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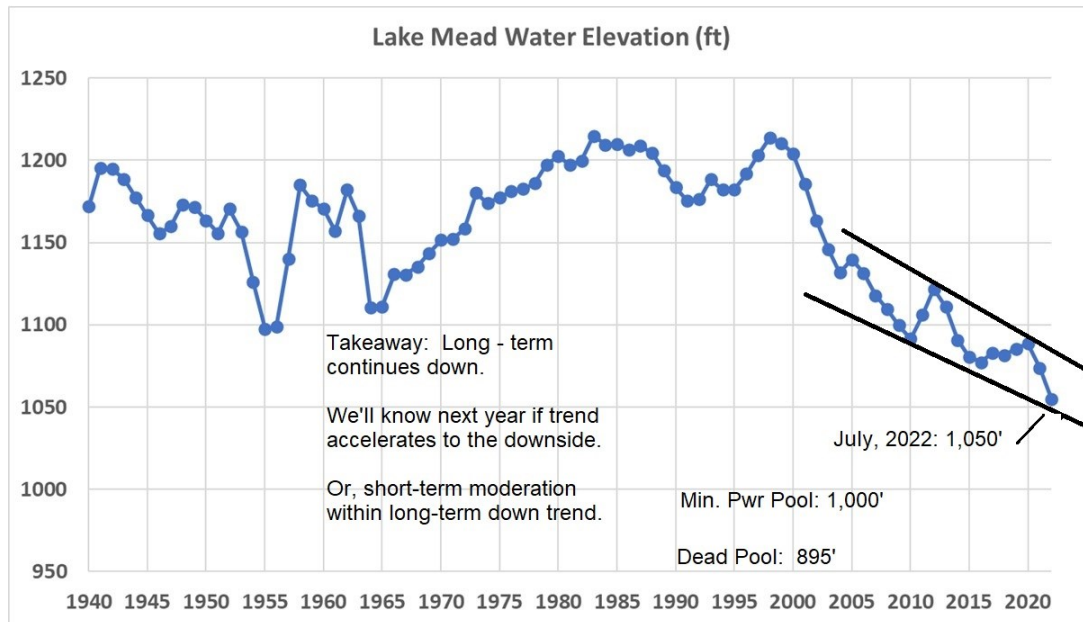
*Comment Received From: John Treichler
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Pacific Water source to enable Lithium Recovery Zone at Salton Sea

See atch commentary and suggestions.

Additional submitted attachment is included below.

Pacific Sea Water via Tunnel to Enable a Lithium Economic Development Zone.



Reference: <https://www.drroyspencer.com/2022/08/lake-mead-low-water-levels-part-2-colorado-river-inflow-variations-and-trend/>

This is climatologist Dr. Roy Spencer's sobering long-term view of the declining water level at Lake Mead. Dr. Spencer's analysis concluded that increased usage of Colorado River water, *plus* - La Nina, contribute to the declining level of Lake Mead. Even if La Nina resolves to increased precipitation, increasing industrial and city demand for water will result in the continuing decline of Lake Mead. [Trendlines and notes are mine].

An email resulting from last-month's Column was from Jeff Geraci who had calculated the net evaporation loss from the Salton Sea and concluded that one tunnel from the Pacific would not suffice. He was correct.

I sourced one of the proposals submitted to the UC Santa Cruz Concept Evaluation Group utilizing Elon Musk's boring machines to tunnel to the Pacific. Per those calculations, one of Elon's 12' diameter tunnels would provide ~460,000 Acre Ft of salt water/ yr. Insufficient to compensate for evaporation: Two are needed to slowly increase the Salton Sea level.

Let's change perspective here. There are other high priority customers for new water: A new Lithium Economic Develop Zone, new business, agriculture, and cities too. Without a stable *long-term* source of treated water, Lithium is on-pause. Venture Capital will not risk it.

The Lithium Valley Commission reporting to the California Energy Commission cited in their Revised Draft Report (Nov 2022), Ch. 4.A: “IID [Imperial Irrigation District] has about 20,400 AFY of water available for contracting to new ⁷ nonagricultural development, including industrial use. ¹⁴⁴This 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”]

The continued fallowing of agricultural land to reallocate Colorado water to new industry is not a viable long-term strategy. Look again at Dr. Spencer’s chart above. Long-term, 10 yrs., the well is approaching dry for industry and agriculture alike. If an economic development zone is to be created around Lithium recovery, then a long-term water supply other than the Colorado River is a key component and needs to be included in the Commission’s final report.

Build-out of the above mentioned economic development zone could include the subject tunnel from the Pacific and treatment facilities as part of the infrastructure. Desalination and thermal distillation of the sea water for said economic zone would release the 20,400 AFY from the IID back to the farming community. The potential for electrical generation at the tunnel outlet is a plus.

Venture capital might be inclined to build the necessary desalination/ distillation plants to provide treated water to commercial customers or supplement city supplies, if they believe the new water will be there. “If you build it, they will come”.

What if the California Energy Commission and the California Water Resources Board engaged the Coastal Commission to jointly and proactively (quickly) locate a suitable Pacific inlet location to enable this new water source? [Insert laughter here]

Alternatively, one Proposal to the UCSC Evaluation Group suggested the tunnel inlet at Camp Pendleton. Underground tunnel: No environmental concerns. Lithium is a National Security asset. All Federal. Hummm.

With one last glance at Dr. Spencer’s long-term chart of Lake Mead water levels: The meter is running.