



The following comments are submitted this year for the April 19th 2016 Meeting, to the Water Board Salton Sea Task Force for the permanent record but were originally submitted last year to the LHC, at their request.

Comments on the LHC Draft Staff Document on the Salton Sea for the August 27th, 2015 business meeting, by Coulter H Stewart, retired businessman and founder/publisher of Government West Magazine, also former Senior Consultant to the California State Assembly Sub-committee on Energy (1976-79).

Dear Commission,

Thank you for the opportunity to comment on the Staff Draft Document.

The report assumes a Salton Sea relying on 750,000 acre feet of annual inflow of polluted agricultural and domestic waste water which represents a decline of some 500,000 acre feet per year from the current inflows of over 1.2 million acre feet per year. Such a scenario will expose over 150 square miles of toxic bottom soil, which as it dries out will migrate as dust with the prevailing winds across those living around the Sea.

Point One: Dust Mitigation- Keep It Wet!

The dust mitigation measures from Bruce Wilcox of IID as outlined in the LHC Staff Draft are wholly inadequate to deal with such a large area, 150 square miles of desiccated toxic soil.

The Los Angeles Department of Water & Power and its contractor Barnard Inc., both conspicuously absent from your hearings, have spent over \$1.5 billion during the past 13 years studying and demonstrating methods & projects to prevent dust and restore wildlife habitat at Owens Lake. Their studies conclude that the most effective way to permanently prevent dust from migrating outside the containment area is to keep the soil wet either by flooding or watering vegetation. Other dry methods like surface stabilizers, tilling or berm building merely interrupt the dust not prevent it.

The 2010 Ten Year Capital Improvement Program for the Los Angeles Department of Water & Power (LADWP) assumed that Los Angeles would obtain 35% of its water supply from the Eastern Sierra and Owens Valley for the following ten years. This water was to be delivered through the 100 year old Los Angeles Aqueduct.

You need to know that this Aqueduct has been closed, for the first time in its history, since April, 2015, thus eliminating 35% of LA's water supply. As the 2010 Program predicted, all this drinking water is now needed to restore Owens Lake, Mono Lake and the re-watering of the Lower Owens River.*

* The LA Aqueduct reopened in November 2015.

Point Two: Geothermal Energy- Don't Count On It!

Geothermal Energy will not generate any meaningful volume of local revenue or exportable power in the short or intermediate term, 10-15 years.

I helped write and secure passage of the original Geothermal Development Act by Assemblyman Terry Goggin back in 1978. Then Governor Jerry Brown signed it into law and thus created the geothermal boom at the Salton Sea in the 1980s. This Act was strongly supported by the geothermal industry of the day.

In the past 37 years only 400 megawatts of the approximately 2000 MW available have been developed. That is a little over 10MW per year. Your Staff Draft Report indicates that significant obstacles exist such as high cost, lack of transmission capacity and lack of local markets for this electricity.

The report fails to mention the large amount of re-injection well makeup water required. Each 50 MW power plant needs to acquire 2,000-6,000 acre feet per year of surface makeup water to re-inject. This prevents resource depletion and land subsidence. If this is not done it is not renewable energy.

The LHC Staff Draft seems to conclude that somehow geothermal electricity will magically attract the necessary investment capital, that the \$450 million transmission lines will magically appear, and that markets will magically emerge to purchase 1250 MW of this high cost electricity all within the next ten years.

This premiss is ludicrous and the geothermal industry knows it. This is probably why no one from the geothermal industry testified at your hearings.

With the price of New Mexico crude oil dropping below \$40 per barrel and natural gas prices remaining low, the chance of high cost geothermal having an impact on local revenues to support any Salton Sea restoration projects in the foreseeable future is nil.

Point Three: Shrink and Die Releases Green House Gasses.

There is no such thing as a smaller, sustainable Salton Sea. The regional economy simply cannot cope with a polluted, salty, agricultural waste water sump receiving only 750,000 acre feet of polluted agricultural run-off each year.

According to the USGS the 100,000 acres of bottom mud presently covered with water that will be exposed, under the above plan, comprise a carbon sequestration sponge. As the Sea shrinks and this mud dries out all this carbon will be released back into the atmosphere thus defeating California's goal to reduce green house gasses.

When you combine an unstable water level, a significant release of GHGs, increasing salinity, the destruction of wildlife habitat and blowing toxic dust the impact on the economies of the Coachella and Imperial Valleys will be severe, as noted in several recent studies.

Point Four: Water Security is Key- More Water is the Solution.

All of the above issues go away if more water is made available to the Salton Sea.

Since the State Water Board has already decided that the Public Trust is met by using drinking water to restore Owens Lake, Mono Lake and for re-watering the lower Owens River it is clear that similar regulatory thinking can be applied to the Salton Sea.

With Lake Mead at 37% of capacity, a closed Los Angeles Aqueduct and only 20% of State Water Project contract deliveries to the Metropolitan Water District, the competition from Southern California Coastal Counties and Cities will only intensify. The only short term fix for thirsty SoCal residents is farm water from the Palo Verde and Imperial Irrigation Districts.

Additional water transfers/sales like that suggested in the Staff Draft will only accelerate the ecologic, economic and public health collapse of the Salton Sea.

More water is needed!

The most reliable source of this water is the Pacific Ocean. Since the salinity of the Salton Sea is already 5.7%, will soon exceed 6% and will blow past 10% in 2018 there is no ecologic reason not to bring in 800,000 acre feet per year of 3.5% ocean water to immediately stabilize the water level. Part of this new 3.5% ocean water inflow can be bermed off from the main super saline Salton Sea to provide several thousand acres of fish friendly wildlife habitat at the Southern end of the Sea including the mouths of the New and Alamo Rivers thus enhancing current plans.

All this can be accomplished for less than \$1 billion and completed within three years. The only requirement is a decision and commitment from the local, state and federal levels to get it done.

Such a plan is not only feasible but the most practical, economically and environmentally sustainable alternative available.

To enhance water security for Southern California this plan can be modified, at additional cost, to desalinate all or a portion of this water coming from the ocean. Given what we now understand about the importance of guaranteed water supply, not dependent upon the vagaries of mother nature, this element cannot be minimized.

Respectfully submitted August 22nd 2015.

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And resubmitted to the Water Board, March 28th, 2016.