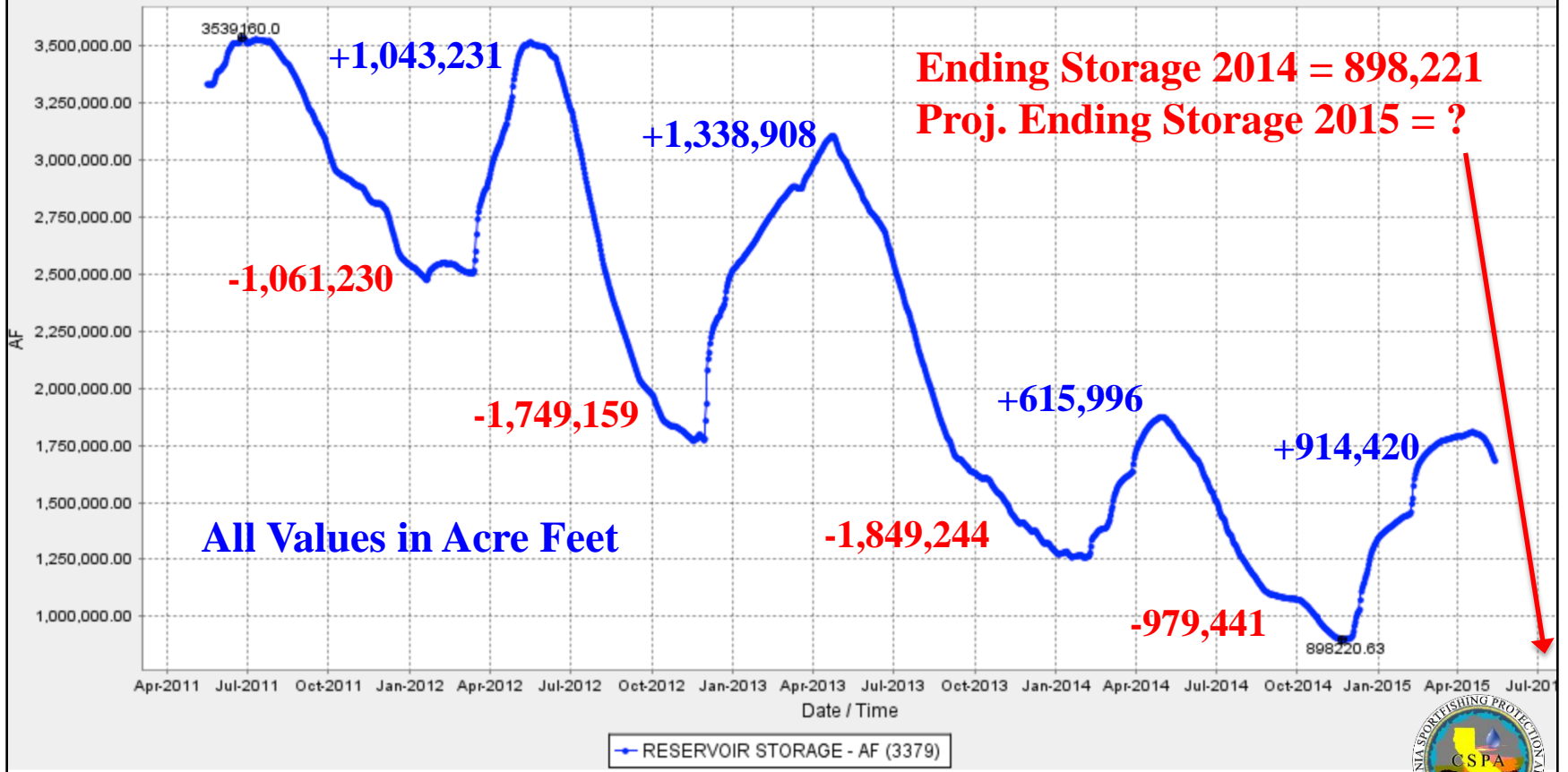


Oroville Storage 2011 - 2015

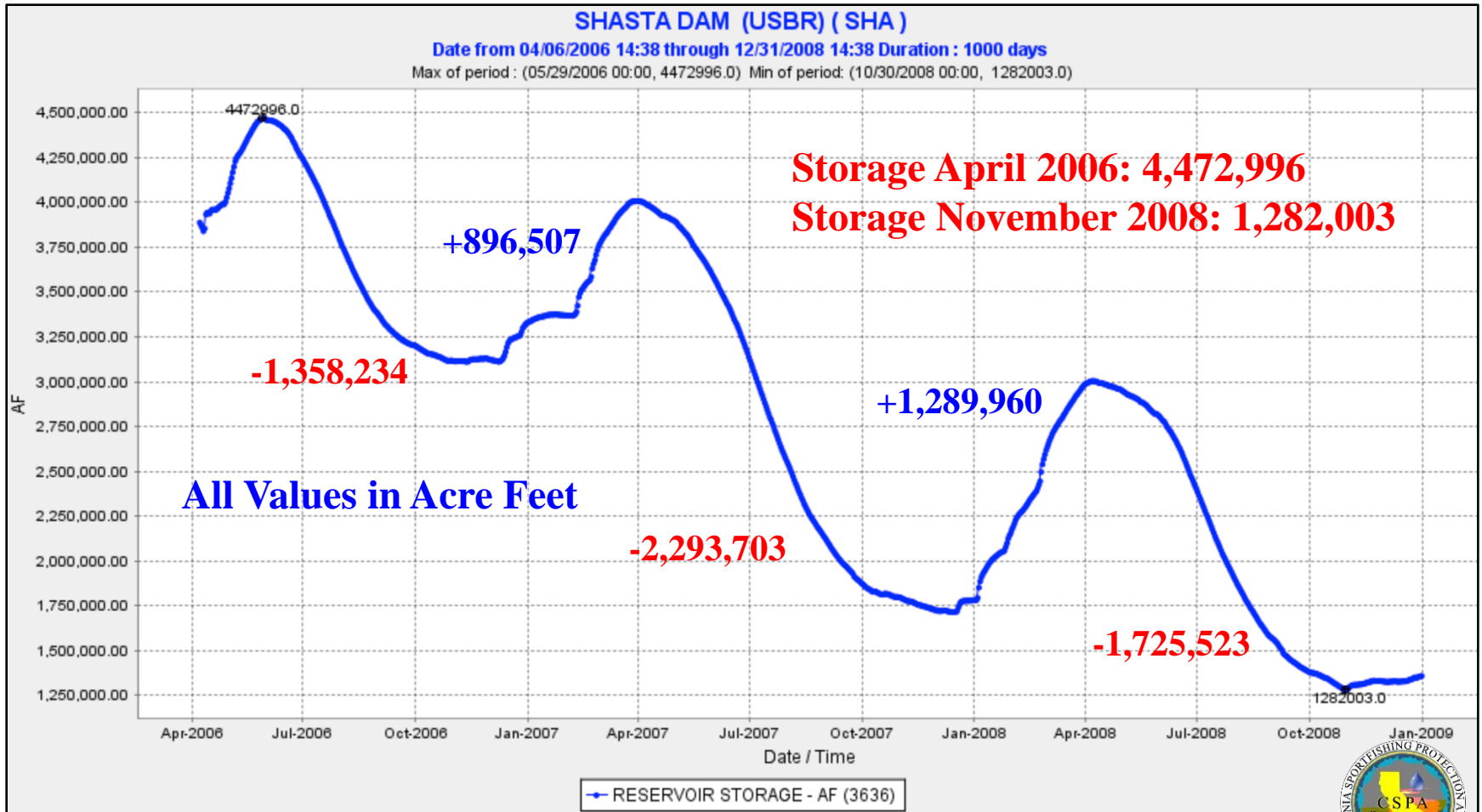
OROVILLE DAM (ORO)

Date from 05/15/2011 00:07 through 05/14/2015 00:07 Duration : 1460 days

Max of period : (06/25/2011 00:00, 3539160.0) Min of period: (11/21/2014 00:00, 898220.63)



Shasta Storage 2006 - 2008

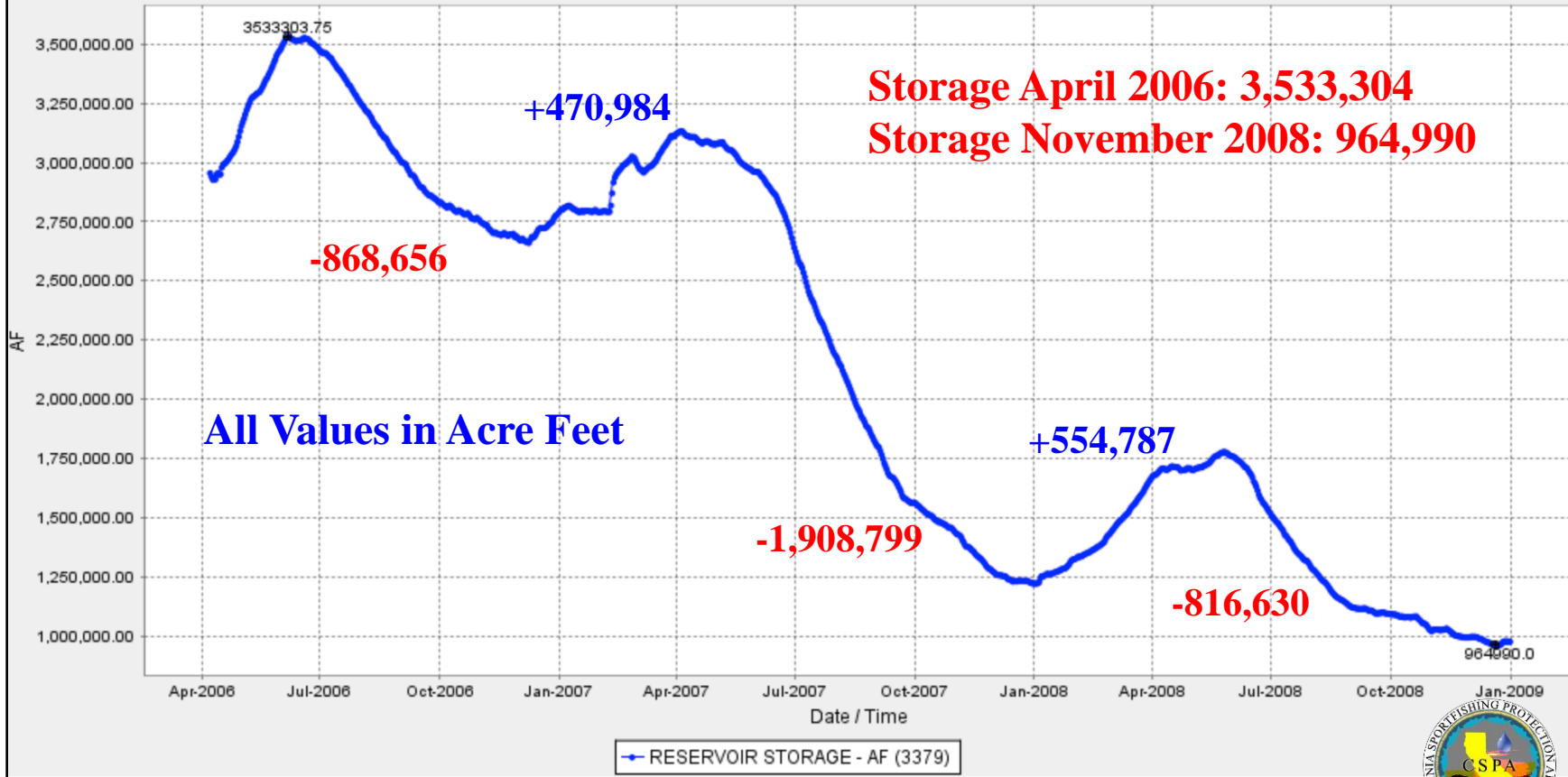


Oroville Storage 2006 - 2008

OROVILLE DAM (ORO)

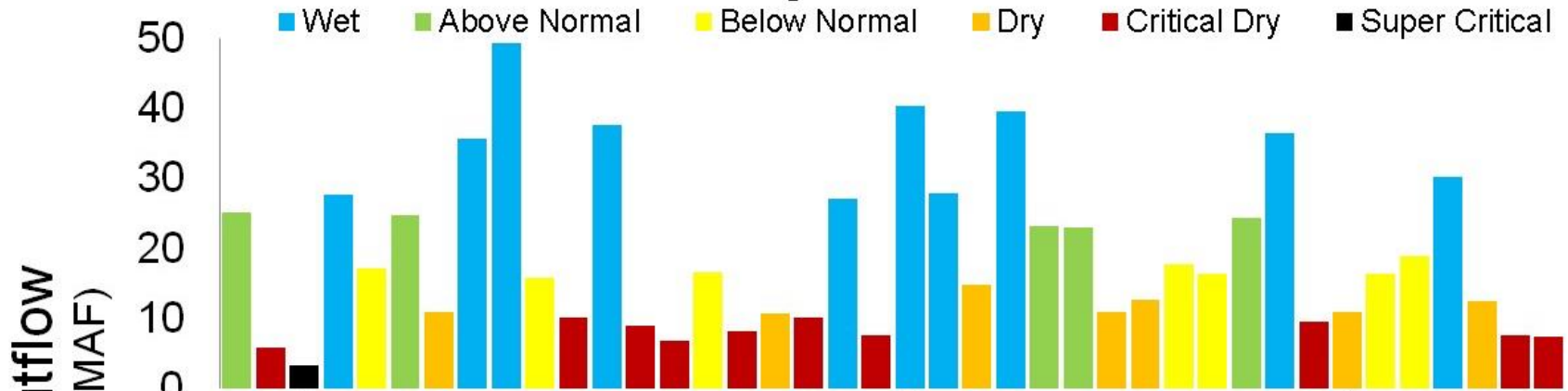
Date from 04/06/2006 15:06 through 12/31/2008 15:06 Duration : 1000 days

Max of period : (06/06/2006 00:00, 3533303.75) Min of period : (12/20/2008 00:00, 964990.0)



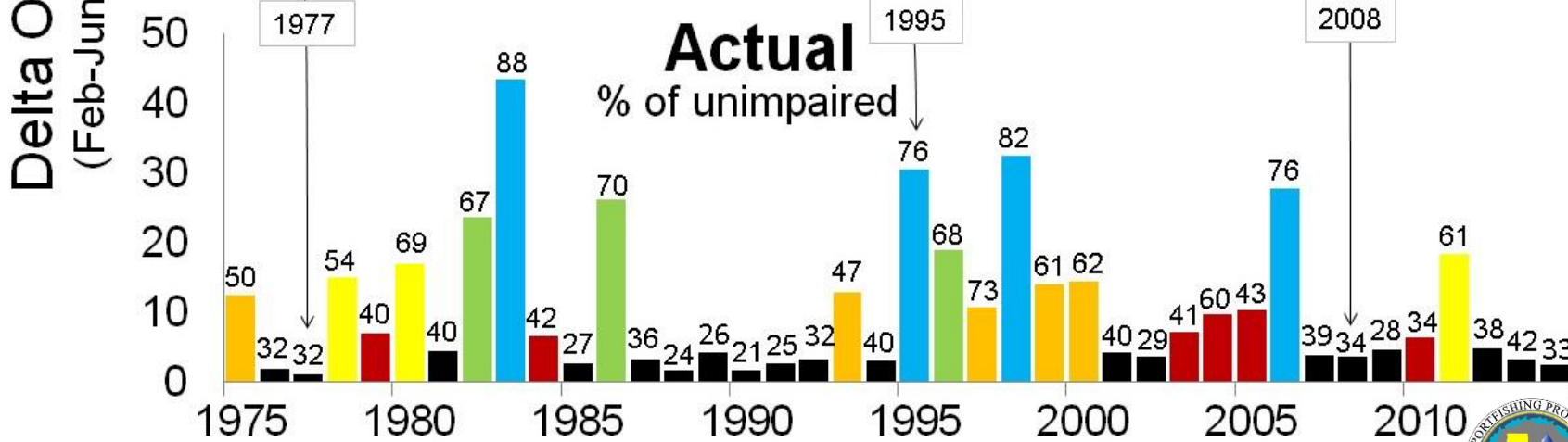
Fish are in a Super Critical Drought 50% of the Time

Unimpaired



Actual

% of unimpaired



Bay Institute 2015



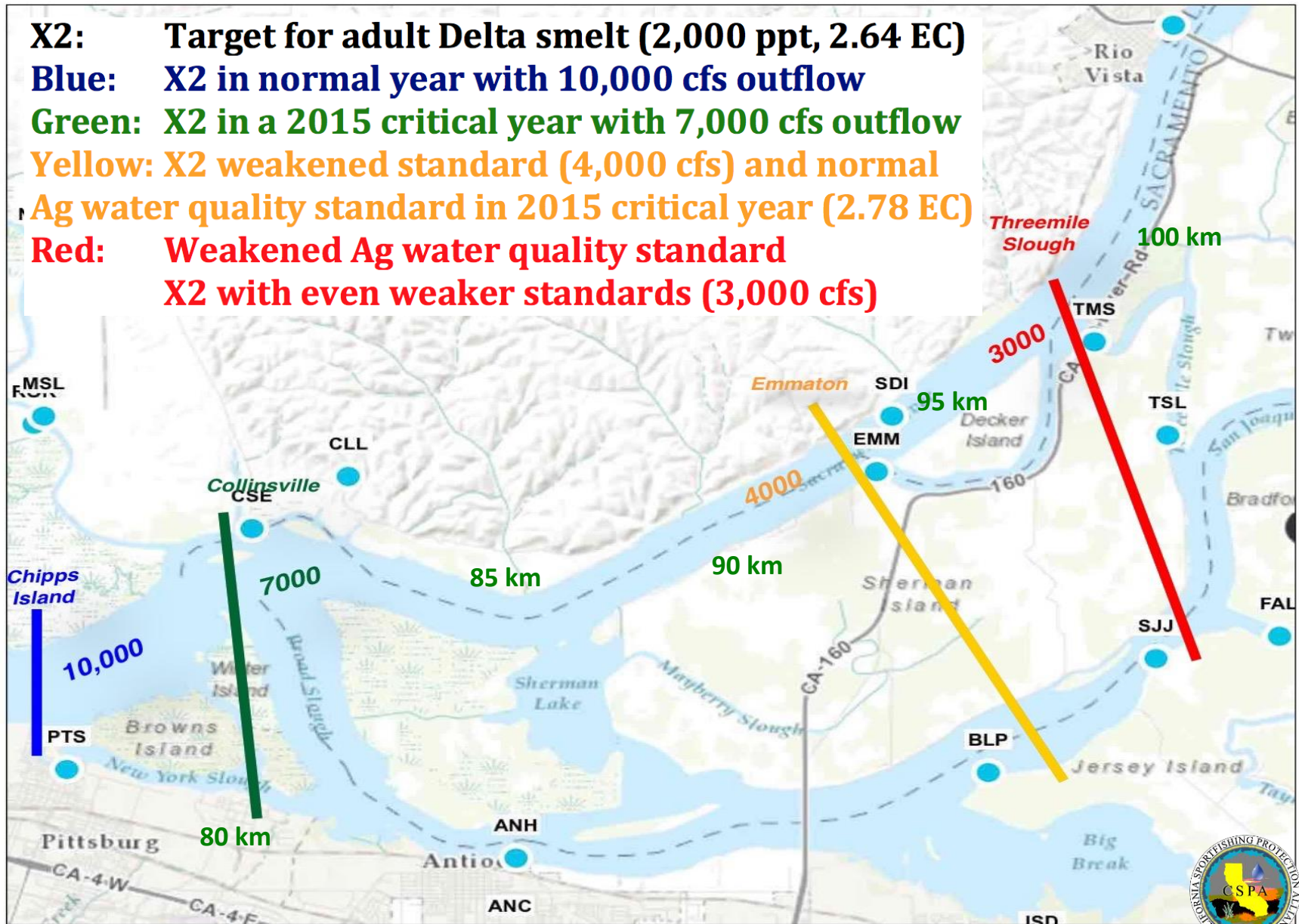
X2: Target for adult Delta smelt (2,000 ppt, 2.64 EC)

Blue: X2 in normal year with 10,000 cfs outflow

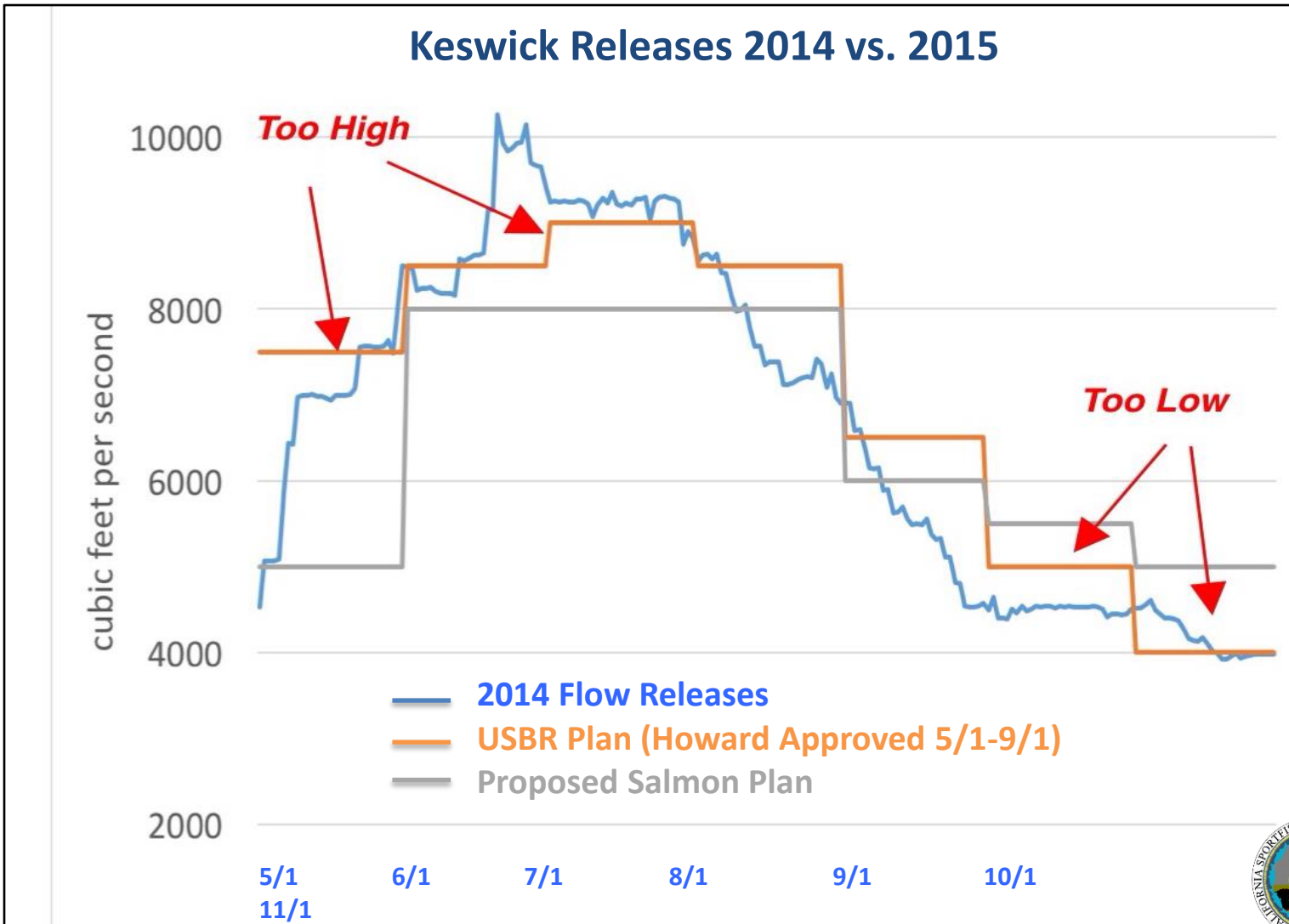
Green: X2 in a 2015 critical year with 7,000 cfs outflow

Yellow: X2 weakened standard (4,000 cfs) and normal Ag water quality standard in 2015 critical year (2.78 EC)

Red: Weakened Ag water quality standard X2 with even weaker standards (3,000 cfs)



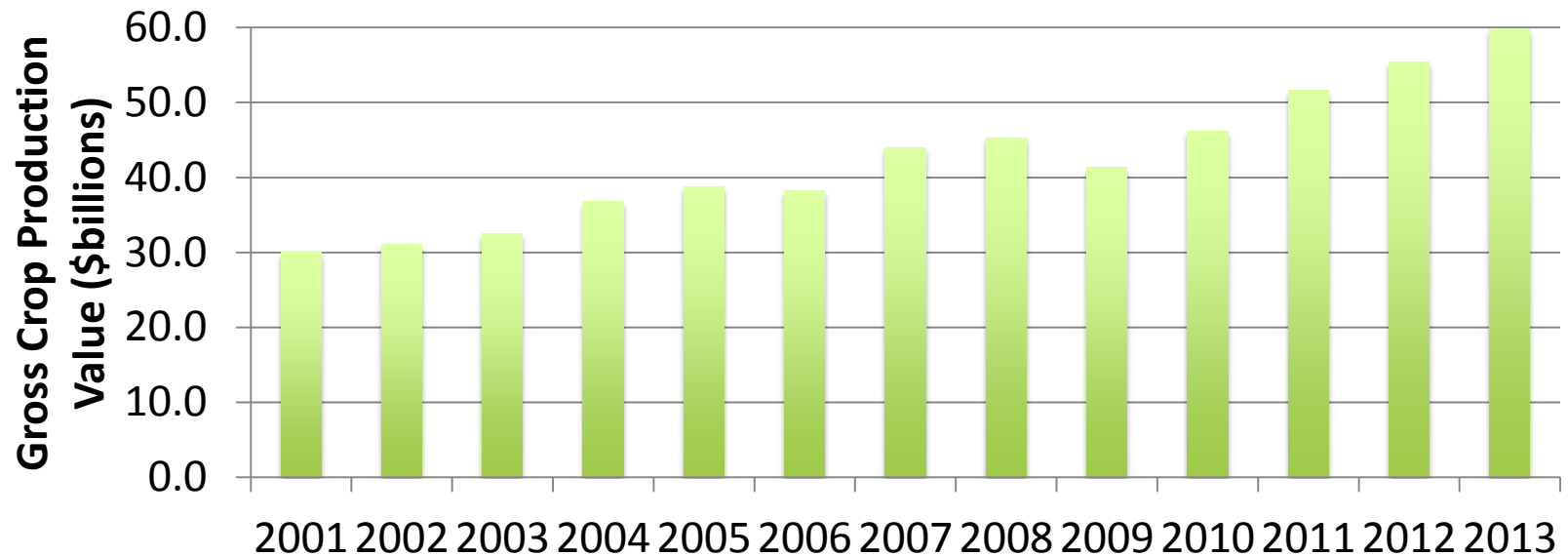
A Repeat Disaster



Crop Production Has Increased During Drought

California Department of Agriculture and U.S. Department of Agriculture, National Agricultural Statistics Service Summary of Ca. Ag. Commissioners Reports

Total California



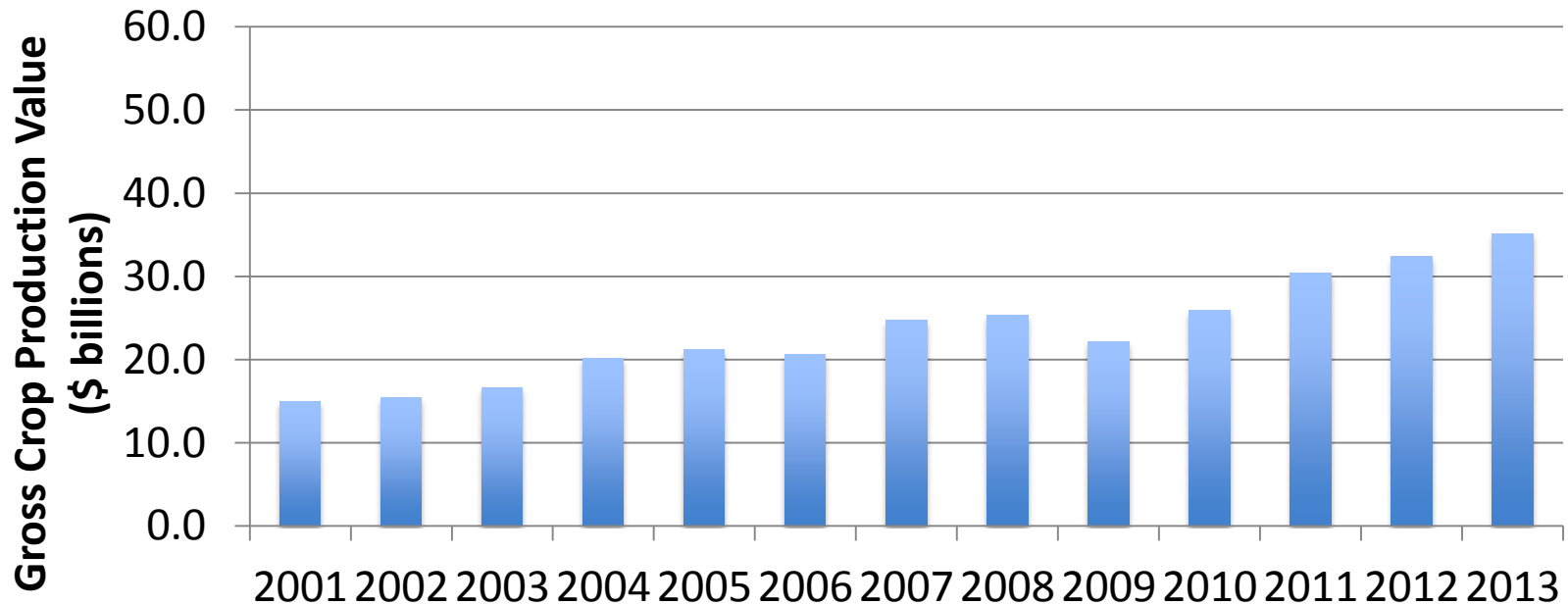
Sacramento:	D	D	AN	BN	AN	W	D	CD	D	BN	W	BN	D
San Joaquin:	D	D	BN	D	W	W	CD	CD	BN	AB	W	D	CD



Also Increased in San Joaquin Valley

California Department of Agriculture and U.S. Department of Agriculture, National Agricultural Statistics Service Summary of Ca. Ag. Commissioners Reports

San Joaquin Valley

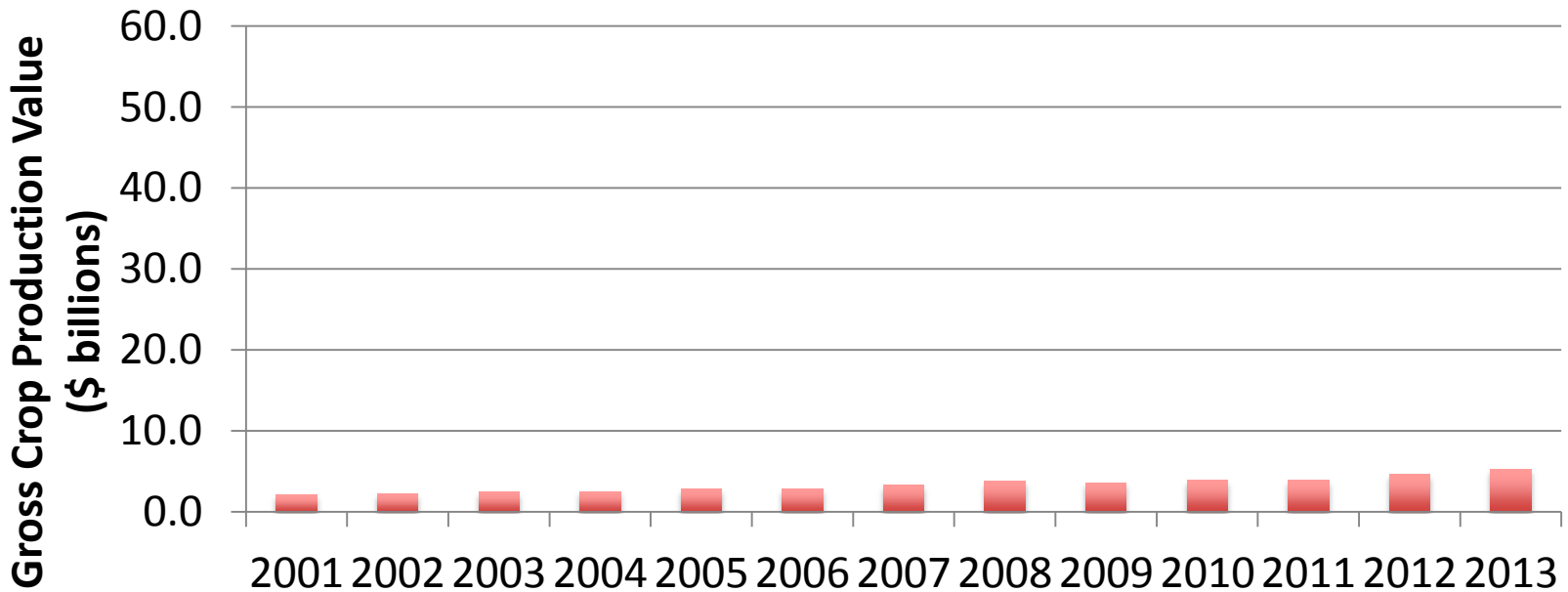


Sacramento:	D	D	AN	BN	AN	W	D	CD	D	BN	W	BN	D
San Joaquin:	D	D	BN	D	W	W	CD	CD	BN	AB	W	D	CD



Also Increased in Sacramento Valley

California Department of Agriculture and U.S. Department of Agriculture, National Agricultural Statistics Service Summary of Ca. Ag. Commissioners Reports
Sacramento Valley



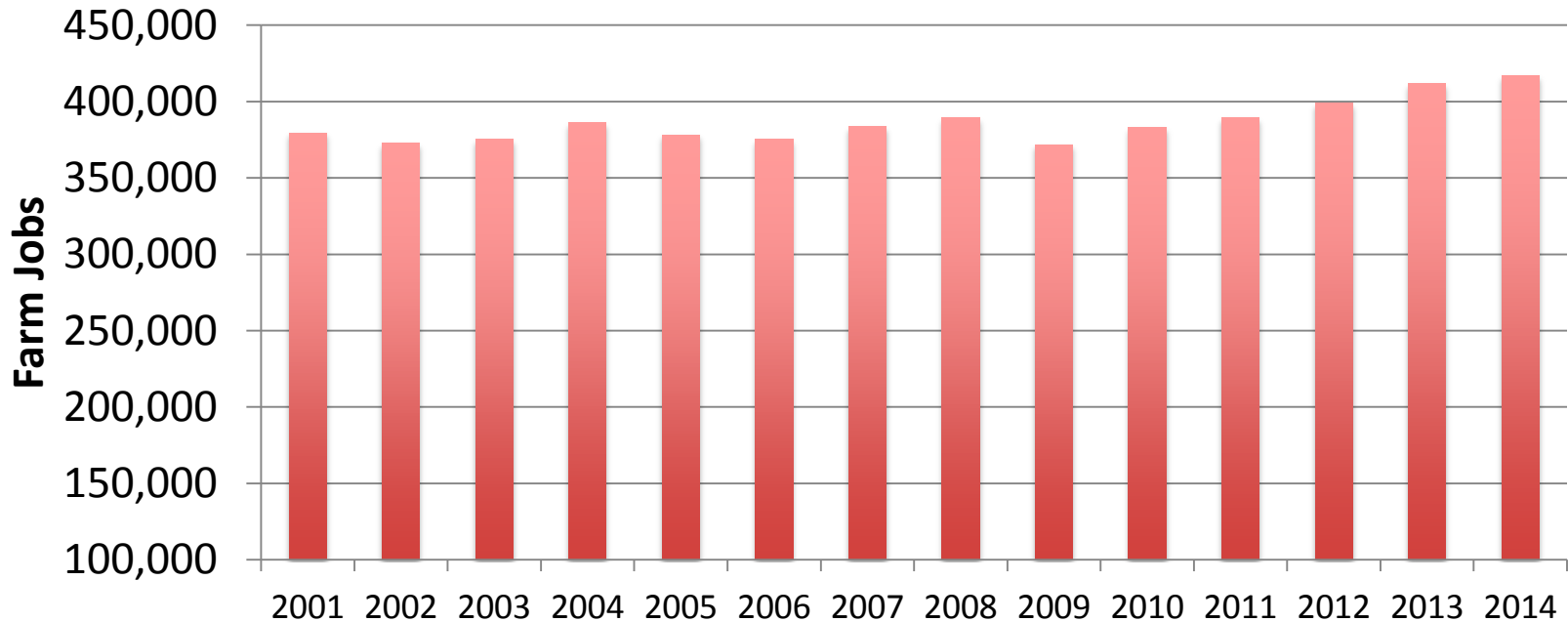
Sacramento:	D	D	AN	BN	AN	W	D	CD	D	BN	W	BN	D
San Joaquin:	D	D	BN	D	W	W	CD	CD	BN	AB	W	D	CD



Farm Jobs Increased During Drought

California Employment Development Department: Employment & Labor Force

Total California



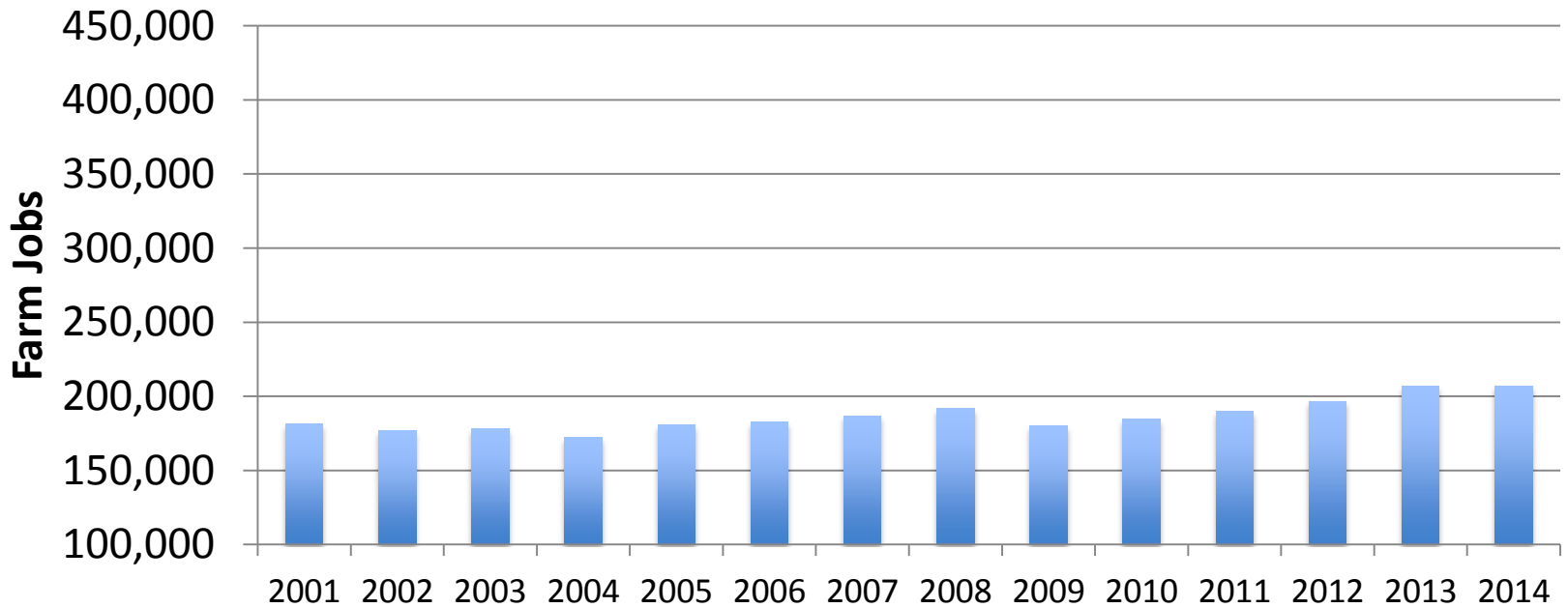
Sacramento:	D	D	AN	BN	AN	W	D	CD	D	BN	W	BN	D	CD
San Joaquin:	D	D	BN	D	W	W	CD	CD	BN	AB	W	D	CD	CD



Farm Jobs Increased in San Joaquin Valley

California Employment Development Department: Employment & Labor Force

San Joaquin Valley



Sacramento: D D AN BN AN W D CD D BN W BN D CD
 San Joaquin: D D BN D W W CD CD BN AB W D CD CD



The Top Revenue Producing and Job Creating Commodities Use the Least Water

Crop Group	Area (1000 acres)	Gross Water (TAF)*	Net Water (TAF)	Gross Revenue (\$1 M)	Rev/Net Water	Contract			Jobs/Net Water (TAF)	
						Direct Jobs	Labor	Total Jobs		
Vegetables, horticulture, non-tree fruits	857	1,298	899	12,875	14,318	67,227	63,484	130,711	10.2	74.76
Cucurbits	116	205	138	874	6,343	9,675	9,136	18,811	21.5	70.20
Fresh tomatos	42	77	55	310	5,621	3,427	3,236	6,664	21.5	62.21
Subtropical fruits	452	1,411	1,049	4,404	4,199	5,686	6,645	12,331	2.8	5.42
Vine	850	1,581	1,183	3,701	3,129	26,008	30,395	56,404	15.2	21.99
Deciduous fruits	671	2,210	1,655	3,910	2,362	17,383	20,315	37,699	9.6	10.50
Onion, garlic	80	225	161	330	2,046	3,647	3,444	7,092	21.5	22.65
Potato	28	66	45	91	2,046	1,011	954	1,965	21.5	22.64
Almonds, pistachios	1,080	3,820	2,892	4,199	1,452	13,383	7,006	20,389	4.9	4.63
Processing tomatos	304	742	548	742	1,355	8,214	7,756	15,970	21.5	14.99
Cotton	300	927	726	502	692	2,875	2,891	5,766	11.5	3.96
Sugar beets	27	138	87	60	685	895	103	999	16.7	10.27
Other field crops	647	1,691	1,096	710	648	6,114	5,557	11,671	16.4	5.58
Grains	576	802	545	342	628	928	189	1,117	3.3	1.70
Corn	781	2,206	1,507	918	609	454	92	546	0.6	0.30
Dry beans	85	199	140	74	526	119	24	143	1.9	0.85
Rice	592	2,700	1,517	796	524	1,573	320	1,893	2.4	1.04
Safflower	43	59	51	23	460	126	25	151	6.5	2.48
Alfalfa	1,039	5,241	3,652	1,303	357	2,801	2,546	5,347	4.1	0.77
Irrigated pasture	830	3,362	2,270	206	91	588	534	1,122	5.4	0.26
Grand Total	9,398	28,961	20,216	36,370	N/A	172,134	164,654	336,788	N/A	N/A

*TAF = Thousand acre-feet

Sources: Irrigated crop area, applied and net water use from California Department of Water Resources'(DWR) 2013 update of the California Water Plan for 2010 Revenue information from Statewide Agricultural Production Model Version 6 (<http://swap.ucdavis.edu>), adjusted to 2012

Jobs estimated from reconciling data from various sources including the California Employment and Development Department and the IMPLAN economic model Prepared by Josue Medellin-Azuara, Research Scientist, UC Davis Center for Watershed Sciences. jmedellin@ucdavis.edu

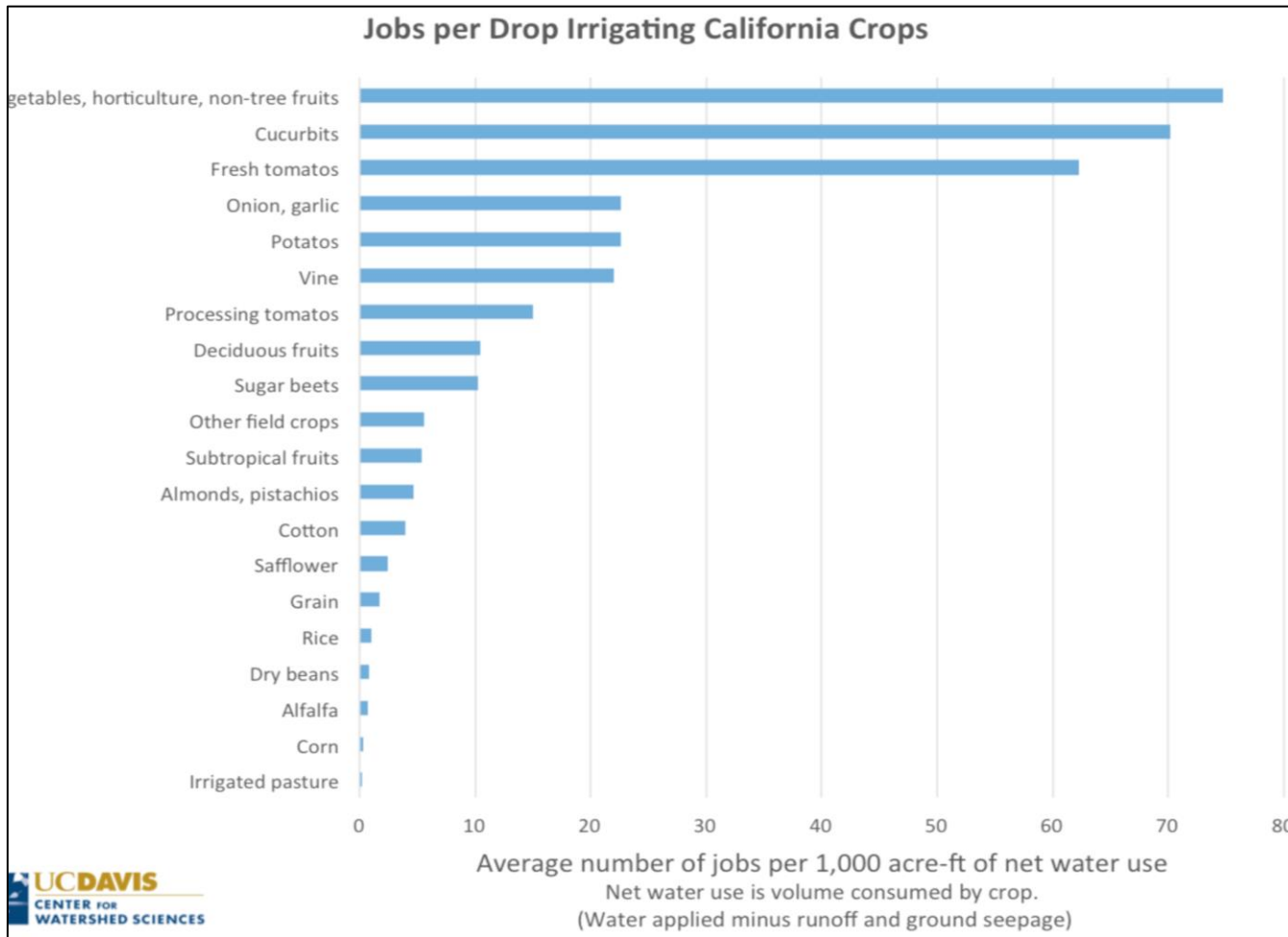
Crop Groups defined by DWR. **Grains** = wheat, barley, oats, hay; **Other field crops** = flax, hops, sunflowers, sudan grass, millet, castor beans

Vegetables, horticulture, non-tree fruits = Artichokes, asparagus, green beans, carrots, celery, lettuce, peas, spinach, flowers nursery and tree farms, bush berries strawberries, peppers, broccoli, cabbage, cauliflower, brussel sprouts. **Cucurbits** = melons, squash, cucumbers. **Deciduous fruits** = apples, apricots, cherries, peaches, figs nectarines, pears, plums, prunes, walnuts. **Subtropical** = grapefruit, lemons, oranges, dates, avocados, olives, kiwis, jojoba, eucalyptus. **Vine** = table, wine and raisin grapes

Prepared by Josue Medellin-Azuara with the assistance of Nadya Alexander, UC Davis Center for Watershed Sciences. Contact: jmedellin@ucdavis.edu



Vegetables, Melons and Tomatoes are Good for People, Jobs and the Environment



The Majority of Water Exports Provide Little Public Benefit

- California agriculture comprises 2% of the state's GDP, spans 9.4 million acres, uses 29 million acre-feet of water, produces 36.4 billion dollars and creates 336,788 jobs.
- Vegetables, horticulture, non-tree fruits, deciduous fruits, cucurbits (melons, squash, cucumbers, watermelon, zucchini, etc.), tomatoes, vine (wine and table grapes), onions, potatoes, etc.

Acres	Water	Revenue	Jobs
27.1%	21.5%	62.7%	81.8%

- Irrigated pasture, alfalfa, corn, almonds, pistachios, cotton.

Acres	Water	Revenue	Jobs
42.9%	53.7%	19.6%	13.9%

The Projects have already exported over 1.5 MAF of water this fourth year of drought. It is an unreasonable use of water to send species into extinction and hijack water from the environment, areas of origin and urban communities simply to supply junior water rights holders in the desert with water to irrigate crops that produce relatively little revenue and few jobs.

