

The Facts about Water and Jobs in the San Joaquin Valley

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While there was initially great controversy over differing estimates of the employment impacts of farm water supplies, multiple academic estimates have converged to a narrow range of values.

Credible Estimates of San Joaquin Valley Employment Losses Due to Reduced Water Supplies

	Biological Opinions (Salmon and Smelt)	Total 2009 Impacts (Drought + Biological Opinions)
UC-Davis (Howitt et. al.)	2,973	7,434
Univ. of Pacific (Michael)	1,392	5,567
UC-Berkeley (Sunding et. al.)	720 (Smelt only)	4,965

Note: For UOP and UC-Davis estimates see http://forecast.pacific.edu/water-jobs/SJV_Rev_Jobs_2009_092810.pdf, for UC-Berkeley see http://agecon.ucdavis.edu/extension/update/articles/v14n4_3.pdf.

Aren't there studies that have estimated over 30,000 lost jobs due to environmental restrictions?

Original estimates by UC-Davis researchers projected 90,000 lost jobs in January 2009, later revised down to 35,000 lost jobs in May 2009. However, the UC-Davis authors admitted to a serious error in the initial modeling done with state water agency staff. They independently updated their job loss estimates with a different model upon discovering the errors, and these results are listed in the table above.

Credible Estimates of Lost Employment Due to Closure of the Salmon Fishery.

California Department of Fish and Game	2,690
University of the Pacific (Michael)	1,823

Note: The difference in these estimates is a conservative assumption in the Pacific study that there are no retail/restaurant impacts from the salmon fishery closure, because all consumer purchases shift to equivalently-valued local substitutes. The DFG estimate attributes about 700 lost jobs to restaurant/retail impacts.

Aren't there studies estimating over 20,000 lost jobs from the salmon fishery closure?

This estimate is not credible. It was made by a consulting firm for the American Sportfishing Association, and uses an incorrect estimate of local salmon retail/restaurant purchases in California.

Have water reductions driven the unemployment rate over 40% in San Joaquin Valley towns?

This widely quoted figure comes from monthly unemployment estimates for cities made by the California Employment Development Department (EDD). For small towns, the monthly EDD estimates are based on the 2000 Census results and move proportionally with monthly unemployment estimates for counties. EDD warns that the methodology is untested for small towns. During a time of good water supplies, the 2000 Census found Mendota unemployment was 32%, the highest of all 474 incorporated towns in California. Even if one accepts the EDD methodology as accurate, the current data casts doubt on the importance of water.

	April 2011	April 2009
Mendota Unemployment (CA EDD)	42.7%	38.2%

Are there more recent unemployment survey data for these towns than the 2000 Census?

Yes, the Census Bureau released new unemployment estimates from the American Community Survey (ACS) at the end of 2010. The survey spans the five year period from 2005 to 2009, and is the most recent official survey data for sub-county areas. If California EDD used this more recent Census data, their methodology would estimate 27.1% unemployment for Mendota in April 2011. The table below shows results from 2005-09 ACS for small farming towns in Westlands Water District and the Delta.

	Unemployment Rate (2005-09 ACS)	Per Capita Income (2005-09 ACS)
Mendota (Westlands area)	16.0%	\$8,915
Huron (Westlands)	17.5%	\$6,492
Walnut Grove (Delta)	34.6%	\$11,498
Isleton (Delta)	16.0%	\$20,249

Have other factors besides water affected unemployment in the Valley and on the west side?

Yes, the Central Valley has been among the hardest hit areas by the foreclosure crisis and housing collapse. While pumping restrictions have reduced agricultural output by approximately \$100 million, the value of private building permits has declined by more than \$5 billion per year in the Valley, and home values have dropped more than 50% in most areas. Low-income cities on the west side of the Valley saw some of the biggest declines.

Building Permits in Westside Communities	2005	2009
Los Banos	690	2
Mendota	214	0
Coalinga	199	0
San Joaquin/Huron	58	4

Are there farmers that would be harmed by higher levels of Delta pumping?

Yes, high levels of Delta pumping increases the salinity of irrigation water for thousands of acres of farmland in the Delta, and has caused Delta cropland to be converted to lower-value pastureland, and reduced productivity on other acres. We are not aware of a current, reliable quantitative estimate of these losses at this time.

Do increases and decreases in Delta pumping affect urban economies?

Much like agriculture and fisheries, the effect depends on the location of the urban area compared to the Delta pumps. Increased Delta pumping can reduce water and wastewater rates for exporting areas, while increasing costs on upstream areas due to lower water quality. Assessments of the economic effects of increasing water and wastewater rates differ, and there is less agreement among researchers on this topic.

What is the bottom line? Does less pumping from the Delta harm the California economy?

Decreasing Delta water pumping harms some parts of the state economy and helps other areas, and the effects on farming and fishing communities on either side of the pumps are of a broadly similar scale. Urban impacts also offset. The net effect on the California economy is relatively small, and could be negative or positive.

About the University of the Pacific Business Forecasting Center:

The mission of the Center is to provide the business and policy community with independent, unbiased assessment and interpretation of economic data and issues with a special focus on the Central Valley. While employment impacts are now similar, the Center was the first and only group of researchers to publish an accurate forecast of agricultural employment impacts during the drought of 2009.