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Sea Water from the Pacific via Tunnel for an Economic Development Zone

Additional submitted attachment is included below.

From:	John Treichler
To:	Energy - Docket Optical System
Cc:	Jason McBride; tunnels@boringcompany.com; Senator.OchoaBogh@Senate.ca.gov; Rep. Raul Ruiz, M.D.
Subject:	Sea Water from the Pacific via Tunnel for an Economic Development Zone.
Date:	Monday, December 12, 2022 10:22:20 AM

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Dear Lithium Valley Commission Staff -

I have been following the progress of the Lithium Valley Commission in preparing the requirements for lithium recovery at the Salton Sea area.

From available information, Coastal Commission aside, the only viable pathway to bring in new water for your economic zone is from the Pacific via tunnel.

My suggestion is to consider this potential project and water source in the preparation of your final report. My intent here is to avoid continued fallowing of agricultural land in the area to provide Colorado River water for new industry when Pacific water is bountiful.

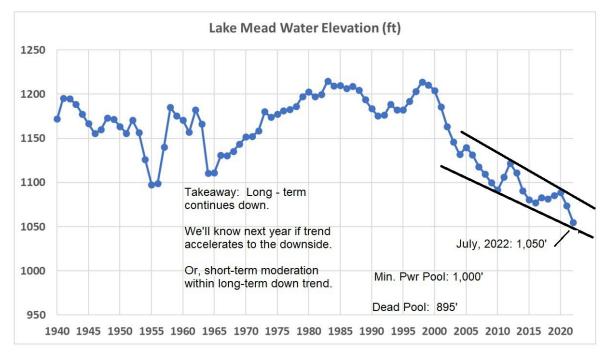


Photo Reference: <u>https://www.drroyspencer.com/2022/08/lake-mead-low-water-levels-part-2-colorado-river-inflow-variations-and-trend/</u> (Trendlines and notes are mine).

This chart from Dr. Roy Spencer, a climatologist, provides the longer term view of the continued declining level at Lake Mead. Dr. Spencer advised that increased usage of Colorado River water, *plus* - La Nina, contribute to the declining level of Lake Mead. Even if the La Nina resolves to increased precipitation, the increasing demand for water will result in the continuing decline of Lake Mead toward Zero Power Pool and 10 years from now, Dead Pool.

I sourced one of the proposals submitted to the UC Santa Cruz Concept Evaluation Group that advocated using Elon Musk's boring machines. Per those calculations, one of Elon's 12' Dia. Tunnels would provide ~460,000 Acre Ft of salt water/ yr. The same website advises Elon's machines can bore 1 mile/week. Seventy miles to the Pacific is 70 weeks or 1.3 years. Inlet and outlet infrastructure proceeds in parallel. A 200 foot drop provides the potential for power generation at the bottom.

The Draft Lithium Valley Commission report to the California Energy Commission cited in the Revised Draft Report (Nov 2022), Ch. 4.A: "IID has about 20,400 AFY of water available for contracting to new ⁷ nonagricultural development, including industrial use. ¹⁴⁴ This water comes from IID's interim ⁸ water supply policy. IID is looking at ways to conserve additional water for industrial use, as ⁹ further described below." Link: https://www.energy.ca.gov/data-reports/california-power-generation-and-power-sources/geothermal-energy/lithium-valley [Look under "Resources"]

So, perhaps the build-out of the above mentioned economic development zone could include subject tunnel from the Pacific as part of the infrastructure. Desalination and thermal distillation of the sea water for said economic zone would release the 20,000 AFY from the IID back to the farming community.

Venture capital might be inclined to build desalination/ distillation facilities make available treated water to commercial customers or supplement city supplies.

And brine removal you ask: Why not just distill off all the water, reclaim whatever minerals are there, and then cart the remaining residual off to a designated landfill.

Water imported from the Pacific via Elon's tunnel would offset that required from the declining Colorado River source.

Again, however, this self-help depends on the Governor's support and the Coastal Commission's proactive work in finding an acceptable inlet site on the Pacific.

With one last glance at Dr. Spencer's long-term chart of Lake Mead water levels, the meter is running. Superior water rights mean nothing if the well is dry. And the well will be dry for industry and agriculture long before Lake Mead approaches Dead Pool maybe 10 years from now. Lesson from history: "Hope is not a productive campaign strategy".

Kind regards,

John Treichler Retired Aerospace Engineer Banning, CA