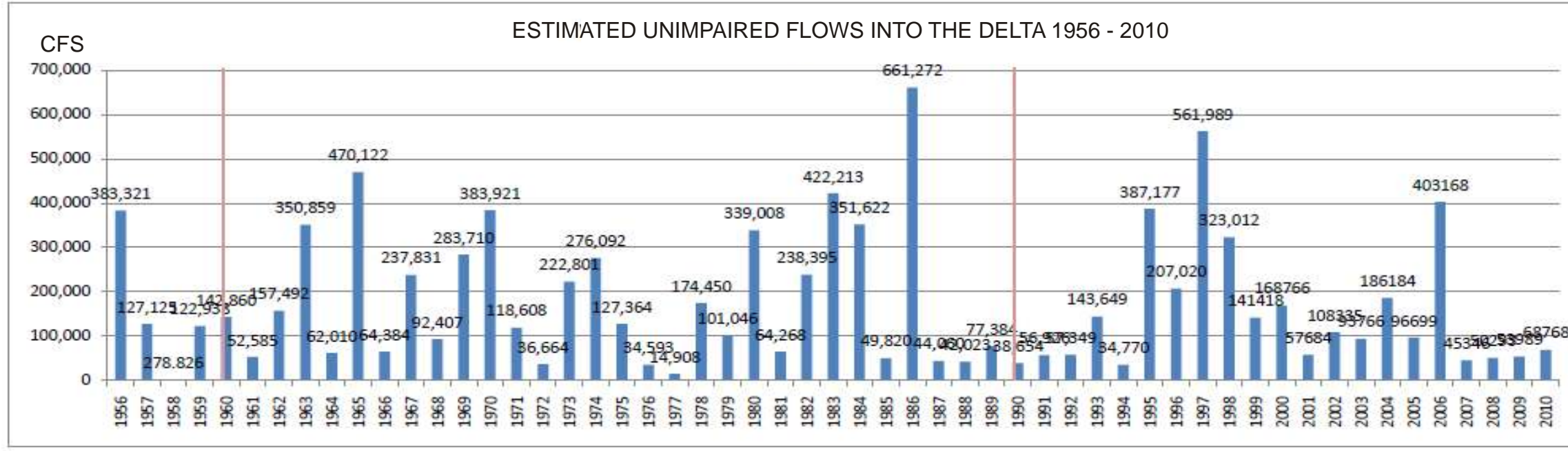


DELTA TIMELINES 2: Inflow and Outflow reporting ... Or ... *Where did the water go?*

FRESHWATER INFLOW TO THE DELTA



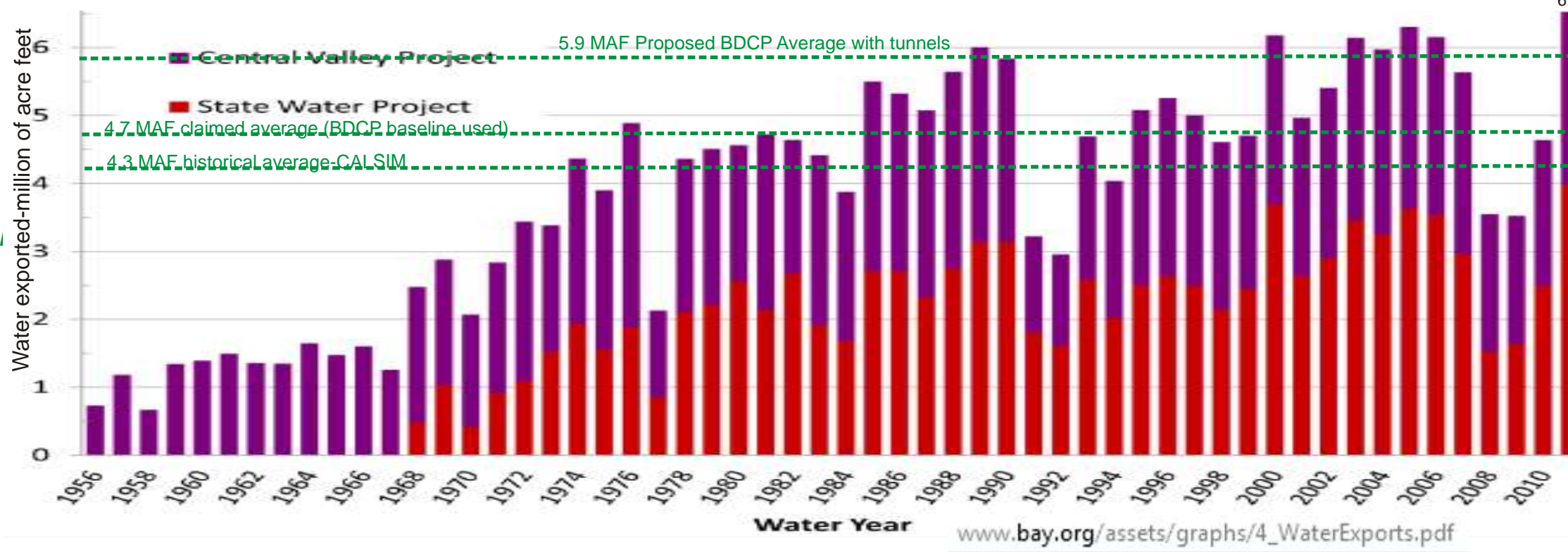
Peak Delta Inflow (TOT) data is from the following Dayflow website: <http://www.water.ca.gov/dayflow/output/Output.cfm> accessed on 2/10/2011

Bar chart shows the estimated inflow to the Delta by year. Clearly estimated fresh water flow can vary from year to year. It is important to note that since 2006 flows into the Delta have been greatly reduced. We have not been in a drought since 2006, so the limited flow into the Delta, as reported by the CA website, does not make sense.

NOTE: the amount of water diverted from the delta is substantially higher than the amount reported as "exports" or rather deliveries of water to water contractors

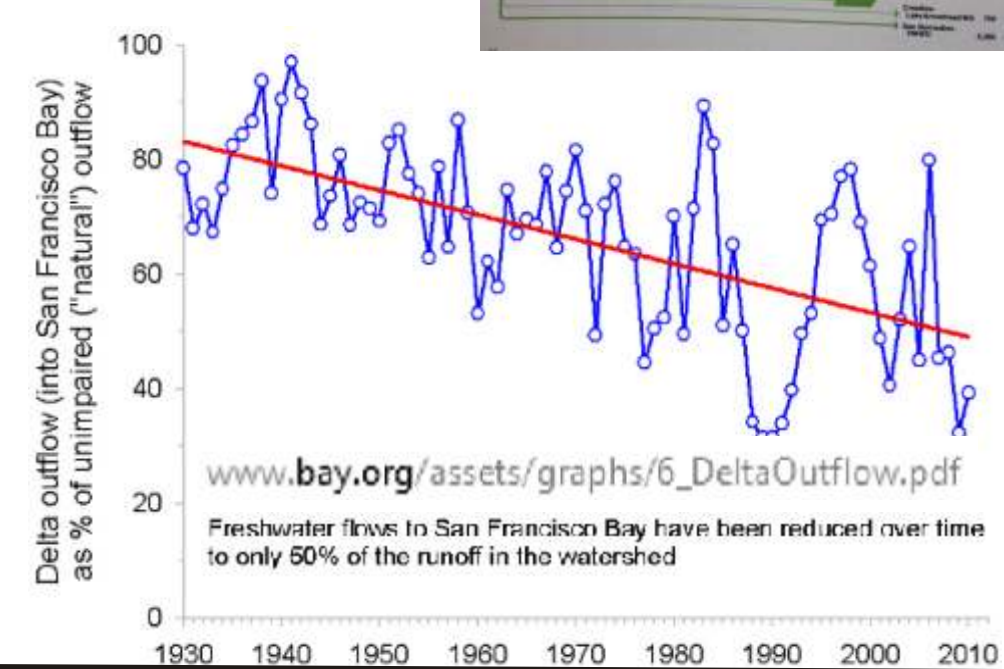
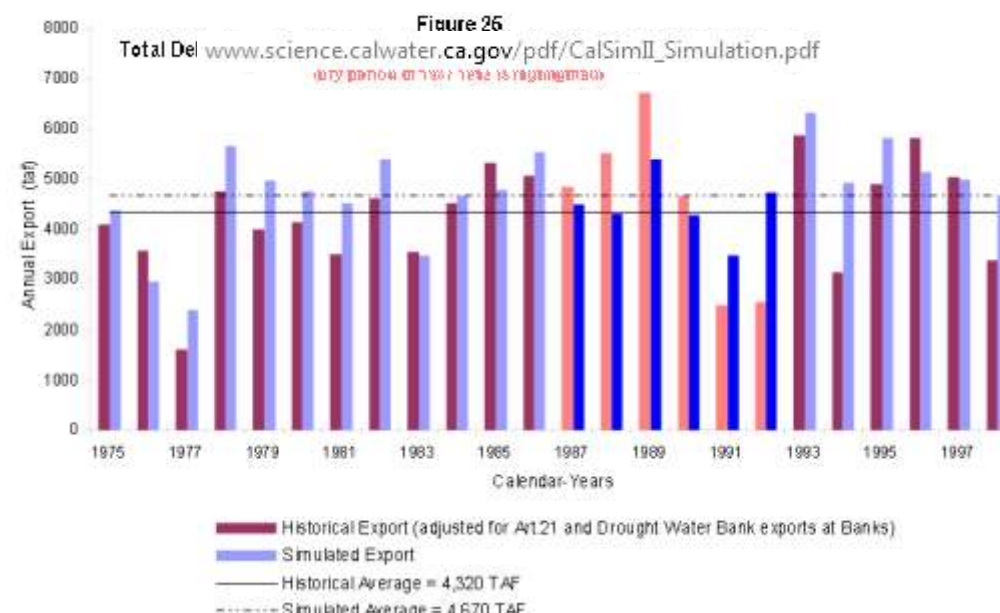
Water Exports acknowledged by DWR & USBR

What is the historical export average compared to the baseline used for BDCP?



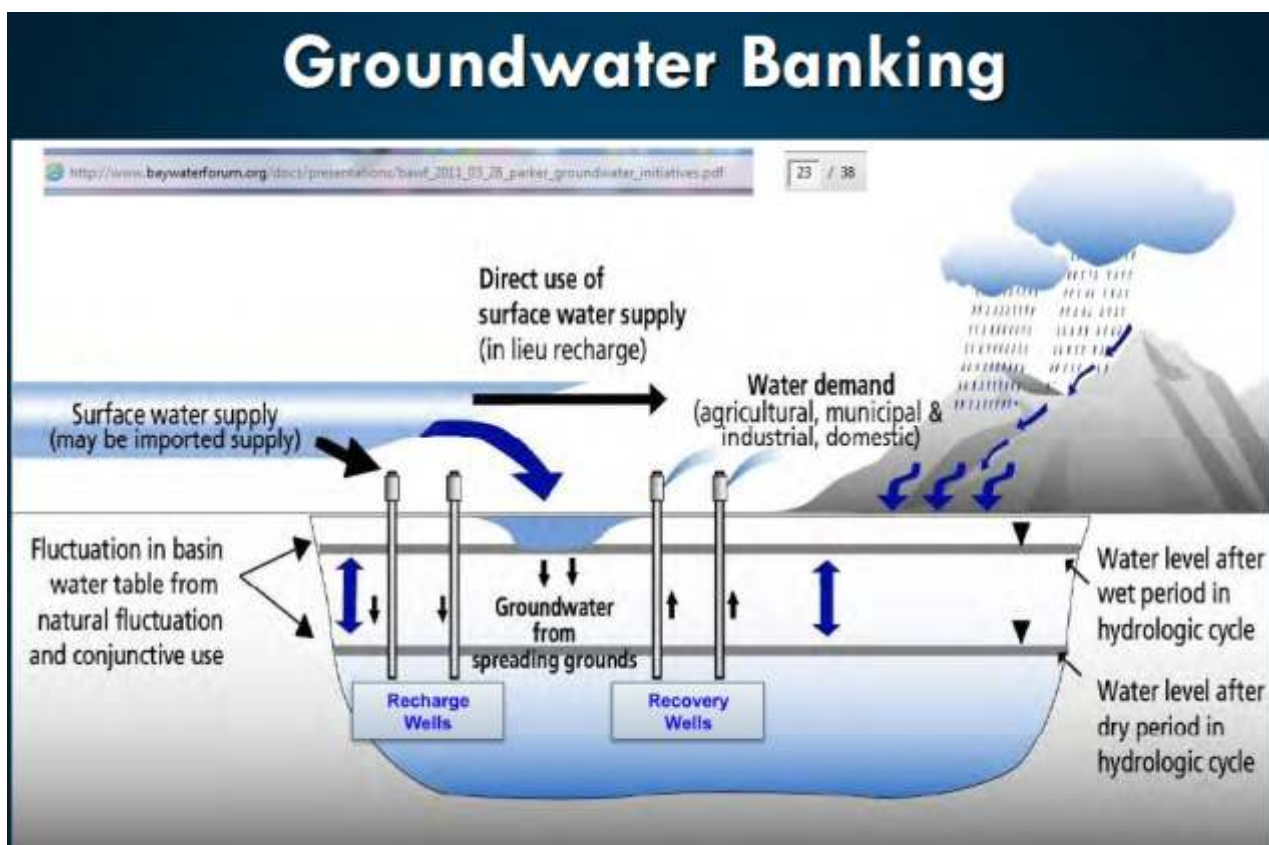
Year Type	2025		
	Through-Delta Criteria Existing BiOp Restrictions (MAF)	Dual Conveyance Criteria (MAF)	
		Initial Operations Under Analysis	Additional Operations Under Analysis ^a
Average of All Year Types	4.7	5.9	5.4
Wet	5.9	7.4	6.7
Above Normal	5.0	6.9	6.1
Below Normal	4.8	6.0	5.5
Dry	4.1	4.9	4.2
Critically Dry	2.9	3.1	2.7

BiOp = Biological Opinion
MAF = million acre-feet
^aThe change in water supplies in this column is primarily due to the inclusion of fall X2 and OMR adjusted criteria.
Source: Highlights of the BDCP, December 2010



The 2004 "Napa Amendment" is reported to be the point when state water managers transferred the largest California underground water bank to the ownership and control of MWD, Westlands, Paramount Farms. \$74 million in state tax dollars were handed over without voter approval but clearly the consent of the state administration at the time. Here is a link to a good summary: <http://www.citizen.org/documents/paperwaterdams.pdf>

Where did the water go?



In January 2006 there were several large storms in Northern California, with rain totals ending up being the 4th highest in California history since they started counting over 130 years ago. The only "flood" of the Delta was reported to be on Steamboat Slough, at a waterfront park and residential community. Levees did not fail; islands did not flood; for a year or so thereafter fish species seemed to begin to recover. But where did all that extra water go? Look at the table below from the 2013 updated water plan by DWR. Then look at the spreadsheet using the same numbers, but rearranged to attempt to simply define actual freshwater outflow into the SF Bay from the Delta. Starting in 2006 it appears that "surplus" flows were going somewhere other than through the Delta and into the bay. At the same time Diamond Lake in Southern California was filling up. Los Vaqueros expansion and San Luis Reservoir are also projects of the same timeframe. Look at the table below, and what you find is that there is UNACCOUNTED FOR waterflow. For example, the DWR table reports that Delta outflow was only 2461 TAF in 2010, and 4774 TAF of exports for both the SWP and CVP combined. That leaves 10,491 TAF unaccounted for. Where did the water go?

Is there an underground water bank in Northern California receiving the freshwater flow? Or did the unaccounted for water get diverted through the Folsom South Canal system to another underground waterbank? About 17 miles of nighttime tunneling and pipe laying happened several years ago in the Gorman Pass area: is there a new undocumented underground reservoir in that area now?

YEAR	SAC RIVER	YOLO	EASTSIDE	SJ	EXPORTS	LOGIC-IN DELTA	DELTA OUTFLOW reported	UNACCOUNTED FOR FLOW	n-Delta use
2010	12777	659	2461	1829	-4774	12952	2461	10,491	877
2009	9867	317	1231	865	-3673	8607	6713	1894	1029
2008	9557	417	0	1234	-3735	7473	1529	5944	1093
2007	11010	248	1979	1596	-5806	9027	6216	2811	1214
2006	28039	13034	9679	7341	-6314	51779	43805	7974	632
2005	16747	707	1173	3777	-6471	15933	15403	530	602
2004	17129	3121	445	1373	-6145	15923	14922	1001	940
2003	18304	1122	534	1365	-6323	15002	14050	952	952
2002	13104	708	462	1396	-5573	10097	9163	934	933

Chart above was created by taking the exact flow numbers from the DWR 2013 table below, calculating basic Delta inflow and outflow as reported below, and then noting where there is unaccounted for flow. Note also how low the Delta outflow has been 2008-2010!



2007-2010 Delta outflow has been the lowest in DWR charted history according to 2013 Water Plan update

In 2009 the EPA granted an exception to use Tulare lake area groundwater for fracking because the applicant said the area had sufficient other sources of drinking water. So, was the "Napa Amendment" groundwater bank transfer for use for drinking water to replace the water taken for fracking? http://www.deltarevision.com/1990-1999_docs/hydr-fracking.pdf

Delta Water Balance Estimates ¹ (TAF)	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sacramento River Inflow	29015	21770	18360	10517	13104	18304	17129	16747	28039	11010	9557	9867	12777
Yolo Bypass Inflow	8996	1635	2961	366	708	1122	3121	707	13034	248	417	317	659
Eastside Tributaries Inflow	2096	1399	1078	372	462	534	445	1173	9679	1979	n	1231	2461
San Joaquin River Inflow	8456	3568	2846	1732	1396	1365	1373	3777	7341	1596	1234	865	1829
North Bay Aqueduct Exports	39	37	47	45	47	42	52	48	43	61	55	46	43
Contra Costa Water District Diversions at Rock Slough and Old River	160	133	126	104	121	138	120	119	116	112	135	107	94
State Water Project Exports at Banks Pumping Plant or Clifton Court Intake	2134	2439	3692	2635	2900	3458	3251	3625	3527	2954	1527	1636	2496
Central Valley Project Exports at Tracy	2474	2262	2487	2332	2505	2685	2722	2679	2628	2679	2018	1884	2141
Delta Consumptive Use ²	1691	1691	1693	1691	1691	1691	1693	1691	1691	1691	1693	1691	1696
Delta Precipitation ²	1423	734	956	764	758	739	753	1089	1059	477	600	663	789
Delta Outflow	43487	22542	18155	6944	9163	14050	14922	15403	43805	6216	1529	6713	2461