

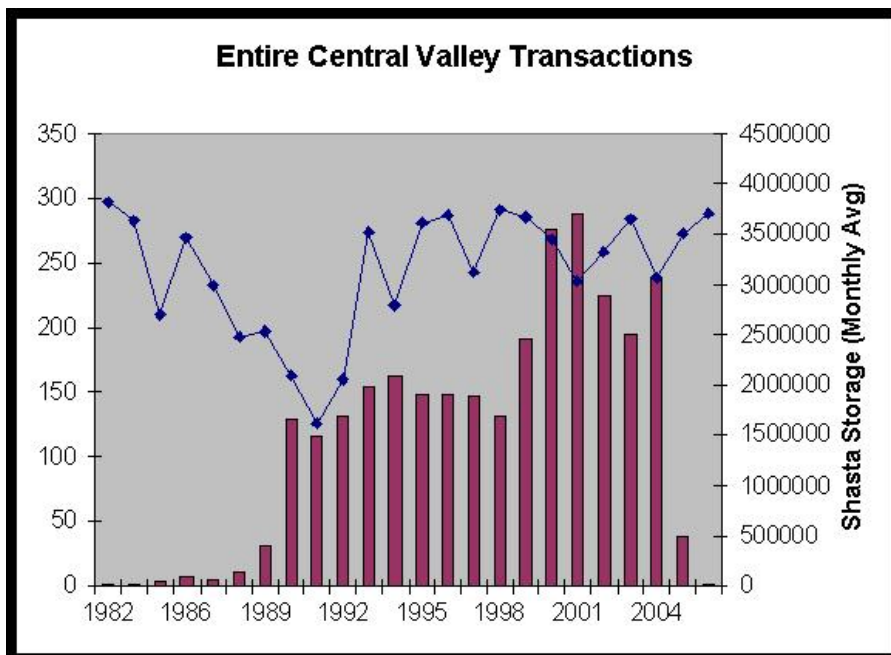
Notes on the Water Rights and Water Transactions Databases Damian Bickett

Our water rights database has data from 190 central valley districts. If those districts have appropriate rights on file (license or permit) with the SWRCB, or they are riparian diverters and are required to file statements of diversion, this database has their pertinent information dating back to 1980. Along with recording unchanging yearly information (diversion rate, storage allowed, etc.) for each right, we also recorded yearly diversion amounts if they were included or noted that no diversion quantity was reported. So far, we have collected data from about 310 permits/licenses/statements and still have about 110 more that we would like to collect. These records are currently missing from the SWRCB records room and we will complete the data collection as soon as they are available.

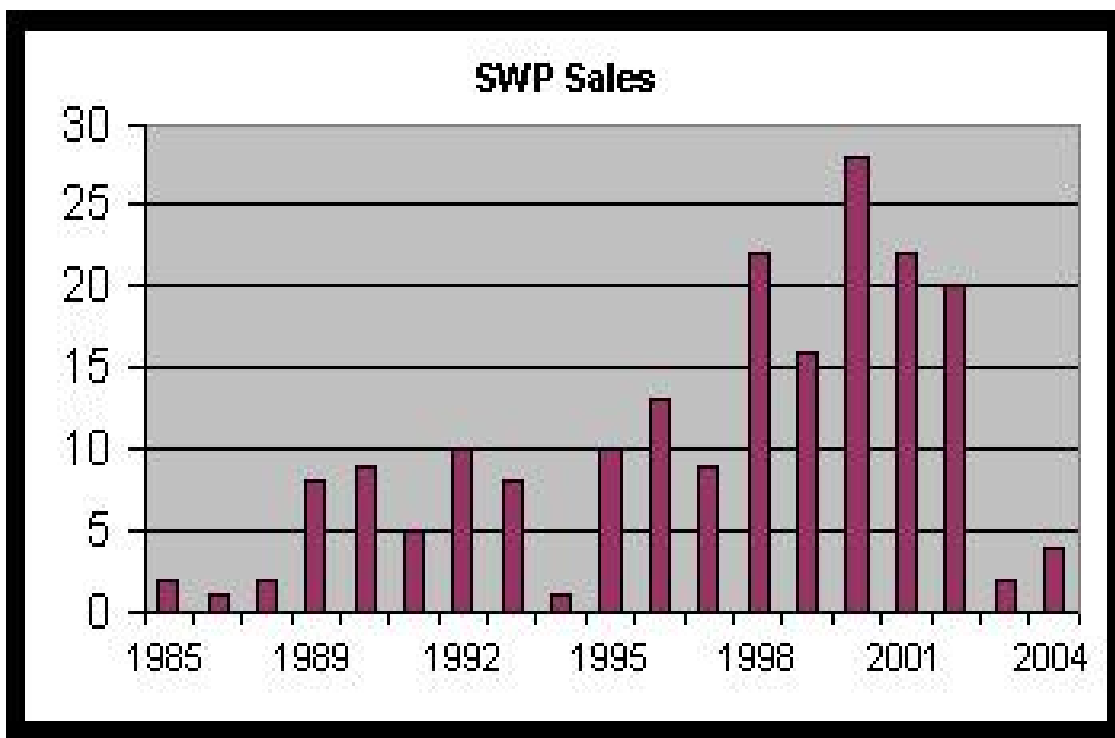
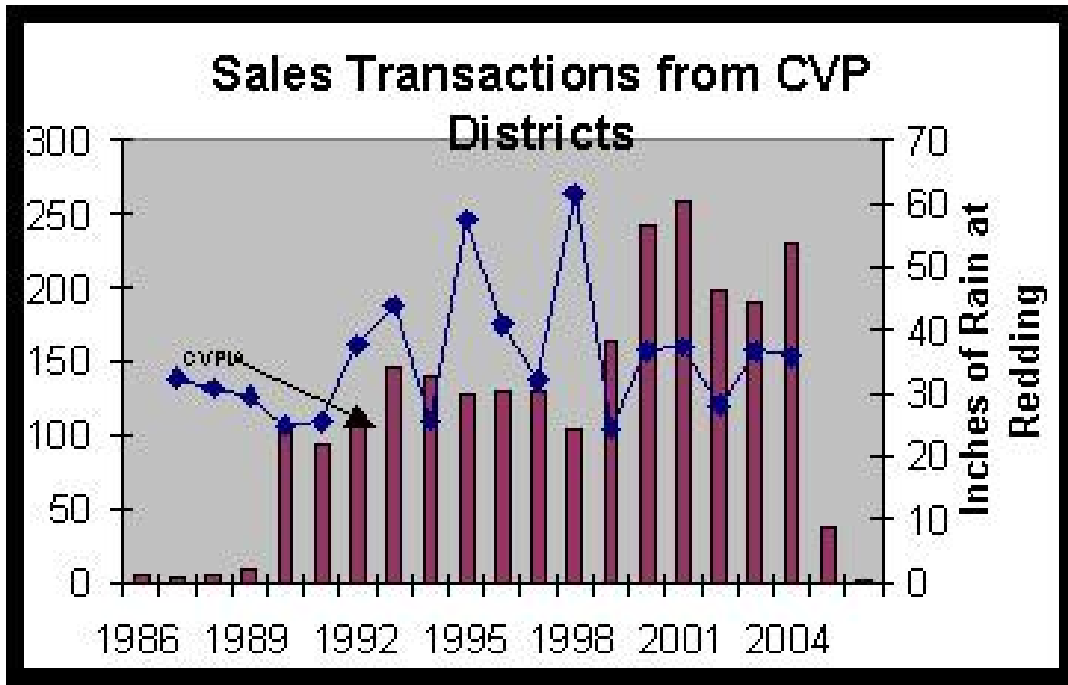
Our water transaction database is a comprehensive listing of water transactions within the last 20 years. [Http://ontap.ca.gov](http://ontap.ca.gov) provided the majority of our transactions before it was discontinued in the summer of 2005 for CA budget reasons. In addition to OnTap, our database also has records of transactions from the publication “Water Strategist” stopping in 2002. In total, we have around 4300 transactions. Although some entries present different information, most have at least the buyer and seller names, the date of the transaction, the amount of water transferred, and the transaction length.

In addition to our transactions database, we also have Ellen Hanak’s database covering many of the same transactions. Her database will primarily be useful as a comparison to our database, allowing us to make sure that our database is indeed comprehensive.

The following shows a breakdown of some of our data so far. The graph below shows a yearly breakdown of any central valley transaction (not necessarily limited to our 190 district focus group). Shasta storage has been added on the opposite axis to show how the drought influenced the initial spike in 1990. After that, however, the explanatory reasons aren’t as clear, and this study will illuminate other factors influencing transactions.



Below, the transactions are broken down by seller type—federal and state districts. The patterns of sales by CVP and SWP districts are similar, although the SWP has far fewer transactions and a pattern likely influenced by the 1994 Monterey Amendments to SWP contracts.



The chart summarizes selling behavior for our districts that sold water. At this point, any sale of water is counted, and this will need to be further disaggregated to show frequent and occasional sellers. The first part looks at the 114 districts that sold and presents how many returned water rights reports to the SWRCB, and to what degree they completed the reports. The same is done for districts that are not listed as sellers within our transactions database. Whether or not a district returned water rights reports with the number of acre-feet they have been diverting is of interest to us because we believe that creating such a paper trail of the district's water use may be a precursor to selling water.

Total Districts that sold	114	%
Had Rights at the SWRCB	62	54.4%
Rights were consumptive	47	41.2%
They reported numbers at least once	41	36.0%
they reported numbers more than 50% of the time	32	28.1%
more than 80%	22	19.3%
more than 90%	17	14.9%
they had more than 50 entries/years of data	19	16.7%
they had fewer than 50 entries/years of data	27	23.7%

Districts that didn't sell	76	
Had Rights at the SWRCB	33	43.4%
Rights were consumptive	27	35.5%
They reported numbers at least once	18	23.7%
they reported numbers more than 50% of the time	18	23.7%
more than 80%	9	11.8%
more than 90%	7	9.2%
they had more than 50 entries/years of data	6	7.9%
they had fewer than 50 entries/years of data	20	26.3%

The following table summarizes the water rights situation for our different districts by district size and by type. On the next page are two tables showing how many districts of each type have irrigation water rights and how many districts of each type have sold water.

District Size Type	SWRCB Rights	Cons Rights	Nothing	% with rights
A	85	67	71	54.49%
B	10	7	24	29.41%
Total	95	74	95	50.00%
Breakdown of the above categories				
91 Federal	45	36	46	49.45%
20 State	8	5	12	40.00%
79 Private	42	33	37	53.16%

Rights and transfers of private, state and federal districts

Sold water		Private	State	Federal
		21	12	81
	Rights?	17	7	38
	Consumptive Rights	13	4	30
	Reported #s to SWRCB?	11	3	27
	#s > 50% of the time	9	3	20
	>80%	7	2	13
	>90%	5	1	11
	> 50 entries	6	0	12
	< 50 entries	6	3	18

Didn't sell water		Private	State	Federal
		58	8	10
	Rights?	25	1	7
	Consumptive Rights	20	1	6
	Reported #s to SWRCB?	18	1	5
	#s > 50% of the time	15	0	3
	>80%	6	0	3
	>90%	5	0	2
	> 50 entries	6	0	0
	< 50 entries	13	1	6