

TUESDAY, JUNE 4, 2013

New BDCP Economic Studies Use Outdated Growth Forecasts to Project an Artificial Water Shortage

There are so many problems in the cost and economic reports released last week by the BDCP, it is hard to know where to begin. From the messages in my in-box, I am not alone in identifying some of the more serious errors in the analysis that exaggerate water supply benefits to justify the tunnels. Some of the serious problems people are talking about include 1) a large, poorly justified shift in the No BDCP water supply scenario that is inconsistent with the Environmental Impact Report and other BDCP documents that allows them to claim higher economic benefits, 2) ignoring 1 million acre feet of alternative water supply development identified in local water plans of southern California water agencies and assuming high costs for alternative supplies, 3) ignoring the conservation targets and regional self-sufficiency requirements of the 2009 Water Package and the Delta Stewardship Council's Delta Plan, and 4) some new language (see page 8-80) that says the state and federal government are considering picking up more of the costs currently allocated to the water contractors. This post isn't about those issues, it is about the inaccurate population and economic growth assumptions in the BDCP report that is inflating the estimated urban benefits of BDCP. To understand its significance, you have to realize that shortages from the estimated levels of urban water demand are driving the vast majority of the economic benefits BDCP is calculating. So it is critically important to estimate urban water demand with best and most current information. Specifically, for Los Angeles, Orange, Riverside, San Bernadino and Ventura Counties, the growth projections used in BDCP are taken from their 2007 Regional Transportation Plan, and in San Diego it is based on "Series 11" from 2006. Both of these projections are out of date and have been replaced by the local planning agencies with much lower growth projections that incorporate the results of the 2010 census. Likewise, the California Department of Finance released updated projections for these counties in 2012 and again earlier this year in 2013 that are the official estimates used for state planning and are now driving housing

and transportation planning at the county level. The 2050 DOF population projections for California are about 15% lower (51 million instead of 60 million) than the projections commonly used a decade ago that are still being used by the BDCP. The BDCP sources only project population to 2035, but the BDCP study appears to extrapolate similar growth rates beyond this point. In 2035, they estimate population of 28.04 million residents in these 6 key urban counties, whereas the state's updated official projection from DOF estimates 25.25 million residents. In other words, official updated growth estimates find 2.8 million fewer water demanders in 2035 than BDCP assumes, about 10% lower. BDCP study doesn't give an exact number for 2050, but it appears that the overestimate grows to at least 15% similar to the old state projections from a decade ago. I won't detail it here, but the economic projections show commercial and industrial demand is also about 15% too high. So what does the new BDCP say about growing urban water demand and the level of shortages?

In the agencies receiving SWP supplies, urban demand is projected to be 5.64 MAF in 2025 (the year CM1 would become operational) and is estimated to grow to 6.18 MAF by 2050. (chapter 8, page 102)

This estimate is 15% too high due to the aggressive forecast, adjusting it would bring 2050 urban water demand to 5.25 MAF (million acre feet), a decrease of 0.93 MAF from BDCP's 2050 estimate. The BDCP study states 2012 urban demand is 5.1 MAF, so this adjusted demand growth to 5.25 MAF would reflect very slow growth over the next 40 years and be a better fit to observed water demand over the past 20 years.

So how does this demand decrease of 0.93 MAF from using a realistic growth forecast compare to their projected urban water shortage with the inflated forecast? The BDCP report states.

By 2025, without BDCP shortages in the urban agencies receiving SWP deliveries are predicted to be 0.50 MAF on average. By 2050, these mean shortages are projected to be 0.84 MAF. The BDCP would mitigate these losses by lessening the frequency and magnitude of water supply shortages.

In summary, the BDCP is projecting urban water supply shortages without BDCP of 0.84 MAF. However, they are exaggerating urban water demand in 2050 by 0.93 maf through the use of aggressive growth

forecasts that are 15% higher than the state's official planning forecasts. In other words, the future urban water supply shortages the BDCP predicts are unlikely to exist.

And it should be noted, these shortage calculation don't even account for the over 1 MAF of new alternative supplies the San Diego County Water Authority has identified in local planning documents that BDCP is ignoring, not to mention the underestimate of conservation. Urban water demand is not growing now and is unlikely to grow significantly in the future.

The most irritating thing to me is that the consultants and the local water agencies know they are using very high projections. Their staff knows they conflict directly with the projections being used in financial, housing and growth projections in state and local governments throughout the state. And the Metropolitan Water District knows its sales are not increasing.

June 5 Postscript: If there is no shortage as defined by the BDCP study, that does not mean the water does not have value to urban users. But the value of water supplied through the tunnels would be much less without a shortage situation. The BDCP study places the value of water that reduces these urban shortages at a whopping \$1,204 to \$1,414 per acre foot in 2012 dollars. If that value were much under \$1,000 af, the net benefits of the tunnels would be negative even with all the other pro-tunnel assumptions in the report.