

Via Email

20 December 2022

Ms. M. Camille Calimlim Touton, Commissioner
c/o Reclamation 2007 Interim Guidelines SEIS Project Manager
US Department of the Interior, Bureau of Reclamation, Upper Colorado Basin Region
125 S. State St., Suite 8100
Salt Lake City, UT 84138

**Re: Scoping Comments on Supplemental Environmental Impact Statement for December 2007 Record of Decision
Entitled Colorado River Interim Guidelines for Lower Basin Shortage and Coordinated Operations for Lake Powell
and Lake Mead**

Dear Commissioner Touton:

Thank you for the opportunity to comment on the scoping for the Supplemental Environmental Impact Statement (SEIS) for the Interim Guidelines. The Colorado River Basin is in an unprecedented, dire condition of water shortage. The period from 2000 through 2022 is the driest 23-year period in more than a century and one of the driest periods in the last 1,200 years. The potential yield of the Colorado River was overestimated when the seven states negotiated the Colorado River Compact in 1922. The ever-increasing population in the areas relying on primary or supplemental water supply from the Colorado River continues to put more and more stress on the system. The recognition of tribal water entitlement that was not included in the Colorado River Compact of 1922 is further testing the will and means of Colorado River states and the federal government in their management of the river.

The subject of the SEIS is an update of the existing Interim Guidelines for Lower Basin Shortage and Coordinated Operations for Lake Powell and Lake Mead, facing unfavorable hydrologic conditions with the understanding that the current framework will be insufficient to overcome the water supply challenges in the upcoming years. Findings from the 7.D. Review completed in December 2020 suggest that although the 2007 Interim Guidelines were generally effective, additional measures are required to reduce the risk of reaching critically low elevations in Lakes Powell and Mead due to continued drought conditions. However, the actions identified in the report focus on improving the efficiency of water use and operations which, while necessary, are more short-term oriented. The emphasis on enhanced flexibility and transparency for water uses is helpful for building the trust that is essential for negotiating long-term solutions, but not clarifying what the long-term solutions could be.

The discussions in the recent Colorado River Symposium hosted by Water Education Foundation and the Colorado River Water User Association's Annual Conference were concerning, suggesting that parties are gearing up for litigation -- apparently without a common vision for collaboration. Indeed, given that we face a potential water supply deficit in the basin measured in millions of acre-feet per year, in combination with severe climate change that creates a new paradigm, the impact of interim actions and improvement in water use efficiency and operational efficiency fall very far short of what is required. While conservation measures are critical, we believe that we simply

cannot conserve our way out of this massive supply-demand imbalance. We also need to pursue solutions that will increase the supply of fresh water in the USA basin states and Mexico.

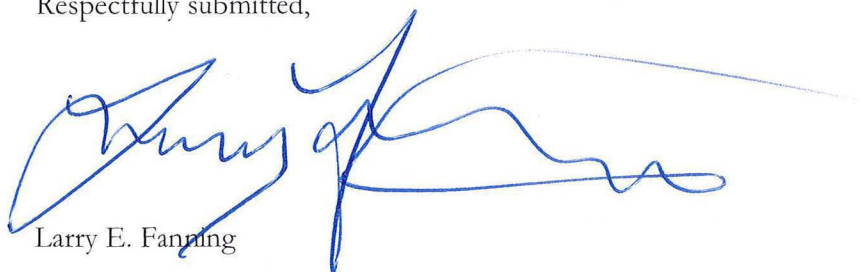
We need solutions on a scale commensurate to the water shortage crisis faced by all the people, farms and businesses in the US and Mexico for which the Colorado River is their lifeblood – and we are convinced that augmentation is an indispensable element of the overall solution set.

Our firm has developed a plan to generate huge volumes of fresh water in and for the binational region. In essence, our plan involves tapping into the inexhaustible water supply available from the Gulf of California (aka Sea of Cortez) and using the abundant geothermal energy available nearby to desalinate that water. The result: an abundant supply of fresh water provided in an environmentally responsible manner and at affordable prices. We believe that our plan provides a credible prospect for a long-term solution to chronic Colorado River water shortages, including refilling Lakes Mead and Powell. (In addition, our plan can incorporate elements to solve another water-related crisis in the Lower Basin Region: the Salton Sea in California.)

The benefits to the USA and Mexico would include: a dedicated, lasting supply of fresh water; a cleaner environment, leading to improvements in human health and wildlife habitat; restoration of agricultural land; and job creation, business investment, and other economic benefits.

We invite you to read an Executive Summary of our plan on the following pages. We will be pleased to provide you with further details and answer any questions you may have. Thank you very much for your attention to this vital matter.

Respectfully submitted,



Larry E. Fanning

Chief Science Officer and Principal Shareholder

EXECUTIVE SUMMARY OF THE NWG PLAN

The New Water Group, LLC ("NWG") has developed **ST-IWRAAP**¹ to resolve the multiple challenges caused by inadequate fresh water in the western USA and northern Mexico. ST-IWRAAP works by using the abundant, geothermal reserves present in The Salton Trough² to power the following program elements:

1. Extraction of sea groundwater from The Gulf of California³. *See Points marked A in Figure. 1*
2. Pipeline Conveyance to Cerro Prieto, Mexico⁴ and (optionally) the Salton Sea⁵. *See Points B & C in Figure 1*
3. Desalination: The water will be desalinated on a primary-secondary-tertiary basis⁶ to yield over 5 MAF per year of fresh water, thereby relieving pressure on the Colorado River.^{7, 8}
4. Environmentally responsible discharge of the brine and related effluent resulting from the desalination and reclamation efforts⁹ using a 25-mile offshore pipeline to the Wagner Basin in the Gulf, a strategic location with a deep drop-off and strong currents¹⁰.
5. Wastewater treatment facilities for Mexicali and highly contaminated waterways in the region¹¹. *See Points marked E in Figure 1*

The Benefits: Successful implementation of the NWG Plan will generate major benefits in both countries, including:

1. A large and sustainable supply of fresh water;¹²
2. Replenishment of key Colorado River storage reservoirs like Lakes Powell and Mead;
3. Improved environment, leading to better public health and wildlife habitat;
4. Restoration of once fertile farmland;
5. Improved water conveyance infrastructure, reducing leakage and evaporation loss; and
6. Economic development, via job creation and improved business climate.¹³

¹ The (patent-pending) Salton Trough Integrated Water Resource Assessment and Action Program (ST-IWRAAP).

² The Salton Trough is an active tectonic, pull-apart basin extending from Gulf of California in Mexico to Palm Springs, CA

³ This extraction will occur via coastal and near-shore arrays of vertical and deep-slant wells to mine naturally filtered seawater from beneath the sea floor in the northern Gulf. Unlike open intake systems, NWG's method is safe for all marine life, including plankton. The filtration results from utilizing pervious ancient river delta sediments and marine deposits

⁴ Cerro Prieto will serve as the principal operations hub, making full use of the abundant geothermal energy available there.

⁵ The Salton Sea in California is drying up, creating major human health problems (asthma, lung cancer, etc.) due to the ever-increasing airborne chemicals picked up from the newly exposed playa (lakebed). Our plan can be expanded to solve this crisis as well, by importing water to re-bury the playas and allow for the regeneration of the marine life and other animals that depend on it. Any water destined for the Salton Sea need not be fully or even partially desalinated because the imported water is less saline than the water now in the lake.

⁶ Using the most advanced, economically viable technology to achieve maximum efficiency

⁷ This fresh water can be conveyed into current water distribution networks, serve to recharge existing water storage locations (e.g., Lakes Mead and Powell), be used for water exchange, provide for water banking, etc.

⁸ Any surplus water production and high-quality reclaimed water will be routed to water banking facilities, to be used for drought relief, etc.

⁹ Salt and lithium are produced via desalination; these will affect the disposal volume and, perhaps, part of the means of disposal.

¹⁰ Using proven eductor technology at the pipeline terminus, the effluent will blend with the surrounding seawater and be safely carried off into the Pacific.

¹¹ This water will be utilized for habitat reclamation

¹² Mexico will receive much higher-quality fresh water than the salt-laden Colorado River water it now receives

¹³ Creation of (a) direct jobs in the construction and operation of the system, (b) indirect, "spinoff" jobs by support businesses, and (c) jobs via project-unrelated investment by firms that would gain certainty about having an adequate water supply.

Figure 1

