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**CALIFORNIA WATER IMPACT NETWORK FIRST  
TO QUANTIFY CENTRAL VALLEY PAPER WATER**

The California Water Impact Network (C-WIN, online at [www.c-win.org](http://www.c-win.org)) has completed a first of its kind analysis of Central Valley water availability compared to water rights claims. The water availability analysis was submitted as [testimony for a State Water Resources Control Board](#) (SWRCB) workshop on amendment of the Bay-Delta Water Quality Control Plan. The testimony documents the (lack of) availability of water compared to water rights claims in the Sacramento, San Joaquin and Trinity rivers, and shows that the Central Valley Project (CVP) and State Water Project (SWP) lack adequate water to back up promised water contract deliveries.

The testimony concluded that water rights claims are many times more than available water supplies for the Sacramento and San Joaquin Rivers, and nearly seven times more than the available supply for the Trinity River. The CVP and SWP have junior water right claims and clearly cannot provide full contract deliveries, especially during drought.

Comparing total annual flows (actual water available) to the water rights that are authorized and claimed for the major river systems flowing into the Delta clearly illustrates the problem of over allocation and insufficient flows, frequently referred to as “paper water.”

Water rights are a form of property that entitles someone to use water from a specific source like a stream. In this case, the state has provided far more rights to the use of water than is naturally provided by nature or human engineering.

California’s water code has evolved over a period of more than 150 years through prior practices, lawsuits, legislation, and water projects. The current over allocation of water rights reflects that evolving jumble. Human promises of water exceed Nature’s provisions, which results in creation of “paper water.”

This over allocation is similar to “clouded titles” for real estate and leads to the continuous disputes and pressures on water agencies to “produce” more water that doesn’t exist. The water rights allocated on these river systems far exceed the water available in most years by a ratio of five or more, as shown in the following chart.

River Basin	Annual Flows	Water Rights***	Ratio
Sacramento R. Basin*	21.6 MAF	120.5 MAF	5.58
San Joaquin R. Basin**	6.2 MAF	32.7 MAF	5.28
Trinity R. Basin*****	1.283 MAF	8.725 MAF	6.70

- \* Includes the Sacramento, Trinity, Feather, Yuba, Bear, and American Rivers
- \*\* Includes the San Joaquin, Merced, Tuolumne, and Stanislaus Rivers
- \*\*\* Nonconsumptive Hydropower rights are not included in this analysis
- \*\*\*\* Trinity River at Lewiston

CVP and SWP water rights have clouded titles for waters of the Sacramento and San Joaquin rivers and their tributaries. The SWP was predicated on damming North Coast Rivers that were subsequently designated off limits because of Wild and Scenic River designations. Five million acre-feet of water from the North Coast never materialized, but the CVP and SWP have contracted for much more water than can possibly be delivered- “paper water.” If Wild and Scenic Rivers remain protected, senior water right claims are honored, and water quality standards are met, the reality is that there is little, if any, “surplus” water available to the Central Valley Project and State Water Project to export south of the Delta. In plain language, this means there is really very little if any water available to the CVP and the SWP at any time.

The C-WIN Paper Water Analysis (testimony) also applied the SWRCB’s 2010 Bay-Delta Outflow Recommendation within the priority of Central Valley water rights. This testimony demonstrated the limited water supplies available for CVP and SWP contractors if the Public Trust resources and beneficial uses of the Bay-Delta are protected.

Where, then, is the water to fill the proposed Peripheral Tunnels Project? While the C-WIN Paper Water Analysis did not discuss the implications to the Peripheral Tunnels, a logical conclusion is that the CVP and SWP have unreliable water rights to fill the Peripheral Tunnels. Why would water ratepayers and the taxpayers want to pay billions for the Peripheral Tunnels when it’s clear that there will be no additional water deliveries and possibly reduced deliveries? Reduced snowpack due to climate change can only further reduce CVP and SWP water deliveries.

The Bay-Delta Conservation Plan (BDCP) and the Peripheral Tunnels would reduce Bay-Delta outflows and conflict directly with implementation of the SWRCB’s 2010 Bay-Delta Outflow Recommendation intended to protect Bay-Delta Public Trust resources. Additionally, decreased flows through the Delta will concentrate and increase residence time of pollutants such as selenium and pesticides in the Bay-Delta estuary.

The C-WIN Paper Water Analysis contains recommendations for the State Water Resources Control Board to enforce the priority of water rights and water quality standards to protect the Public Trust and other beneficial uses of the Sacramento-San Joaquin San Francisco Bay-Delta estuary.

The C-WIN report clearly documents that claims to California's water vastly exceed the actual amount of water available. The state and federal water projects are nearly last in line in terms of seniority of water rights, and are the most likely to be cut back in the event of decreasing snowpack, drought and dedication of water to meet the Public Trust, areas of origin and other beneficial uses. The State Water Resources Control Board has clearly not done its job to rein in paper water claims. It would be foolish for California to move ahead with a massive project like the Peripheral Tunnels based on paper water that doesn't exist.