

To: The Bureau of Reclamation

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RE: Comments on the Revised Draft Supplemental EIS for Near-Term Colorado River Operations

December 5, 2023

To the Bureau of Reclamation:

I am writing to submit comments¹ on the Revised Draft Supplemental Environmental Impact Statement for Near-Term Colorado River Operations (Revised Draft SEIS), issued by the Bureau of Reclamation (USBR or Reclamation) on October 27, 2023.² My comments focus on issues related to the Salton Sea, and specifically on reasonably foreseeable and significant adverse impacts of Reclamation’s proposed federal action (Proposed Action) on the Salton Sea, its ecosystem (including tributaries and wetlands), wildlife reliant on the Salton Sea ecosystem, the environment, the climate, and people throughout the areas surrounding the Salton Sea, including but not limited to Tribes and other environmental justice communities. (When the foregoing impacts are hereinafter referred to collectively, the phrase “Salton Sea Impacts” will be used for brevity.)

The Revised Draft SEIS is an improvement over the original Draft SEIS issued in April 2023, which improperly failed to address Salton Sea Impacts in any manner whatsoever. However, the Revised Draft SEIS remains seriously deficient in a number of important respects, including the following: (a) the modeling relied upon by Reclamation to draw conclusions about Salton Sea Impacts is not publicly available, adequately explained, or properly validated and justified; (b) the discussion in the Revised Draft SEIS regarding the nature and extent of Salton Sea Impacts is inadequate, and the conclusions Reclamation reaches based on that discussion are unwarranted and unreasonable; (c) the Revised Draft SEIS inappropriately relies on insufficient, speculative, and ineffective mitigation measures to address the reasonably foreseeable and significant harm to people, wildlife, the environment, and the climate that will occur as a consequence of the proposed federal action’s negative impacts on the Salton Sea and its ecosystem; and (d) the Revised Draft SEIS does not discuss, or present potential remedies for, the even more dire Salton Sea Impacts that could occur if Reclamation’s modeling of Colorado River water availability from 2024 through 2026 turns out to be overly optimistic.

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¹ Please note that I do not have a personal stake in these issues, and I do not represent or speak on behalf of any interested individual, organization, company, or government entity. I submit these comments solely as a concerned citizen, and as someone who has spent many years objectively analyzing numerous scientific, factual, legal, and policy issues concerning the past, present, and future of the Salton Sea and the Colorado River.

² Notice of Availability of EIS No. 20230146, Draft Supplement, BR, CO, [Near-term Colorado River Operations Revised Draft Supplemental EIS](#), October 27, 2023. 88 Federal Register 73840.

I. Background

Two sets of public comments regarding the Colorado River and the Salton Sea that I previously submitted to Reclamation contain important information that is directly relevant to these comments concerning the Revised Draft SEIS: my comments (dated May 24, 2023) on the original Draft SEIS,³ and my comments (dated August 14, 2023) on development of post-2026 Colorado River management strategies.⁴ To avoid redundancy, I incorporate by reference the entirety of those previous public comments. Please see those submissions for details concerning the following key issues (and others):

- The Colorado River flowed into the Salton Basin and sustained vast estuarine, lacustrine, and wetland ecosystems for approximately 5 million years until 20th century Colorado River infrastructure intentionally severed the natural connection between the river and the northern Salton Trough.
- Today's Salton Sea and its essential ecosystem are currently dependent on Colorado River wastewater, primarily agricultural drainwater, flowing into the central Salton Basin following use of the river's water by the Imperial Irrigation District (IID), the Coachella Valley Water District (CVWD), and Mexico.
- Mandatory annual transfers of large volumes of Colorado River water from IID to urban areas pursuant to the 2003 Quantification Settlement Agreement (QSA) have caused, and will continue to cause, significant harm to the Salton Sea and its ecosystem, wildlife, the environment, the climate, public health, and the economy throughout the region surrounding the lake. As required by the QSA, IID will continue to transfer approximately 500,000 acre-feet of water annually for decades to come.
- State and federal officials have failed to remedy the foreseeable injurious impacts of the QSA on the Salton Sea, wildlife, people, and the environment, despite legal requirements to do so.
- Environmental justice communities throughout the Salton Sea region—including, but not limited to, Tribes—are suffering significant, disproportionate, and unremedied negative effects on their health and socioeconomic well-being because of the QSA water transfers, the resulting shrinkage of the Salton Sea, associated deterioration of water quality, ongoing collapse of the lake's ecosystem, pollution of the region's air by hazardous particulates blowing off of the exposed lakebed, and related impacts on the region's economy.
- Hundreds of wildlife species—including ones that are already designated as endangered, threatened, or of special concern under federal and/or state law—are in jeopardy as their essential Salton Sea habitat becomes dangerously degraded. Demise of the Salton Sea ecosystem, particularly in combination with the deterioration and loss of lakes and wetlands elsewhere, will pose an existential threat to millions of migratory birds.
- There is a critical need for full and permanent restoration of the Salton Sea to protect both wildlife and people from catastrophic consequences.
- While a long-term plan for full restoration of the Salton Sea is devised and implemented, there is an urgent but unfulfilled need for effective mitigation of the worsening harm to people, wildlife, the environment, and the climate that is occurring as the lake shrivels from freshwater deprivation, its salinity skyrockets, the ecosystem collapses, and vast expanses of desiccated lakebed emit huge quantities of dangerous dust and greenhouse gases.

³ My public comments on the original Draft SEIS are available online here: https://www.academia.edu/102314523/Comments_on_the_Draft_SEIS_for_Near_Term_Colorado_River_Operations_Jenny_E_Ross.

⁴ My comments on development of post-2026 Colorado River management strategies are available online here: https://www.academia.edu/106768974/Comments_on_Development_of_Post_2026_Colorado_River_Management_Strategies. Those comments are also available on Reclamation's website, beginning on page 142 of the following document: http://www.usbr.gov/ColoradoRiverBasin/documents/post2026/scoping/Organizations_L-S_508.pdf.

As all Colorado River stakeholders understand, a chronic and major imbalance between water supply and demand continues to exist on the river, and the situation is unsustainable. Although favorable hydrology during the winter of 2022-2023 temporarily relieved some pressure to implement immediate and enormous reductions in water use, there remains an undeniable need for substantial cuts in water consumption both now and in the future. However, reductions in Colorado River water deliveries to Salton Trough water rights holders—IID, CVWD, and Mexico⁵—will decrease the amount of water flowing into the central Salton Basin that is necessary for sustaining the Salton Sea. Consequently, such cutbacks will worsen the dreadful ecological, environmental, public health, and socioeconomic consequences that are already ongoing at the Salton Sea because of the QSA water transfers, and that have been inadequately addressed for many years by the responsible state and federal government agencies.

In May 2023, the three U.S. states in the Colorado River's Lower Division submitted a joint proposal (the Lower Division Proposal) to USBR for addressing the river's ongoing water-supply deficit during 2024-2026, and Reclamation has now designated the Lower Division Proposal as the agency's Proposed Action in the Revised Draft SEIS. But the magnitude of the decrease in Salton Sea inflows that will result from the Proposed Action is currently uncertain, because the specific details regarding reduced water use by IID and CVWD are still being negotiated and are not included in the Revised Draft SEIS. However, on December 1, 2023 IID announced it has proposed to USBR that, in order to support sustainability of the Colorado River system during 2024-2026, IID will plan to conserve an extra 800,000 acre-feet of Colorado River water it would otherwise be legally entitled to use. This very large quantity of conserved water will be in addition to the amount of water IID conserves and transfers annually pursuant to the QSA, which is approximately 500,000 acre-feet per year. But there is still no public information regarding precisely how the Imperial Valley agricultural community will conserve an additional 800,000 acre-feet of water during 2024-2026, and those key unknown details will determine the magnitude of the consequent decrease in Salton Sea inflows. Some potential measures for conserving water will result in much greater reductions in Salton Sea inflows than other measures. Nonetheless, based upon historical information, it appears that the volume of water reaching the lake will decrease by *a minimum of* approximately 267,000 acre-feet during 2024-2026 if 800,000 acre-feet are conserved; and, depending on the specific types of water conservation measures that are implemented in the Imperial Valley, Salton Sea inflows could drop by a much larger amount than that.⁶

Despite the uncertainty regarding the specific magnitude of the decrease in Salton Sea inflows that will occur during 2024-2026, one overarching and critical issue is nonetheless clear: **Any action alternative for managing the Colorado River that reduces water use by Salton Trough rights holders will necessarily accelerate and exacerbate the harmful impacts of freshwater deprivation that are already affecting the Salton Sea, hundreds of wildlife species, the environment, the climate, and the health and socioeconomic well-being of people throughout the surrounding region. The federal government is legally obligated to avert that harm by avoiding or minimizing the foreseeable negative impacts of**

⁵ Although cuts in water deliveries to Mexico are not part of the NEPA process for near-term Colorado River operations, previously Mexico has agreed to reductions when the Lower Basin U.S. states have committed to sustain cuts. Reductions in use of Colorado River water by Mexico will decrease the amount of wastewater currently flowing across the international border into the Salton Sea.

⁶ The figure of 267,000 acre-feet is based on the historically-accurate assumption that there is a 3:1 relationship between irrigation use and Salton Sea inflow—i.e., if three acre-feet of water are used to irrigate a field, one acre-foot will ultimately flow into the Salton Sea. Similarly, for every three acre-feet of water conserved by fallowing, there is a one acre-foot reduction in the amount of Salton Sea inflow. However, some other types of measures that may be used to accomplish water conservation on a more permanent basis than fallowing could cause far greater decreases in the amount of water flowing into the Salton Sea. For example, in some instances there is a 1:1 relationship between the amount of water conserved by lining an earthen canal with concrete and the amount by which Salton Sea inflows are reduced. So, conserving three acre-feet of water by lining a canal could decrease inflows to the lake by three acre-feet. Thus, 267,000 acre-feet is *the minimum decrease* in the volume of Salton Sea inflows that should be expected if IID's water consumption is reduced by 800,000 acre-feet, and it is reasonably foreseeable that the implementation of water conservation measures other than fallowing will result in a much larger decrease in the amount of water flowing into the lake.

federal actions to the greatest feasible extent, in compliance with the National Environmental Policy Act (NEPA),⁷ the NEPA implementing regulations,⁸ and other applicable statutes, regulations, and policies.

Notwithstanding the above facts and legal requirements, the Revised Draft SEIS presents an inadequate discussion of: (a) the significant direct, indirect, cumulative, and disproportionate negative impacts on the Salton Sea, the wildlife reliant on the Salton Sea ecosystem, the environment, the climate, and people throughout the areas adjacent to the lake—including, but not limited to, Tribes and other environmental justice communities—that foreseeably will result if Reclamation proceeds with the Proposed Action or any other action alternative that substantially reduces inflows to the central Salton Basin; (b) alternatives for avoiding the foregoing adverse impacts; and (c) effective mechanisms for minimizing the harmful effects that cannot be avoided.

II. The modeling Reclamation relies upon to draw conclusions about Salton Sea Impacts is not publicly available, adequately explained, or properly validated and justified

The Revised Draft SEIS and its Appendices include extensive explanatory details and supporting documentation regarding the Colorado River modeling relied upon by Reclamation; however, the Revised Draft SEIS does not include comparable information concerning the “Salton Sea Modeling” Reclamation also relies upon. Instead, the modeling used in the Revised Draft SEIS to reach conclusions about Salton Sea Impacts is a black box, the keys to which have been withheld from the public.⁹ That is untenable.

The model used (by Tetra Tech, on behalf of USBR) for the Revised Draft SEIS’s “Salton Sea Modeling” is identified as a modified version of the Salton Sea Accounting Model (SSAM), which was originally developed by Reclamation more than two decades ago—prior to the QSA, and before the worst drought in at least 1200 years desiccated the Western U.S. and northwest Mexico and provided troubling insight into the potentially devastating future impacts of climate change throughout the Colorado River basin. Since 2000 that model has been repeatedly altered by Tetra Tech, and possibly others, and utilized for a variety of purposes, including a number of purposes related to the Salton Sea Management Program (SSMP). The modified versions of the model used for SSMP purposes have not been publicly disclosed, and they do not appear to have been properly validated for the specific functions involved, or peer-reviewed by independent experts. Now it appears that the SSAM has again been modified by Tetra Tech, and is being used to perform more purposes for which it has apparently not been validated. Again the modified model is not publicly available, and it is impossible for independent experts or other members of the public to evaluate its validity or the soundness of its use. The details of the assumptions and hypothetical scenarios utilized to perform the “Salton Sea Modeling” for the Revised Draft SEIS also have not been publicly disclosed; therefore, independent experts and other members of the public cannot assess their appropriateness and accuracy either. Based on this nonpublic modeling, the Revised Draft SEIS makes important findings about Salton Sea Impacts (or the alleged lack thereof) that are unjustified, inappropriate, erroneous, and even illegitimate.

It is indefensible for the Revised Draft SEIS to rely on undisclosed and potentially unsound modeling to reach consequential conclusions, and to expect the public simply to accept those conclusions at face value.

⁷ Pub. L. 91–190, 42 U.S.C. 4321 et seq.

⁸ National Environmental Policy Act Implementing Regulations (May 20, 2022). 40 CFR Parts 1500-1508.

⁹ I am not ascribing motives to Reclamation or Tetra Tech personnel; I am simply stating a fact.

III. The discussion of Salton Sea Impacts in the Revised Draft SEIS is inadequate, associated conclusions are unsupported and unreasonable, and suggested mitigation measures are insufficient and will be ineffective

The Revised Draft SEIS does not adequately discuss the significant direct, indirect, cumulative, and disproportionate negative impacts on the Salton Sea, the surrounding environment, the wildlife reliant on the Salton Sea ecosystem, and people throughout the region adjacent to the lake, including but not limited to Tribes and other environmental justice communities, that foreseeably will result if Reclamation proceeds with the Proposed Action or any other action alternative that substantially reduces inflows to the central Salton Basin. Some reasonably foreseeable and significant negative impacts are not mentioned at all in the Revised Draft SEIS, and others are insufficiently and/or inappropriately analyzed. Conclusions drawn in the Revised Draft SEIS regarding adverse impacts related to the Salton Sea are unsupported, inaccurate, and/or improper; and the mitigation measures suggested for addressing the negative effects are inadequate and speculative, and will be ineffective.

III.A. Impacts of Reduced Water Deliveries

In part 3.7 “Water Deliveries,” section 3.7.2 “Environmental Consequences,” the Revised Draft SEIS poses the question, “*Issue 6: How would changes to operational activities affect flows into the Salton Sea?*” The text then states:

...Under the No Action Alternative, there would be no changes to current operational activities that would affect flows to the IID or CVWD. Therefore, the surface water elevation of the Salton Sea could continue to decrease at the current rate. **Under the Proposed Action, there is the possibility that the IID and CVWD could enter into additional system conservation agreements; thus, there could be reduced deliveries, resulting in potentially less inflow to the Salton Sea** from irrigation drainage.¹⁰

Without further explanation or supporting details, the Revised Draft SEIS summarily concludes:

Therefore, the Proposed Action could result in expedited (but not additional) lake bed exposure compared with the No Action Alternative, due to less possible available agricultural runoff. **Lake bed exposure may be greater under the Proposed Action for the next 26 years**, as estimated by the Salton Sea Modeling (Tetra Tech 2023), **but long-term impacts would be the same as under the No Action Alternative.**¹¹

As explained in part II above, the model used for the “Salton Sea Modeling” is not publicly available, and it does not appear to have been properly validated or peer-reviewed. In addition, the details of the assumptions and hypothetical scenarios used to perform the modeling also have not been disclosed to the public and may be unsound. Under these circumstances it is impossible for independent experts or other members of the public to evaluate the appropriateness or accuracy of the modeling, or the legitimacy of the conclusions reached in the Revised Draft SEIS based on the modeling. It is unreasonable for the Revised Draft SEIS to rely on undisclosed and potentially invalid modeling to reach important conclusions, and to expect passive public acquiescence in response to those unsupported findings.

Moreover, even assuming the modeling is technically valid, it is absurd to assert that “the Proposed Action could result in **expedited (but not additional) lake bed exposure** compared with the No Action Alternative. ... **Lake bed exposure may be greater under the Proposed Action for the next 26 years, ... but long-term impacts would be the same as under the No Action Alternative.**” Essentially what is being claimed here is that the ongoing QSA water transfers will eventually kill the Salton Sea, expose most of its lakebed, and cause devastating harm to both wildlife and people anyhow, so overall it doesn’t matter that the Proposed

¹⁰ Revised Draft SEIS, page 3-84, emphasis added.

¹¹ Ibid.

Action will expedite the Salton Sea’s demise, increase the amount of exposed lakebed emitting toxic and carcinogenic dust for the next 26 years, and cause dreadful impacts on people and wildlife during that time. That is an insupportable claim. If Mr. X were to strangle Mr. Y to death and then declare that his action caused no additional harm to Mr. Y because Mr. Y would have died eventually anyhow (as we all will), that assertion would obviously be ludicrous and legally indefensible. The similar assertion in the Revised Draft SEIS is no less ludicrous and indefensible.

- Reducing Salton Sea inflows by at least scores of thousands of acre-feet annually—beyond the extremely large amount by which inflows are already reduced each year because of the QSA water transfers—will negatively affect public health. Dust emitted from the exposed Salton Sea lakebed is uniquely hazardous—far more so than typical desert dust.¹² People in communities adjacent to the Salton Sea are already suffering significant and disproportionate pulmonary illness associated with chronic inhalation of dangerous particulates being emitted from exposed Salton Sea lakebed because of the QSA.¹³ The proximity of disadvantaged populations to the Salton Sea ensures they will be subjected to worsening harm as the Proposed Action causes accelerated decline of the lake, increases exposure of its lakebed, and exacerbates ecosystem deterioration. A recent study determined that “each one-foot drop in lake elevation creates, on average, \$151.5 million in respiratory mortality costs in the Salton Sea counties...”¹⁴ It is reasonably foreseeable that the Proposed Action will cause people in the Salton Sea region to suffer increased respiratory morbidity and mortality related to increased hazardous dust emissions from the exposed lakebed. Is that serious harm somehow rendered insignificant because the QSA water transfers might ultimately cause the same consequences decades from now? Of course not.
- Decreased Salton Sea inflows resulting from the Proposed Action will increase the lake’s salinity and will have other adverse impacts on water quality, thereby jeopardizing the survival of wildlife reliant on the Salton Sea ecosystem. If fish and birds are killed, or entire species are extirpated, as a result of rapid declines of freshwater inflows pursuant to the Proposed Action, is that major harm somehow rendered insignificant because the QSA water transfers could eventually cause the Salton Sea ecosystem to collapse and all the lake’s wildlife to disappear someday anyhow? Of course not.

The claim presented in the Revised Draft SEIS that the harm to be caused by the Proposed Action is not “additional” because it will happen eventually anyhow is specious for another reason as well: The allegedly inevitable long-term harm will not actually occur if government officials comply with their legal obligations. Restoration of the Salton Sea is legally required by statute, and that legislation was specifically intended to prevent significant future harm to both wildlife and people resulting from the QSA water transfers. The Salton Sea Restoration Act¹⁵ mandates action to restore the habitats necessary for permanently supporting the numbers and variety of birds and other wildlife originally reliant on the Salton Sea ecosystem, and to protect people from various types of injurious consequences that will result if the lake continues to shrivel from

¹² For example, recent research concluded that dust from exposed Salton Sea lakebed causes lung inflammation that is distinct from the pulmonary effects of exposure to typical desert dust. (Biddle, T.A. et al. (2022). Aerosolized aqueous dust extracts collected near a drying lake trigger acute neutrophilic pulmonary inflammation reminiscent of microbial innate immune ligands. *Science of the Total Environment* 858(3):159882. <https://doi.org/10.1016/j.scitotenv.2022.159882>.)

¹³ For example, a recent study found the childhood asthma rate for the portion of Imperial County closest to the Salton Sea’s exposed lakebed was 22.4% in comparison to a nationwide prevalence of 8.4%. (Farzan, S.F. et al. (2019). Assessment of Respiratory Health Symptoms and Asthma in Children Near a Drying Saline Lake. *Int. J. Env. Res. Public Health*, 16(20):3828. <https://doi.org/10.3390/ijerph16203828>.) The same study determined that chronic pulmonary symptoms in children not diagnosed with asthma are also high in the Salton Sea region. Notably, emergency room visits for children ages 5-17 years with asthma in Imperial County are more than double the California statewide average. (Data: <https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHIB/CPE/Pages/CaliforniaBreathingCountyAsthmaProfiles.aspx>.)

¹⁴ Jones, B.A. and Fleck, J. (2020). Shrinking lakes, air pollution, and human health: Evidence from California’s Salton Sea. *Science of the Total Environment* 712(22):136490. <http://dx.doi.org/10.1016/j.scitotenv.2019.136490>.

¹⁵ California Fish and Game Code Chapter 13, Sections 2930 et seq.

freshwater deprivation, more of its lakebed is exposed, and its ecosystem collapses. If government officials fully satisfy their legal responsibilities, serious future harm to wildlife and people that would otherwise ultimately occur in the coming decades because of the QSA will actually not materialize.

The Proposed Action will cause significant harm to people and wildlife before full long-term restoration of the Salton Sea can feasibly be implemented, and some of the harmful consequences of the Proposed Action will be irreversible even if comprehensive long-term restoration of the Salton Sea ultimately occurs. Many reasonably foreseeable negative effects of the Proposed Action—including but not limited to major emissions of hazardous particulates and greenhouse gases from exposed lakebed, die-offs of fish and birds, and human morbidity and mortality—constitute irremediable harm that cannot be retroactively cured by subsequent restoration actions. Thus, if the Proposed Action is to be implemented, Reclamation must ensure that all harmful impacts are prevented or carefully minimized to the greatest feasible extent. But instead the Revised Draft SEIS merely shrugs off the harm as if it is utterly unimportant. That is untenable.

III.B. Effects on Water Quality

In part 3.8 “Water Quality,” section 3.8.2 “Environmental Consequences,” the Revised Draft SEIS fails to present an adequate analysis of the impacts of the Proposed Action on important water quality parameters in the Salton Sea, associated wetlands, and tributaries—including agricultural drains and rivers carrying irrigation drainwater. The Revised Draft SEIS also fails to consider the negative impacts on wildlife and people that could foreseeably result from adverse effects on water quality. Moreover, the Revised Draft SEIS unjustifiably dismisses all water quality impacts as *de minimis* effects that do not qualify as “Cumulative Impacts” of concern, by repeatedly asserting inaccurately that proposed habitat revitalization and dust mitigation projects that have not even been fully planned, approved, and funded—let alone constructed and fully implemented to successful operational status—will “continue to improve conditions” at the deteriorating Salton Sea. These problems are discussed further in the sub-sections below.

III.B.1. Changes in Salinity

The Revised Draft SEIS poses the question, “*Issue 1: How would elevation protection and low-flow conditions affect salinity within each reach?*” The text then acknowledges, “...**there would be some effects on the Salton Sea’s salinity** from the implementation of drought-reduction scenarios under the Proposed Action; **there would be an increase in salinity when compared with the No Action Alternative...**”¹⁶ But the specific effects on salinity and the foreseeable adverse impacts of those effects are not adequately or appropriately elucidated in the Revised Draft SEIS.

Figure 3-32 in the Revised Draft SEIS presents modeling results concerning the increase in salinity of the Salton Sea, but the model used and the details of the modeling analysis are not publicly available. It appears the model has not been validated for the specific functions it is being used to perform, and has not been properly peer-reviewed. It is impossible for independent experts and other members of the public to evaluate the soundness of the undisclosed modeling, the suitability and accuracy of its assumptions, or the legitimacy of the conclusions Reclamation has drawn from it.

In addition, the Revised Draft SEIS fails even to mention the impacts of the Proposed Action on salinity in other crucial components of the Salton Sea ecosystem,¹⁷ such as wetlands, irrigation drains, and rivers that contain Colorado River wastewater and are relied upon by wildlife.

¹⁶ Revised Draft SEIS, page 3-107, emphasis added.

¹⁷ California’s Salton Sea Restoration Act defines the phrase “the Salton Sea ecosystem”: “For the purpose of the restoration plan, the Salton Sea ecosystem shall include, but is not limited to, the Salton Sea, the agricultural lands surrounding the Salton Sea, and the tributaries and drains within the Imperial and Coachella Valleys that deliver water to the Salton Sea.” (California Fish & Game Code Section 2931(d).)

Moreover, the Revised Draft SEIS goes on to make the following unwarranted and inaccurate claim: **“The implementation of the US Army Corps of Engineers EA for the implementation of the 10-Year Plan’s projects for aquatic habitat restoration would continue to improve conditions, including decreased salinity concentrations over time.”**¹⁸ This groundless statement—which is unjustifiably repeated throughout the discussion of Salton Sea Impacts in the Revised Draft SEIS—is based on false assumptions.

Despite the fact that a draft 10-Year Plan was first issued by the State of California’s Salton Sea Management Program in 2017, and notwithstanding the existence of legal requirements that mandated the SSMP must meet specific habitat restoration and dust suppression milestones annually from 2018 through 2028 during the life of the 10-Year Plan,¹⁹ as of the beginning of December 2023:

- A final Environmental Assessment (EA) for the 10-Year Plan has not been publicly released.²⁰
- There is no publicly available, final 10-Year Plan presenting approved projects.
- Annual, legally-required acreage milestones for completion of habitat restoration and dust suppression measures have not been achieved by the SSMP in any year from 2018 through 2023.
- No habitat project on the exposed Salton Sea lakebed that is part of the SSMP’s 10-Year Plan has actually begun operating.
- Ecological and environmental conditions at the Salton Sea have continued to deteriorate, causing ongoing and worsening harm to both wildlife and people.

It has not even been publicly disclosed which specific proposed “projects for aquatic habitat restoration” will eventually be included in the final 10-Year Plan; and it is entirely uncertain which of those projects will actually be constructed, what their final features will be, or when they will become fully operational. Funding for proposed projects has not been obtained;²¹ the water supply required for proper functioning of the projects may be in jeopardy because of drought, climate aridification, and worsening constraints on the availability of Colorado River water; and other necessary preconditions for implementing proposed projects have not been satisfied. Even assuming some of the projects suggested in the draft 10-Year Plan are eventually funded and constructed, it is also not known whether they are capable of operating successfully to achieve their intended goals and to avert significant harm.

¹⁸ Revised Draft SEIS, pages 3-107 to 3-108, emphasis added.

¹⁹ A draft of the “Salton Sea Management Program Phase 1: 10-Year Plan” was issued in March 2017. Legal requirements for implementation of the 10-Year Plan were established when a stipulated order, WRO 2017-0134, was adopted at a meeting of the California State Water Resources Control Board on November 7, 2017. WRO 2017-0134 required the SSMP to begin implementing habitat and dust control measures in 2018, and to complete a minimum total of 29,800 acres of such measures by the end of 2028. (WRO 2017-0134, Exhibit A, paragraph 24.) Moreover, WRO 2017-0134 mandated that “no less than 50%” of the total required acreage “shall provide habitat benefits for fish and wildlife that depend on the Salton Sea ecosystem,” and further clarified that “Projects that provide habitat benefits for fish and wildlife do not include dust control projects that involve surface roughening, vegetation enhancement and surface stabilization.” (WRO 2017-0134, Exhibit A, paragraph 25.) In addition, WRO 2017-0134 also required that the SSMP must satisfy specific acreage requirements for the amount of habitat and dust suppression measures to be implemented *each year* from 2018 through 2028. But the SSMP has not complied with those acreage requirements in any year. Finally, WRO 2017-0134 also explicitly stated that the total required area of 29,800 acres of habitat and dust suppression measures was in addition to all SSMP projects already started as of 2017. The projects already begun included the “Species Conservation Habitat” project (SCH) located in the vicinity of the New River delta, which was planned prior to issuance of WRO 2017-0134. At the beginning of December 2023, the SCH project is still not operating, and no habitat projects have been constructed pursuant to the 10-Year Plan as required by WRO 2017-0134.

²⁰ My comments on the June 2022 “Draft Environmental Assessment: Salton Sea Management Program Phase 1: 10-Year Plan” are available online here: https://www.academia.edu/109609318/Comments_on_the_2022_Draft_Environmental_Assessment_for_the_SSMP_Phase_1_10_Year_Plan

²¹ To make matters worse, California’s 2023-24 budget package decreased state funding for Salton Sea programs by \$119 million for 2022-23 and 2023-24. See: <https://lao.ca.gov/Publications/Report/4807>.

Thus it is false, and even nonsensical, for the Revised Draft SEIS to assert that “implementation of the US Army Corps of Engineers EA for the implementation of the 10-Year Plan’s projects for aquatic habitat restoration **would continue to improve conditions...**”²² The reality is that conditions at the Salton Sea have been dangerously deteriorating for many years as a result of the QSA water transfers; they have not been improving as the Revised Draft SEIS alleges. In addition, the details and effects of the draft 10-Year Plan’s proposed projects remain highly uncertain, and any benefits of such projects are extremely unlikely to materialize during the period relevant to the Revised Draft SEIS and the Proposed Action. To presume that the potential 10-Year Plan projects will counteract the negative impacts of the Proposed Action is unjustifiable.²³

During 2024-2026—and in fact for a total of 26 years, according to the Revised Draft SEIS—the Proposed Action will result in adverse impacts on salinity of the Salton Sea that would not otherwise occur in a No Action scenario. It is also likely, although Reclamation does not mention this, that there will be long-lasting negative effects on the salinity of other components of the Salton Sea ecosystem, including wetlands, irrigation drains, and rivers carrying Colorado River wastewater. These adverse impacts are likely to cause significant harm to the aquatic food web and to wildlife reliant on the Salton Sea ecosystem. By any reasonable definition of “additional” and “cumulative,” these foreseeable negative effects of the Proposed Action are additional and cumulative. They must be carefully analyzed by USBR, and avoided or mitigated to the greatest feasible extent.

III.B.2. Changes in Temperature

The Revised Draft SEIS inquires, “**Issue 2: How would elevation protection and low-flow conditions affect the temperature within each reach?**” The text then presents no discussion of the Proposed Action’s impacts on temperature of the Salton Sea, associated wetlands, or irrigation drains and other tributaries carrying Colorado River wastewater that are used by wildlife reliant on the Salton Sea ecosystem. Nonetheless, it asserts again, “**The implementation of the US Army Corps of Engineers’ EA for the implementation of the 10-Year Plan’s projects for aquatic habitat restoration would continue to improve conditions.**”²⁴ As explained above, this claim is groundless and unreasonable.

III.B.3. Changes in Sedimentation

The Revised Draft SEIS asks, “**Issue 3: How would elevation protection and low-flow conditions affect the sediment within each reach?**” In responding to this question, the text does not discuss whether the Proposed Action could cause any changes in sedimentation in the Salton Sea, associated wetlands, or irrigation drains and other tributaries carrying Colorado River wastewater that are used by wildlife reliant on the Salton Sea ecosystem. Instead, the Revised Draft SEIS simply asserts the same unwarranted and inaccurate conclusion stated previously: “**The implementation of the US Army Corps of Engineers’ EA for the implementation of the 10-Year Plan’s projects for aquatic habitat restoration would continue to improve conditions.**”²⁵

III.B.4. Changes in Dissolved Oxygen

The Revised Draft SEIS poses the question, “**Issue 4: How would elevation protection and low-flow conditions affect DO within each reach?**” But the text fails to assess the impacts of the Proposed Action on

²² Revised Draft SEIS, pages 3-107 to 3-108, emphasis added.

²³ The brief discussion in the Water Quality section of the Revised Draft SEIS regarding salinity issues at the Salton Sea also includes the following peculiar statement: “The Salton Sea is a high-salinity body of water where *some ponds have higher salinity than ocean water.*” (Revised Draft SEIS, page 3-93, emphasis added.) The Salton Sea is an enormous lake; it is not composed of separate “ponds” with varying salinity. It appears that the personnel responsible for evaluating Salton Sea issues in the Revised Draft SEIS may not have had a sufficient understanding of the lake, its ecosystem, its hydrology, and related matters to properly perform the necessary analyses.

²⁴ Revised Draft SEIS, page 3-116, emphasis added.

²⁵ Revised Draft SEIS, page 3-122, emphasis added.

dissolved oxygen in the Salton Sea, associated wetlands, or irrigation drains and other tributaries carrying Colorado River wastewater that are used by wildlife reliant on the Salton Sea ecosystem. It is reasonably foreseeable that levels of dissolved oxygen in the lake, wetlands, and streams (including irrigation drains) could decline because of reduced freshwater inflows. Nonetheless, the Revised Draft SEIS does not evaluate that issue, and instead indefensibly asserts the same unfounded and erroneous claim stated previously: **“The implementation of the US Army Corps of Engineers’ EA for the implementation of the 10-Year Plan’s projects for aquatic habitat restoration would continue to improve conditions.”**²⁶

III.B.5. Changes in Nutrients and Algae

The Revised Draft SEIS asks, **“Issue 5: How would elevation protection and low-flow conditions affect nutrients and algae within each reach?”** In responding to this question, the text does not evaluate the impacts of the Proposed Action on nutrients and algae in the Salton Sea, associated wetlands, or irrigation drains and other tributaries carrying Colorado River wastewater that are used by wildlife. It is reasonably foreseeable that the Proposed Action could affect nutrients and algae in various components of the Salton Sea ecosystem, could increase the occurrence of harmful algae blooms and/or deoxygenation events associated with algae blooms, and could cause associated harm to wildlife and people. Yet again the Revised Draft SEIS does not even mention these issues, and instead repeats the same unjustified and inaccurate claim asserted previously: **“The implementation of the US Army Corps of Engineers’ EA for the implementation of the 10-Year Plan’s projects for aquatic habitat restoration would continue to improve conditions.”**²⁷

III.B.6. Changes in Metals and Other Contaminants

The Revised Draft SEIS inquires, **“Issue 6: How would elevation protection and low-flow conditions affect metals within each reach?”** But the text then fails to consider the impacts of the Proposed Action on metals and other potentially dangerous contaminants (including, but not limited to, selenium, arsenic, PCBs, and pesticide residues) known to be present in the Salton Sea and its sediments, as well as in tributaries carrying agricultural drainwater and other Colorado River wastewater, in irrigation drains that flow directly into the Salton Sea, and in associated wetlands used by wildlife reliant on the Salton Sea ecosystem. Nonetheless, the text indefensibly asserts the same unsupported and erroneous claim used throughout the Revised Draft SEIS to sidestep discussing the need to avoid or mitigate adverse impacts of the Proposed Action: **“The implementation of the US Army Corps of Engineers’ EA for the implementation of the 10-Year Plan’s projects for aquatic habitat restoration would continue to improve conditions.”**²⁸

III.C. Effects on Air Quality

III.C.1. Exposed Lakebed and Public Health

In part 3.9 “Air Quality,” the Revised Draft SEIS acknowledges that because the QSA water transfers are causing the Salton Sea’s water level to drop, **“dust is already a concern for the Salton Sea area, and additional dust would affect local air quality and public health.”**²⁹ But the text then offers an inappropriate, unfounded, and unreasonable response to the question, **“How would changing flow characteristics affect the potential exposed shoreline and fugitive dust?”** The Revised Draft SEIS states:

Under the No Action Alternative, there would be no changes to current operational activities that would affect flows to the IID or CVWD. Therefore, the Salton Sea’s current shoreline area could continue to

²⁶ Revised Draft SEIS, page 3-123, emphasis added.

²⁷ Revised Draft SEIS, page 3-125, emphasis added.

²⁸ Revised Draft SEIS, page 3-123, emphasis added.

²⁹ Revised Draft SEIS, page 3-128, emphasis added.

decrease at the current rate. **Projected exposed playa at the Salton Sea for both the Salton Sea Restoration and Renewable Energy Initiative (SSRREI) and Perimeter Lake alternatives show exposed playa will continue to increase as elevation decreases through 2047 and then stabilize.** Total exposed playa in all alternatives is projected to approach 100,000 acres by around 2047 and stabilize consistent with the elevation results. The mean elevation in 2018 was 20,549; in 2047, the mean elevation is projected to be 100,303 acres. **The SSRREI alternative gradually converts some newly exposed playa into wetland habitat. The Perimeter Lake alternative covers some of the exposed playa when the lake levees are completed. Both alternatives have similar final exposed playa areas at build-out, and are similar to the No Action Alternative in terms of total playa area that may need to be managed for air quality impacts.**³⁰

Use of the foregoing statements relating to the SSRREI and Perimeter Lake concepts indicates that the personnel responsible for preparing the portion of the Revised Draft SEIS related to Salton Sea issues lacked the necessary knowledge to analyze the pertinent matters appropriately. The SSRREI was proposed by IID and Imperial County in 2015 and was never acted upon. The “Perimeter Lake” concept was originally proposed many years ago, and never advanced toward implementation. Over the years various revised iterations of the “Perimeter Lake” concept, and some elements of the SSRREI, have been suggested repeatedly as long-term restoration options, but none of the proposals has been approved as a final plan to be constructed. Multiple substantially modified versions of the “Perimeter Lake” concept are currently being considered, along with numerous other possible long-term restoration alternatives, in the “Imperial Streams Salton Sea and Tributaries Feasibility Study” currently being conducted by the Army Corps of Engineers. No details of the current status of that study are publicly available. At this point it is not clear whether *any* comprehensive long-term restoration plan for the Salton Sea will ultimately be approved, funded, constructed, and operated successfully. It is misguided and unreasonable for the Revised Draft SEIS to present obsolete, unjustified, and irrelevant information relating to superseded long-term restoration concepts in order to make unwarranted claims about the magnitude of exposed Salton Sea lakebed and hazardous dust emissions that could result from the No Action Alternative and Proposed Action for near-term Colorado River operations.³¹

In a subsequent paragraph the Revised Draft SEIS also states in its “Air Quality” section:

Based on modeling, the Salton Sea water surface elevation will decline more rapidly under the Proposed Action than under the No Action Alternative due to additional consumptive uses on the playa (either shallow water habitat or perimeter lake). While the water surface elevation of the habitat and perimeter lake are stabilized under the alternatives, the Salton Sea water surface elevation is projected to decline by about 4 feet, as compared with under the No Action Alternative, by 2047. Projected playa exposure may be greater under the Proposed Action, but by 2047, it is projected to be the same as under the No Action Alternative.³²

The above claims about the amount of exposed lakebed, and the assertion that by 2047 it will be the same as for the No Action Alternative, are unsupported, misguided, and unreasonable. No citations to publicly available and properly validated modeling are offered in support of these assertions. Moreover, again it appears that outdated long-term restoration concepts are inappropriately being discussed. It is not even clear whether the “Proposed Action” referenced in the first sentence is Reclamation’s Proposed Action in the Revised Draft SEIS or some other “Proposed Action” in an obsolete and immaterial document related to previously-proposed concepts for long-term Salton Sea restoration. Similarly, it is not clear whether the “modeling” mentioned is new work done specifically for the Revised Draft SEIS, or old work done for superseded restoration concepts or for some other purpose unrelated to the Revised Draft SEIS. It appears

³⁰ Revised Draft SEIS, page 3-132, emphasis added.

³¹ The quoted text above also presents unintelligible information (e.g., it expresses current and future lake elevations as acreage figures, which makes no sense).

³² Revised Draft SEIS, page 3-133.

that irrelevant claims concerning obsolete restoration concepts are improperly being referenced and relied upon in the Revised Draft SEIS.

Under the heading “Cumulative Effects,” the Revised Draft SEIS then asserts that “**no additive cumulative effects would occur on air quality** due to the proposed management plan evaluated in the Salton Sea 10-Year Plan or the environmental assessment for the implementation of the 10-Year Plan’s projects.”³³ Again, this statement is unwarranted, and is based on false assumptions. As explained earlier, despite the fact that a draft 10-Year Plan was first issued by the Salton Sea Management Program in 2017, and notwithstanding the existence of legal requirements mandating that annual habitat restoration and dust suppression milestones must be achieved by the SSMP each year from 2018 through 2028 during the life of the 10-Year Plan, as of December 2023 there is no publicly-available final EA for the 10-Year Plan; there is still no final, approved, and funded 10-Year Plan; the required milestones have not been achieved in any year; and air quality in the Salton Sea region continues to deteriorate harmfully as increasing areas of exposed lakebed emit hazardous particulates. It has not even been publicly disclosed which proposed projects will be included in the final 10-Year Plan; and it is entirely uncertain which projects will actually be implemented in the future, or when such implementation will occur. The funding for proposed projects has not been obtained, the water supply required for their operation is not assured, and other necessary preconditions for constructing proposed projects have not been satisfied. Even if some projects are ultimately constructed, it is unknown whether they can operate successfully as intended. Based on the extremely slow pace of work done so far by the SSMP, with not a single habitat project proposed in the 2017 draft 10-Year Plan actually operating at the beginning of December 2023, it is exceedingly unrealistic and completely unjustified to claim that any 10-Year Plan project will be fully functional and will prevent cumulative effects on air quality during the period relevant to the Revised Draft SEIS.³⁴ It is unreasonable for the Revised Draft SEIS to rely on unsupported speculation; and it is improper for Reclamation to use that unfounded speculation to draw the inaccurate conclusion that the Proposed Action will cause no cumulative negative effects on air quality and therefore, implicitly, will cause no harm to public health or other adverse impacts from impaired air quality.

III.C.2. Greenhouse Gas Emissions

In the “Air Quality” section of the Revised Draft SEIS the text correctly states that “impact indicators” for air quality include greenhouse gas (GHG) emissions. However, the only GHG emissions discussed in the text are ones “from alternative power sources (coal and natural gas) due to reduced hydropower.”³⁵ In contravention of applicable legal requirements, significant GHG emissions resulting from exposure of the Salton Sea’s lakebed and deterioration of its ecosystem due to freshwater deprivation are not considered at all in the Revised Draft SEIS, nor are the major social costs of those GHG emissions.³⁶ Federal guidance applicable to NEPA analyses explicitly requires that agencies “must disclose and consider...the extent to which a proposed action and its reasonable alternatives (including the no action alternative) would result in reasonably foreseeable GHG emissions that contribute to climate change.”³⁷ Moreover, applicable federal guidance states that an agency’s NEPA analysis should “quantify a proposed action’s projected GHG

³³ Revised Draft SEIS, page 3-133, emphasis added.

³⁴ It is conceivable that instead of indicating additive or cumulative impacts on air quality will be avoided or remedied by the 10-Year Plan, the quoted text may have been attempting to say that the 10-Year Plan’s projects will not *cause* additive or cumulative effects on air quality. If that was the intended meaning, the sentence was very poorly written. Moreover, to evaluate the potential impacts of the 10-Year Plan is not properly within the scope of the Revised Draft SEIS.

³⁵ Revised Draft SEIS, page 3-131.

³⁶ See the discussion of these issues in part III.C of my comments on the original Draft SEIS, and refer to the related references cited therein for additional information:

https://www.academia.edu/102314523/Comments_on_the_Draft_SEIS_for_Near_Term_Colorado_River_Operations_Jenny_E_Ross

³⁷ National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change (2023). Council on Environmental Quality, Executive Office of the President, January 4, 2023, Section IV.

emissions...for the expected lifetime of the action,” and “provide additional context for GHG emissions, including through the use of the best available social cost of GHG (SC-GHG) estimates, to translate climate impacts into the more accessible metric of dollars, allow decision makers and the public to make comparisons, help evaluate the significance of an action's climate change effects, and better understand the tradeoffs associated with an action and its alternatives...”³⁸ The Revised Draft SEIS fails to include any such analyses for the significant biogenic GHG emissions, and their large social costs, that will foreseeably result from the effects of the Proposed Action and the No Action Alternative on the Salton Sea and its ecosystem.

Nonetheless, the Revised Draft SEIS inaccurately indicates—using the same inappropriate boilerplate language employed repeatedly throughout the text to shrug off the possibility of “Cumulative Effects” on the Salton Sea, its wildlife, the environment, and people throughout the adjacent region—that no adverse impacts related to GHG emissions will occur at the Salton Sea “due to the proposed management plan evaluated in the Salton Sea 10-Year Plan or the environmental assessment for the implementation of the 10-Year Plan’s projects.”³⁹ This claim is unsupported and erroneous. Not only will the proposed 10-Year Plan projects fail to counteract the GHG emissions from exposed lakebed and the deteriorating Salton Sea that foreseeably could result from the Revised Draft SEIS’s Proposed Action, the 10-Year Plan’s projects themselves could cause ongoing releases of significant quantities of GHGs,⁴⁰ and those unmitigated GHGs would also result in large social costs.

III.D. Effects on Visual Resources

In part 3.10 “Visual Resources,” the Revised Draft SEIS poses the question, “*Issue 4: How would management of water availability for the Lower Division States affect the landscape character?*” The text acknowledges that “potential changes to the shoreline of the Salton Sea, through adjustments in water management, would be visible from the Salton Sea State Recreation Area, Salton Sea National Wildlife Refuge, multiple California state routes (State Routes 78, 86, and 111), and adjacent residential areas.”⁴¹ The Revised Draft SEIS admits, “Based on the expedited [sic] exposure of the Salton Sea lake bed under the Proposed Action, resulting in the diminishing influence of water on adjacent landscapes, **greater indirect impacts on the landscape character adjacent to the Salton Sea during the planning period are anticipated compared with under the No Action Alternative.**”⁴²

However, the Revised Draft SEIS goes on to conclude without explanation—and does so based on modeling that is not publicly disclosed and does not appear to have been properly validated or peer-reviewed—that “**The long-term impacts would become the same between the No Action Alternative**

³⁸ Id., Section II.

³⁹ On page 3-136 the Revised Draft SEIS states in relevant part, “No cumulative effects would occur on power generation and GHG emissions due to the proposed management plan evaluated in the Salton Sea 10-Year Plan or the environmental assessment for the implementation of the 10-Year Plan’s projects.” It is conceivable that instead of indicating cumulative GHG emissions at the Salton Sea will be avoided or remedied by the 10-Year Plan, the quoted text may have been attempting to say that the 10-Year Plan will not have cumulative effects on GHG emissions related to power generation. If that was the intended meaning, then the sentence was not well written. Moreover, to evaluate the potential impacts of the 10-Year Plan is not properly within the scope of the Revised Draft SEIS.

⁴⁰ See the following peer-reviewed report and the references cited therein: Ross, J.E. (2022). Potential Major Greenhouse Gas Emissions from Proposed Salton Sea Long-Range Plans. Report submitted to the California Natural Resources Agency. January 27, 2022. 14 pages. <https://doi.org/10.13140/RG.2.2.36775.62884>. Also see that report’s Supplementary Information, explaining the possible magnitude of the GHG emissions that may result from implementation of proposed in-basin plans for the Salton Sea that leave vast areas of lakebed exposed and include other components that are potentially large sources of GHG emissions. <https://doi.org/10.13140/RG.2.2.10089.36964>.

⁴¹ Revised Draft SEIS, page 3-139.

⁴² Revised Draft SEIS, page 3-146, emphasis added.

and Proposed Action.”⁴³ It is impossible for independent experts or other members of the public to evaluate the soundness of the modeling or the accuracy of the conclusions drawn from it. It is unreasonable for the Revised Draft SEIS to rely on undisclosed and possibly invalid modeling to reach consequential conclusions about adverse impacts in the Salton Sea region attributable to the Proposed Action.

In addition, under the heading “Cumulative Effects” the Revised Draft SEIS states:

The Salton Sea Management Program’s 10-Year Plan identifies a series of aquatic habitat and dust suppression projects to improve conditions around the Salton Sea. The US Army Corps of Engineers recently completed an EA for the implementation of these projects, which would result in long-term beneficial impacts on the area’s scenic quality under all action alternatives. **Combined with either the No Action Alternative or the Proposed Action under this SEIS, the implementation of the 10-Year Plan’s aquatic habitat and dust suppression projects would result in countervailing cumulative effects that temper the impacts on scenic quality from additional exposure of the Salton Sea lake bed.**⁴⁴

But, as explained earlier, there is no publicly-available, final, approved 10-Year Plan; nor is there a publicly-available, final EA for the 10-Year Plan. It remains unclear which—if any—projects proposed in the draft 10-Year Plan will actually be funded, constructed, and provided with the necessary water supply to function as intended; and it is uncertain which—if any—proposed projects will become fully operational and will operate successfully during the period relevant to the Revised Draft SEIS and Proposed Action. Based on the extremely slow pace of work done so far by the Salton Sea Management Program, with not a single habitat project proposed in the 2017 draft 10-Year Plan actually operating at the beginning of December 2023, it appears exceedingly unrealistic to claim that any 10-Year Plan project will be fully functional and will yield net scenic value (or any other significant benefits) in the period 2024-2026. In addition, dust suppression projects implemented by the Salton Sea Management Program impair or destroy scenic values at the Salton Sea rather than enhancing them—as many residents of the Salton Sea area have repeatedly complained to the SSMP at public meetings. Therefore, rather than having “countervailing cumulative effects that temper the impacts on scenic quality from additional exposure of the Salton Sea lakebed” as asserted in the Revised Draft SEIS, dust control measures included in the 10-Year Plan will further undermine already-impaired scenic quality and will continue to do so throughout the period relevant to the Revised Draft SEIS.

Consequently, it is reasonably foreseeable that as a result of the Proposed Action there will be significant negative and unmitigated effects on scenic values in the Salton Sea region, as well as related economic impacts, including but not limited to impaired property values, decreased tourism and recreation, and lower associated commercial activity.

III.E. Effects on Cultural Resources

The Revised Draft SEIS explains that, for purposes of its analysis, cultural resources “include historic and prehistoric buildings, structures, sites, and objects, including Indian sacred sites and traditional cultural properties.”⁴⁵ There are many known “historic and prehistoric... structures, sites, and objects, including... sacred sites and traditional cultural properties” of the Desert Cahuilla Indians in the Salton Sea region. In addition, many relevant locations have not been surveyed for the presence of such resources but may contain them. The Revised Draft SEIS presents an inadequate analysis of potential adverse impacts on such cultural resources at the Salton Sea, and in adjoining and adjacent areas, that could result from the Proposed Action.

The Desert Cahuilla Indians have lived in the northern Salton Trough for many thousands of years, and throughout that time have relied upon a variety of traditional cultural properties and other cultural resources in the central Salton Basin, including but not limited to: large lakes; their tributaries, shorelines, and

⁴³ Ibid.

⁴⁴ Revised Draft SEIS, pages 3-147 to 3-148, emphasis added.

⁴⁵ Revised Draft SEIS, page 3-148.

wetlands; associated wildlife, such as fish and birds; and the area’s groundwater and springs. The Desert Cahuilla Indians also created and utilized culturally important sites, structures, and objects (e.g., fish traps, ceramic objects, projectile points, and walk-in wells) for traditional Tribal activities in the Salton Basin related to the foregoing cultural resources.

In particular, the traditional territory and the reservation lands of the Torres Martinez Desert Cahuilla Indians directly adjoin the Salton Sea and its increasingly exposed lakebed; and they also include regions of the lake itself, as well as areas that were within the lake but are now part of the exposed lakebed because of the QSA water transfers. Hazardous dust blowing off of the Salton Sea’s increasingly exposed lakebed, toxic algae blooms in the lake and associated tributaries and wetlands, noxious fumes emanating from the lake and its marshes as the ecosystem collapses from freshwater deprivation, and the death and disappearance of fish and birds because of the lake’s declining health all constitute significant negative impacts on the cultural resources of the Torres Martinez Desert Cahuilla Indians. The resources being harmed “(a) are rooted in that community’s history, and (b) are important in maintaining the continuing cultural identity of the community.”⁴⁶ It is reasonably foreseeable that injurious effects on the traditional cultural properties and cultural resources of the Tribe will worsen if the Proposed Action is implemented. The Revised Draft SEIS should have evaluated these issues, but did not.⁴⁷

The Revised Draft SEIS admits that some areas relevant to potential impacts of the Proposed Action on cultural resources, including but not limited to archaeological resources, have not previously been surveyed for the presence of such resources. Moreover, the text acknowledges that “the resource potential of the dry lake bed is unknown because no subsurface investigations have been done (US Army Corps of Engineers 2022).”⁴⁸ Nonetheless, the Revised Draft SEIS asserts the conclusory finding that “No additional impacts on [cultural or archaeological] resources at the Salton Sea would occur under either alternative.”⁴⁹ This claim is unsupported and inappropriate.

III.F. Effects on Paleontological Resources

In part 3.12 “Paleontological Resources,” the Revised Draft SEIS correctly states that “a relatively complete geologic record of fossil-bearing sediment has been deposited” in the northern Salton Trough during the past 7 million years, and that “[p]aleontological remains are widespread and very diverse.” While the Revised Draft SEIS acknowledges “[t]here is the potential for paleontological resources to be present within the playa margins,” it does not properly discuss the fact that the Proposed Action could result in the exposure, degradation, and loss of important paleontological resources at the Salton Sea; nor does it suggest appropriate actions to avoid those adverse impacts, or to minimize them if avoidance is impossible.

The Revised Draft SEIS poses the question, “*Issue 2: How would changes in river flow from Lake Mead water releases and from equalizing and balancing Lake Mead and Lake Powell affect paleontological resources along the river and the Salton Sea shore?*” The “Summary” text then states, “**No additional impacts on resources at the Salton Sea would occur under either alternative.**”⁵⁰ The Revised Draft SEIS presents no support for this conclusory and erroneous statement.

⁴⁶ Revised Draft SEIS, page 3-151.

⁴⁷ Please note that I do not represent or speak on behalf of the Torres Martinez Desert Cahuilla Indians or any other Tribe. I offer these comments solely as a concerned citizen and as someone who has extensive knowledge about matters related to the past, present, and future of the Salton Sea and associated issues affecting people throughout the surrounding region, including but not limited to Tribes.

⁴⁸ Revised Draft SEIS, page 3-151.

⁴⁹ Revised Draft SEIS, page 3-154.

⁵⁰ Revised Draft SEIS, page 3-163, emphasis added.

When discussing the impacts of the Proposed Action on paleontological resources at the Salton Sea, the Revised Draft SEIS then states:

“Under the Proposed Action, if conservation measures are required and implemented, less water would flow into the Salton Sea. **This may lead to the exposure of paleontological resources in the lake bed more quickly than under the No Action; however, exposure would eventually be the same as under the No Action Alternative.**”

No justification is provided for the claim that exposure of paleontological resources “would eventually be the same as under the No Action Alternative.” Presumably this assertion is based on some sort of modeling; however, as previously noted, the relevant modeling is not publicly available, and does not appear to have been properly validated or peer-reviewed. It is impossible for independent experts or other members of the public to analyze the propriety or accuracy of the modeling or the conclusions based upon it. Moreover, even assuming the modeling is technically valid, it is untenable to claim that rapid, harmful exposure—and potential destruction—of paleontological resources because of the Proposed Action are unimportant effects because those resources might be exposed someday anyhow under the No Action Alternative.

Under the “Cumulative Impacts” heading, the Revised Draft SEIS also states:

For the Salton Sea, the Salton Sea 10-Year Plan, as analyzed in the Salton Sea Management Program’s Phase 1: 10-Year Plan EA (US Army Corps of Engineers 2022), may also, in conjunction with the proposed near-term Colorado River operations, contribute to cumulative effects on paleontological resources... However, **with mitigations described in the 10-Year Plan, the project should not contribute to cumulative impacts, in conjunction with the proposed near-term Colorado River operations.**⁵¹

This claim that mitigation measures described in the draft 10-Year Plan for projects proposed in that plan will prevent cumulative impacts of the Revised Draft SEIS’s Proposed Action on paleontological resources is speculative and unwarranted. As explained earlier, the 10-Year Plan has not been publicly released in final form, and it is unclear which—if any—proposed projects in the draft 10-Year Plan will actually be approved, funded, fully constructed, supplied with necessary water, and operated successfully. Mitigation activities related to 10-Year Plan projects may not be implemented and become operational during the period relevant to the Revised Draft SEIS; and, regardless, they were not designed to address any adverse impacts of the Revised Draft SEIS’s Proposed Action, and they may not effectively do so.

III.G. Effects on Biological Resources

While appropriately acknowledging the major importance of the Salton Sea ecosystem for migratory birds and other species, the Revised Draft SEIS inadequately discusses the significant negative impacts on wildlife and plants in the Salton Sea ecosystem, including but not limited to species of special conservation concern, that are foreseeable results of the Proposed Action.

III.G.1. Vegetation

In part 3.13.2 the Revised Draft SEIS poses the question, “**Issue 1: How would changing flow characteristics affect vegetation?**” Specifically regarding vegetation in the Salton Sea ecosystem, the text then asserts:

According to the updated Salton Sea Accounting Model (SSAM) and projections of future IID water delivery using Reclamations CRSS model, the Proposed Action would cause a decrease in water level and a corresponding increase in exposed playa beginning in late 2025/early 2026 as compared with the No Action Alternative. An increase in exposed playa would result in an increased risk for the establishment of invasive species along with an increase in fugitive dust, which could have a detrimental effect on the

⁵¹ Revised Draft SEIS, page 3-164, emphasis added.

productivity of adjacent vegetation. However, water levels would stabilize by 2040 and would be similar to the No Action Alternative (TetraTech 2023).⁵²

Again, as explained earlier in these comments, it is improper for Reclamation to rely on a model—the revised SSAM that has been repeatedly altered by Tetra Tech during the past two decades for a variety of purposes—that is not publicly available, and does not appear to have been properly validated or peer-reviewed. Independent experts and other members of the public cannot evaluate the validity of the model, the soundness of the assumptions utilized for the modeling, the accuracy of the results, or the legitimacy of the conclusions drawn from them. This situation is untenable.

In addition, the Revised Draft SEIS fails to acknowledge reasonably foreseeable and likely irreversible negative effects on native vegetation (which is much more diverse than the Revised Draft SEIS indicates) adjoining the Salton Sea shoreline, in associated wetlands, in riparian corridors along Salton Sea tributaries, in the vicinity of springs, and within irrigation drains. The Revised Draft SEIS also fails to discuss possible adverse impacts of the Proposed Action on groundwater levels in the Salton Basin, which help to sustain some vegetation and also support springs that native plants rely upon. It is reasonably foreseeable that changes to groundwater levels may occur as the Salton Sea recedes because of the Proposed Action, and those changes could negatively affect vegetation. Furthermore, it is misguided and inaccurate for the Revised Draft SEIS to imply that increases in exposed lakebed caused by the Proposed Action from 2024 through 2040 are not significant because the Salton Sea’s water level would allegedly be stabilized from 2040 onward. Even if it is correct that the lake’s water level will ultimately stabilize (which has not been demonstrated in the Revised Draft SEIS and in reality is highly unlikely to happen for a variety of reasons), harmful and likely irreversible consequences of changes to vegetation resulting from the Proposed Action will occur during the period prior to 2040. The alleged stabilization of the lake at a very low elevation after that period will not alter the harm that has already occurred.

III.G.2. Wildlife

In part 3.13 “Biological Resources,” the Revised Draft SEIS properly explains that the Salton Sea ecosystem provides crucial habitat for more than 400 species of birds including special status species; it is one of the last remaining habitats of the endangered desert pupfish (*Cyprinodon macularius*); and it supports other fish, as well as reptiles, amphibians, and mammals. For example, regarding birds, the text correctly states:

The Salton Sea is an important migratory stopover site for birds (Service 2023). Over 400 bird species have been recorded at the Salton Sea, and the area is considered an Audubon Important Bird Area of global significance. While the Salton Sea primarily supports migratory birds, 109 species are year-round residents (Service 2023).

The Salton Sea provides globally important shorebird habitat. Over 100,000 shorebirds of 25 different species utilize the Salton Sea during annual migration, making it one of the most important shorebird habitat areas west of the Rocky Mountains (Service 2023).⁵³

Concerning fish, the Revised Draft SEIS acknowledges:

Salinity refuges are localized around confluences with streams, and these areas may be extremely important for the continued persistence of fish in the Salton Sea (Riedel 2016). The 2017 survey (CDFW and USFWS 2017) captured the most tilapia around the freshwater inputs, thus indicating these inflows may be important for the persistence of fish in the Salton Sea, especially with lower salinities in these areas.⁵⁴

⁵² Revised Draft SEIS, page 3-194.

⁵³ Revised Draft SEIS, page 3-172.

⁵⁴ Revised Draft SEIS, page 3-173.

The Revised Draft SEIS then poses the question, “**Issue 2: How would changing flow characteristics affect wildlife?**”⁵⁵ In response the text admits, “**Water elevations are predicted to be lower under the Proposed Action for the Salton Sea, exacerbating existing issues of water availability and salinity for migratory birds and terrestrial wildlife.**”⁵⁶ The Revised Draft SEIS also acknowledges that “[r]eductions in flow and increased salinity may reduce habitat for tilapia,”⁵⁷ but does not then specifically state that decreased numbers of tilapia will have direct and significant negative impacts on the many species of piscivorous (fish-eating) birds reliant on the Salton Sea ecosystem, including special status species that are already in jeopardy.

The Revised Draft SEIS does not address the negative effects on wildlife reliant on the Salton Sea ecosystem that could result from reduced flows in irrigation drains and rivers carrying Colorado River wastewater, and from decreased water in associated wetlands; instead the text unjustifiably assumes there will be no such negative effects. In reality, adverse impacts may be significant for some species, including special status species, and should have been evaluated. The failure to do so resulted in erroneous conclusions in the Revised Draft SEIS. For example, in Appendix G to the Revised Draft SEIS, which presents information concerning potential negative impacts on species of special conservation concern, the entry for the least bittern (*Ixobrychus exilis*) inaccurately states that particular species “is not found in habitat that would be impacted by any alternatives.” But clearly the least bittern utilizes marshes in the Salton Sea ecosystem: “In the Salton Sea area, most bitterns reside in freshwater marshes in managed impoundments, **along rivers or canals sustained by agricultural wastewater, and on lake edges**; they are found particularly in dense stands of cattails but also in Common Reed (*Phragmites australis*) and even dense tamarisk (*Tamarix* spp.) if cattail is nearby (Patten et al. 2003).”⁵⁸ Therefore, the mistaken assertion in Appendix G regarding a lack of negative effects on the least bittern appears to be based on the incorrect assumption that marshes in the Salton Sea region sustained by Colorado River wastewater—including, but not limited to, marshes at the receding edges of the Salton Sea—will be unaffected by the Proposed Action. Contrary to that assumption, it is reasonably foreseeable that the Proposed Action will, at a minimum, cause reduced flows in streams and wetlands sustained by agricultural wastewater; and therefore the habitat relied upon by least bitterns in the Salton Sea ecosystem could indeed be adversely affected, with associated negative consequences for the birds themselves.

On Table 3-24, the Revised Draft SEIS correctly specifies the desert pupfish as one of the “Federally Listed Species Potentially Affected by the Alternatives.” However, under the column “Salton Sea,” the table states “Present (not reported since 2007).” In addition, Appendix G claims there will be no “Potential Species Impacts” on desert pupfish as a consequence of any alternative. Moreover, the text of the Revised Draft SEIS states:

There are previous accounts of desert pupfish in 2004 and 2007 from CDFW surveys of the Salton Sea, and it is possible but **unlikely that this species is still present in the Salton Sea**. If desert pupfish are present, they are likely in small numbers and **it is not likely that the alternatives will be detrimental to the persistence of this species. Reduction in water and increase in salinity could potentially change habitat distribution of this species; however, this species has high tolerances of water quality changes and can move to suitable habitat where available.**⁵⁹

The parenthetical statement in Table 3-24 is misleading, and the assertions in Appendix G and in the text of the Revised Draft SEIS concerning desert pupfish are unjustified and inaccurate. I have personally been present for past Salton Sea fish surveys, including surveys of both desert pupfish and tilapia, and I am

⁵⁵ Revised Draft SEIS, page 3-194.

⁵⁶ Revised Draft SEIS, page 3-195, emphasis added.

⁵⁷ Revised Draft SEIS, page 3-196.

⁵⁸ Shuford, W. D., and Gardali, T., editors. 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento. Species Account for the Least Bittern, page 139, emphasis added.

⁵⁹ Revised Draft SEIS, page 3-196, emphasis added.

familiar with the methodology used. Although the methodology may provide limited information on some trends over time in a specific location, it is not capable of demonstrating that desert pupfish are no longer present in the Salton Sea. In addition, desert pupfish are certainly present in the Salton Sea ecosystem within springs, tributary streams (including natural desert streams, such as Salt Creek and San Felipe Creek, as well as agricultural drains), and wetlands associated with the lake and its tributaries. Furthermore, it is known that salt-tolerant desert pupfish utilize shallow waters of the Salton Sea to move between otherwise separated tributaries and disconnected wetlands. Genetic diversity and resilience of the species depend on such movements linking otherwise isolated small populations.

Survival of desert pupfish in the Salton Sea ecosystem is in jeopardy as the lake recedes further, salinity rises, tributaries and wetlands shrink and some disappear, and connectivity is lost among populations of the already-endangered fish. The connections that lake waters have provided among associated tributaries and wetlands are becoming very limited as the amount of exposed lakebed expands. Numerous prior connections among the tributaries and wetlands in which pupfish persist have already been severed. Some tributaries now debouche only onto expanses of dry lakebed, and many wetlands previously adjoining the Salton Sea have become entirely cut off from the lake. It is reasonably foreseeable that these problems and others will worsen as a result of the Proposed Action. Accelerated recession of the Salton Sea and expedited increase in the lake's salinity because of the Proposed Action, as well as decreased fresh water and rising salinity in some tributaries and associated wetlands, will increase threats to the survival of the desert pupfish, will negatively impact the ability of pupfish to move among shrinking habitat areas at the Salton Sea, will adversely affect the capacity of this endangered species to adapt to changing environmental conditions, and may cause significant mortality of desert pupfish.

The Proposed Action will also adversely affect tilapia in the Salton Sea (as the Revised Draft SEIS acknowledges) and in the lake's tributaries. In addition, negative impacts are likely to occur on other fish currently persisting in tributaries, in the Salton Sea at river deltas, and in wetlands. Therefore, piscivorous birds reliant on the Salton Sea ecosystem will also suffer adverse effects. Fish-eating birds including, but not limited to, ones that are classified as special status species under California law, such as the American white pelican (*Pelecanus erythrorhynchos*) and California brown pelican (*Pelicanus occidentalis californicus*), are already suffering steep declines in their numbers at the Salton Sea due to the consequences of the QSA water transfers. Additional reductions in freshwater inflow and accelerated salinity increases resulting from the Proposed Action will worsen negative effects on piscivorous birds, and some species may even be extirpated.

Moreover, the impacts of the Proposed Action on water levels and salinity in the Salton Sea, its tributaries, and associated wetlands will foreseeably also adversely affect a variety of other species. Shrinking freshwater habitat and rising salinity will decrease aquatic food resources for many species of birds and other terrestrial wildlife. Smaller habitat areas and rising salinity will also cause birds, including but not limited to migratory waterfowl, to be concentrated in shrinking areas of suitable habitat and to suffer increased physiological stress. Consequently, avian disease outbreaks will be more likely to occur, and will be more difficult to control. Significant increases in mortality of many avian species are reasonably foreseeable as a result of the Proposed Action, and extirpation of some species is possible.

Regarding effects of the Proposed Action on wildlife, the Revised Draft SEIS states:

According to the updated SSAM and projections of future IID water delivery using Reclamation's CRSS model, **the Proposed Action would expedite previously anticipated decreases in water level and corresponding increases in exposed playa at the Salton Sea beginning in 2024** as compared with the No Action Alternative, **worsening existing issues of water availability and salinity for terrestrial wildlife** (Imperial Irrigation District 2018a).⁶⁰

Yet then the Revised Draft SEIS goes on to allege:

⁶⁰ Revised Draft SEIS, page 3-202, emphasis added.

However, **given that the predicted flows are only marginally different, no population level impacts are expected on terrestrial wildlife species. Similarly, impacts on fisheries are also predicted to be the same between the two alternatives.**⁶¹

Likewise, regarding effects of the Proposed Action specifically on special status species, the Revised Draft SEIS asserts:

According to the updated SSAM and projections of future IID water delivery using Reclamation’s CRSS model, **the Proposed Action would expedite previously anticipated decreases in water level and corresponding increases in exposed playa at the Salton Sea beginning in 2024, worsening existing issues of water availability and salinity for special status species as compared with the No Action Alternative.** Desert pupfish were not captured in 2017, and it is not expected that they are present in the Salton Sea. However, impacts on this species (if it is present) would be similar to those of the No Action Alternative, since **there is no substantial difference in changes to water when comparing the two alternatives. No impacts beyond those described in the No Action Alternative are expected for special status species.**⁶²

The foregoing contentions in the Revised Draft SEIS regarding the Proposed Action’s lack of negative impacts on wildlife, including but not limited to special status species, are unfounded. It is inaccurate and indefensible for the Revised Draft SEIS to conclude that expedited decreases in water levels and accelerated increases in salinity caused by the Proposed Action will not yield significant adverse impacts on wildlife.

- A decrease in Salton Sea inflows of at least 267,000 acre-feet—and potentially a much greater decrease—during 2024-2026 is not a *de minimis* change that is “only marginally different” from the No Action Alternative as the Revised Draft SEIS alleges. That claim is unreasonable on its face.
- Furthermore, in reaching the erroneous conclusion that there will be no additional negative impacts on wildlife, Reclamation relies on a model and modeling assumptions that have not been publicly disclosed and do not appear to have been properly validated or peer-reviewed. As noted throughout these comments, it is impossible for independent experts and other members of the public to evaluate the validity of the model, the appropriateness of the assumptions used for the modeling, the accuracy of the modeling results, and the legitimacy of the conclusions being drawn from those results. This situation is untenable.
- In arriving at the unwarranted conclusion that the Proposed Action will not cause additional adverse impacts on wildlife, including desert pupfish and other special status species, Reclamation relies on the fallacious argument that the same negative effects would ultimately occur over the long term anyhow in a No Action scenario as a result of the QSA water transfers, so it makes no difference if the adverse impacts happen more quickly. But the reality is that rapid and greatly injurious alterations of crucial habitat resulting from the Proposed Action would cause major and potentially irreversible harm to a variety of wildlife species during the period relevant to the Revised Draft SEIS. It is indefensible for Reclamation to dismiss those harmful consequences as trivial. Moreover, as explained previously, if government agencies comply with their legal obligations then full long-term restoration of the Salton Sea will be achieved in the coming years, and the allegedly inevitable long-term impacts of the QSA will be averted.
- In addition, it is unjustified for the Revised Draft SEIS to claim that no population-level impacts on wildlife will occur because of the Proposed Action, and it is equally unwarranted to imply that adverse effects of the Proposed Action causing significant wildlife mortality are not problematic as long as they do not cause a population-level decline in a particular species. Those conclusory statements are unfounded, and they are inconsistent with applicable law.

⁶¹ Ibid.

⁶² Revised Draft SEIS, page 3-219, emphasis added.

Under the heading “Cumulative Impacts,” the Revised Draft SEIS also asserts regarding effects of the Proposed Action on Salton Sea wildlife:

One of the stated purposes of the Salton Sea Management Program’s 10-Year Plan is to improve habitat for fish and wildlife through mitigating effects of decreasing water levels and increased salinity in recent years (California Natural Resources Agency 2021). The construction of ponds and aquatic habitat to support fish and wildlife is intended to restore habitat at appropriate salinity levels to support fish and wildlife. This will result in a positive impact on terrestrial wildlife species.⁶³

Similarly, the Revised Draft SEIS makes a virtually identical assertion regarding effects of the Proposed Action on special status species at the Salton Sea:

One of the stated purposes of the Salton Sea Management Program’s 10-Year Plan is to improve habitat for fish and wildlife through mitigating effects of decreasing water levels and increased salinity in recent years (California Natural Resources Agency 2021). The construction of ponds and aquatic habitat is intended to restore habitat at appropriate salinity levels to support fish and wildlife. This will result in a positive impact on special status terrestrial wildlife species, including Yuma Ridgway’s rail.⁶⁴

Essentially the claim here is that because the intention of the 10-Year Plan is to construct projects that will serve to restore some aquatic wildlife habitat of appropriate salinity levels, there will be net positive effects on wildlife notwithstanding the negative impacts of the Proposed Action. This claim is unjustified and inaccurate, and is based on false assumptions. As explained earlier in these comments, despite the fact that a draft 10-Year Plan was first issued by the State of California’s Salton Sea Management Program in 2017, at the beginning of December 2023 there is no publicly-available final Environmental Assessment for the 10-Year Plan, and there is still no final, approved 10-Year Plan. It has not been publicly disclosed what projects will be included in the final 10-Year Plan, and it is entirely uncertain which proposed projects will actually be implemented in the future, or when such implementation will occur. The funding for proposed projects has not been obtained, the necessary water supply is not assured, and other essential preconditions for constructing and operating proposed projects have not been satisfied. It is not even known whether any proposed projects can function successfully as intended. In addition, notwithstanding the existence of legal requirements mandating that particular acreage milestones for habitat restoration and dust suppression must be achieved by the SSMP annually from 2018 through 2028 during the life of the 10-Year Plan, the required milestones have never been achieved in any year. Meanwhile, conditions at the Salton Sea continue to deteriorate as a result of the QSA water transfers, and the worsening conditions continue to jeopardize the health and survival of numerous wildlife species. Based on the extremely slow pace of work done so far by the SSMP, with not a single habitat project proposed in the 2017 draft 10-Year Plan actually operating at the beginning of December 2023, it is exceedingly unrealistic to claim that any 10-Year Plan project will be fully constructed and operating as intended during the period 2024-2026, and it is even more unrealistic to assume that any such project will function successfully during that period to prevent cumulative negative effects on wildlife, including but not limited to special status species.

It is unreasonable for the Revised Draft SEIS to rely on unsupported speculation; and it is indefensible for Reclamation to depend on that unwarranted speculation to draw the inaccurate conclusion that the Proposed Action will cause no significant direct, indirect, or cumulative negative effects on any wildlife species.

III.H. Effects on Recreation

In part 3.14 “Recreation,” the Revised Draft SEIS discusses foreseeable effects of the Proposed Action on “key recreational resources or issues” including public use of lake shorelines as well as boating and fishing. Regarding the Salton Sea, the text acknowledges:

⁶³ Revised Draft SEIS, page 3-202, emphasis added.

⁶⁴ Revised Draft SEIS, pages 3-219 to 3-220.

Under the Proposed Action, there is the possibility that IID and CVWD could take additional shortages, which could reduce river flows and inflow to the Salton Sea from irrigation drainage. This could diminish the Salton Sea shoreline more than the No Action Alternative would, thereby adversely affecting shoreline recreation.⁶⁵

The Revised Draft SEIS should also have stated that receding of the Salton Sea shoreline and rising salinity because of the Proposed Action's reduced water deliveries are adverse impacts that are likely to negatively affect boating and fishing as well. Each incremental increase in exposed lakebed makes launching a boat increasingly difficult, and each incremental increase in salinity increasingly threatens the persistence of fish.

Under the heading "Cumulative Effects," the Revised Draft SEIS then claims:

No additive cumulative effects would occur on recreation due to the proposed management plan evaluated in the Salton Sea 10-Year Plan or the environmental assessment for the implementation of the 10-Year Plan's projects.⁶⁶

Essentially the Revised Draft SEIS appears to be saying that there will be no "additive cumulative" adverse impacts on Salton Sea recreation from the Proposed Action, because any negative effects will be counteracted by the alleged beneficial effects of the 10-Year Plan's projects. But, if that is the import of the above statement,⁶⁷ this claim is unjustified and incorrect. As repeatedly explained above, any benefits of the 10-Year Plan's projects are entirely speculative, because those projects have not been approved or funded, the necessary water supply for their operation is not assured, and their full implementation to successful operation is extremely unlikely to occur during the period relevant to the Proposed Action and its negative impacts.

III.I. Socioeconomic Impacts

In part 3.16 "Socioeconomics," the Revised Draft SEIS fails to discuss various reasonably foreseeable and significant socioeconomic impacts in California's Imperial and Riverside Counties related to the Proposed Action's negative effects on the Salton Sea. Those impacts should have been evaluated.

The Revised Draft SEIS poses the question: "***Issue 1: How would anticipated water shortages affect economic contributions from agriculture?***" But the associated text does not discuss the potential negative economic effects on agriculture in Imperial and Riverside Counties that may result from the adverse impacts on agricultural commodities and workers caused by the Proposed Action's effects on the Salton Sea. The potential negative impacts on agricultural commodities and workers foreseeably include, but are not limited to, deposition onto crops of damaging salt particles and contaminants emitted by the increasingly exposed Salton Sea lakebed, and harmful effects on the health of agricultural laborers from chronically breathing hazardous fugitive dust blowing off of the exposed lakebed. These impacts on agriculture will be in addition to, and will compound, the negative economic effects throughout the region that foreseeably may be caused by the loss of significant quantities of Colorado River water needed for irrigation, and by related fallowing of farm fields, decreased crop production, reduced employment, and diminished income for farmers and businesses associated with agriculture.

The Revised Draft SEIS also poses the question: "***Issue 2: How would changes to reservoir levels as a result of water shortages impact economic activity associated with recreation?***" But the text does not adequately discuss potential negative economic impacts on recreation and tourism at the Salton Sea, and elsewhere in

⁶⁵ Revised Draft SEIS, pages 3-241 to 3-242.

⁶⁶ Revised Draft SEIS, page 3-242.

⁶⁷ Alternatively, the quoted text above may have been intended to indicate that neither the management plan proposed in the 10-Year Plan nor the EA for the 10-Year Plan's projects will have "additive cumulative effects" on recreation from Hoover Dam to the Salton Sea. If that was the intended meaning, then the sentence was very poorly written. Moreover, to evaluate the potential impacts of the 10-Year Plan is not properly within the scope of the Revised Draft SEIS.

Imperial and Riverside Counties near the lake, that may be caused by the Proposed Action. Such potential adverse economic impacts include, but are not limited to, declining tourism and decreased participation in recreation throughout the areas adjacent to the Salton Sea, and associated declines in related economic activity such as use of hotels and restaurants, that could foreseeably result from worsening particulate air pollution, deteriorating water quality, an increase in harmful algae blooms and hydrogen sulfide irruption events, morbidity and mortality of fish and birds, damage to visual resources, and other harm caused by the effects of the Proposed Action on the Salton Sea, its ecosystem, its wildlife, and the regional environment.

The Revised Draft SEIS only acknowledges limited economic impacts related to recreation that may result from changes in air quality, and inaccurately asserts that such impacts will not be “additional”:

...the Proposed Action could result in expedited (but not additional) lake bed exposure, compared with the No Action Alternative, due to less possible available agricultural runoff... lake bed exposure can result in air quality impacts. This could result in impacts occurring on regional recreation and the associated spending in an expedited fashion compared with the No Action Alternative.⁶⁸

It is unreasonable for the Revised Draft SEIS to allege that the lakebed exposure resulting from the Proposed Action would not be “additional,” and thereby to imply that the economic impacts of the lakebed exposure would also not be “additional.” Clearly it matters if a tourism-related or recreation-related commercial enterprise is forced out of business quickly in just a year or two, instead of incurring a gradual decline in commerce over the course of decades. For example, adaptation may be feasible in the latter case, but is probably impossible in the former situation.

The Revised Draft SEIS also fails to discuss reasonably foreseeable adverse socioeconomic impacts of the Proposed Action in Imperial and Riverside Counties related to the negative public health effects of worsening particulate air pollution, deteriorating water quality, an increase in harmful algae blooms and hydrogen sulfide irruption events, morbidity and mortality of fish and birds, damage to visual resources, and other harm caused by the effects of the Proposed Action on the Salton Sea, its ecosystem, its wildlife, and the environment. It is foreseeable that there could be significant adverse impacts on the physical and psychological health of people living near the Salton Sea because of the effects of the Proposed Action, and it is also foreseeable that a variety of significant economic costs will result from those harmful health impacts—including, but not limited to, increased medical expenses and loss of income due to illness.

In addition, the Revised Draft SEIS fails to discuss the reasonably foreseeable negative socioeconomic effects in Imperial and Riverside Counties related to potential adverse impacts on the developing lithium industry that may occur because of harm to the Salton Sea caused by the Proposed Action. Unsafe air quality in the central Salton Basin could jeopardize commercial-scale lithium extraction, an emerging industry that is anticipated to be central for U.S. efforts to fight climate change in the coming years. Chronic impairment of air quality with hazardous fugitive dust containing toxic and carcinogenic constituents will likely be worst in the area where lithium extraction and processing facilities must be located, within the Salton Sea Geothermal Field near the southeast shore of the lake. Prevailing winds blowing across exposed lakebed will push airborne pollutants directly into that area. It is foreseeable that dangerous air quality will impair the ability of the lithium industry to attract the large numbers of skilled workers it will require, and will adversely affect the health of those who choose to work at the necessary facilities near the shriveling Salton Sea. Significant economic costs would result from those foreseeable consequences of the Proposed Action.

III.J. Effects on Environmental Justice

In my comments on the original Draft SEIS for near-term Colorado River operations I discussed in detail the environmental injustice problems at the Salton Sea that may be worsened by any action alternative that

⁶⁸ Revised Draft SEIS, page 3-306, emphasis added.

substantially reduces water deliveries to Salton Trough water rights holders, and I discussed pertinent legal mandates and directives related to environmental justice with which the text of the original Draft SEIS was required to comply but did not. As noted at the outset of my current comments, my earlier comments on the original Draft SEIS are fully incorporated herein by reference.⁶⁹

The Revised Draft SEIS acknowledges Reclamation is required to incorporate environmental justice as part of its mission. Specifically, Reclamation admits it is necessary for the Revised Draft SEIS to “address, as appropriate, any disproportionately high and adverse human health or environmental effects of their actions, programs, or policies on minority and low-income populations.” Nonetheless, unfortunately the Revised Draft SEIS does not present an appropriate or sufficient analysis of these issues concerning the Salton Sea region.

First, for purposes of analyzing environmental justice issues, the Revised Draft SEIS inappropriately limits the “Tribal populations with potential to be affected by project management” to “those with current entitlements to receive Colorado River water in the Lower Basin.” This limitation improperly excludes Tribes in the Salton Trough—including but not limited to the Torres Martinez Desert Cahuilla Indians, whose reservation adjoins the Salton Sea and its increasingly exposed lakebed—from the analysis of environmental justice issues. That exclusion is inappropriate in light of the fact that Salton Trough Tribes, and especially the Torres Martinez Desert Cahuilla Indians, will suffer foreseeable, significant, and disproportionate negative effects as a result of the Proposed Action’s impacts on the Salton Sea, the lake’s ecosystem and wildlife, and the environment.

Second, the Revised Draft SEIS presents an inadequate analysis of potential human health impacts on environmental justice communities resulting from the effects of the Proposed Action on the Salton Sea. Only the following statements are included:

...the Proposed Action could result in expedited (but not additional) lake bed exposure compared to the No Action Alternative, due to the possibility of less available agricultural runoff... lake bed exposure can result in air quality impacts. These air quality impacts could potentially impact nearby environmental justice communities to a higher degree.⁷⁰

...both alternatives anticipate an increase in exposed shoreline, and this increase would potentially have a negative effect on air quality because the decreasing water level would increase fugitive dust. Since dust is already a concern for the Salton Sea area, additional dust would affect local air quality and public health. The Salton Sea is located in two environmental justice counties in California: Riverside and Imperial. Under the Proposed Action, additional dust could result in disproportionate impacts on these environmental justice communities.⁷¹

Although these statements are correct and appropriate as far as they go, overall they constitute a factually and legally insufficient analysis of pertinent environmental justice issues in the Salton Sea region. The Revised Draft SEIS fails to properly evaluate a variety of significant negative impacts on environmental justice communities that may also foreseeably result from the Proposed Action’s adverse effects on the Salton Sea, including various “ecological, aesthetic, historic, cultural, economic, social, [and] health impacts,” and “amplif[ication of] climate change-related hazards”⁷²—which are all matters that Reclamation is required to consider carefully in a NEPA analysis. Although the Revised Draft SEIS discusses some of these matters in relation to environmental justice communities elsewhere in the lower Colorado River basin, it does not adequately analyze (or in some instances even mention) the many types of adverse impacts that foreseeably will disproportionately affect environmental justice communities in the Salton Sea region.

⁶⁹ See footnote 3 for a hyperlink to a PDF of my public comments on the original Draft SEIS.

⁷⁰ Revised Draft SEIS, pages 3-325 to 3-326.

⁷¹ Revised Draft SEIS, page 3-327.

⁷² Environmental Justice Guidance under the National Environmental Policy Act (1997). Council on Environmental Quality, Executive Office of the President, December 10, 1997, Section VII.

Worsening adverse impacts on the physical, psychological, and socioeconomic well-being of people in disadvantaged communities throughout the Salton Sea region, including but not limited to Tribal communities, are foreseeable and likely consequences of the Proposed Action. The particulates emitted from exposed Salton Sea lakebed—which include not only PM10 and PM2.5, but may also contain a variety of other hazardous, toxic, and carcinogenic constituents—are unusually dangerous; they confront the region’s residents with different and far greater health risks than does typical desert dust. In addition, a variety of other threats to the health and well-being of environmental justice communities are posed by the shriveling Salton Sea, the increasingly exposed lakebed, the ailing ecosystem, and worsening water quality in the lake, its tributaries, and associated wetlands. All of those threats are likely to be exacerbated by the Proposed Action.

The Revised Draft SEIS also fails to “identify and analyze mitigation measures for impacts to minority populations and low-income populations in the affected environment” at the Salton Sea as legally required.⁷³ Reclamation should have considered specific types of “mitigation methods for each potential impact identified,” including, but not limited to: “(a) Avoiding an impact by not taking a certain action or parts of an action. (b) Minimizing an impact by limiting the degree or magnitude of the action and its implementation. (c) Rectifying an impact by repairing, rehabilitating, or restoring the affected environment...”⁷⁴

As a result of the QSA water transfers—the consequences of which will be expedited and exacerbated by the Proposed Action—residents of environmental justice communities in the Salton Sea region live and work near a shriveling and dying lake littered with the corpses of birds and fish, and covered with expanses of harmful algae blooms; they breathe hazardous airborne dust and noxious fumes emitted from the exposed lakebed and the residual deteriorating lake; and they are chronically exposed to hazardous, toxic, and carcinogenic contaminants that jeopardize their health. They suffer socioeconomic consequences including, but not limited to, increased medical expenses, lost work days, jeopardized employment, and decreased property values. If the Proposed Action proceeds without concurrent measures to avoid or effectively minimize associated adverse impacts, community members’ physically and psychologically harmful experience of this gross environmental injustice will also be worsened by the knowledge that the responsible government officials willfully persist in failing to take necessary actions to address the known, severe, and disproportionate negative consequences affecting them.

At the end of Reclamation’s discussion of environmental justice issues, the Revised Draft SEIS makes the same type of unjustified and inaccurate boilerplate statement that is asserted repeatedly in the document:

No cumulative effects would occur on environmental justice communities due to the proposed management plan evaluated in the Salton Sea 10-Year Plan or the environmental assessment for the implementation of the 10-Year Plan’s projects.⁷⁵

The claim that the 10-Year Plan will avert cumulative effects on environmental justice communities that could otherwise result from the Proposed Action is inappropriate and erroneous.⁷⁶ As explained throughout these comments, any benefits of the 10-Year Plan’s projects are entirely speculative, because those projects have not been approved or funded, the necessary water supply for their operation is not assured, and their full implementation to successful operation is extremely unlikely to occur during the period relevant to the Proposed Action and its negative impacts.

⁷³ Id., Section IX.

⁷⁴ Ibid.

⁷⁵ Revised Draft SEIS, page 3-331.

⁷⁶ Alternatively, the quoted text above may have been intended to indicate that neither the management plan proposed in the 10-Year Plan nor the EA for the 10-Year Plan’s projects will have “cumulative effects” on environmental justice communities near the Salton Sea. If that was the intended meaning, then the sentence was very poorly written. Moreover, to evaluate the potential impacts of the 10-Year Plan is not properly within the scope of the Revised Draft SEIS.

IV. Foreseeable harm to wildlife, people, the environment, and the climate that could result from the Proposed Action must be avoided or minimized to the greatest feasible extent

It is reasonably foreseeable that many types of significant harm to wildlife and people will occur during 2024-2026 if Reclamation proceeds with the Proposed Action or another action alternative that will substantially decrease freshwater inflows to the Salton Sea.⁷⁷ In addition, as partially acknowledged by the Revised Draft SEIS, some negative impacts caused by the Proposed Action will persist far beyond 2026, and they will result in worsening consequences for many years thereafter. Furthermore, some of those harmful effects will be irreversible.

It is therefore essential, and legally required, for Reclamation to identify effective measures: (a) for *avoiding* the negative effects that will foreseeably result from reduced inflows to the Salton Sea during 2024-2026; and (b) for *minimizing* the negative effects of those inflow reductions *to the greatest feasible extent if they cannot be avoided*. But Reclamation failed to address these matters appropriately in the Revised Draft SEIS. Thus, if USBR decides to proceed with the Proposed Action or any other action alternative that will substantially decrease inflows to the Salton Sea, the final SEIS and Record of Decision must describe and select effective harm-avoidance and mitigation measures to protect wildlife, people, and the environment from foreseeable injurious consequences, and Reclamation must expeditiously implement those measures.

Federal actions that the Department of the Interior committed to undertake in support of the 10-Year Plan pursuant to a multi-agency Memorandum of Understanding entered in November 2022 (the 2022 MOU)⁷⁸ are not adequate to prevent, or to minimize to the greatest feasible extent, the foreseeable harm that could result from implementation of the Proposed Action or another action alternative for near-term Colorado River operations that substantially reduces freshwater inflows to the Salton Sea. As explained repeatedly in these comments, the projects proposed in the 10-Year Plan have not been fully formulated or funded, the water supply necessary for the operation of those projects is not assured, it remains unclear whether the projects can even function successfully as intended if they are constructed, and the complete implementation of the 10-Year Plan through effective operation of its projects is exceedingly unlikely to happen during the period relevant to the Proposed Action and its foreseeable negative consequences. Furthermore, the 10-Year Plan was only intended to temporarily remedy harm caused in the short term by the QSA water transfers, until a full long-term restoration plan could be implemented; it was not intended or designed to address the additional harm that will be caused by further rapid reductions in Salton Sea inflows resulting from the Proposed Action. Thus, beyond Interior's commitments in the 2022 MOU to buttress the 10-Year Plan, Reclamation must identify and implement *additional measures* to avoid and/or minimize damage to the Salton Sea and associated harm to wildlife, people, and the environment that will result from additional substantial decreases in inflows to the lake during 2024-2026 because of the Proposed Action.

Ultimately, for the longer term, implementing comprehensive and permanent restoration of the Salton Sea and its ecosystem is the only way to: (a) prevent the additional harm to wildlife, people, and the environment beyond 2024-2026 that will foreseeably occur because of the Proposed Action's impacts on the Salton Sea; (b) avert further harm from the ongoing QSA water transfers; and (c) avoid the injurious consequences of

⁷⁷ For additional details regarding the many types of potential significant harm, please see my comments on the original Draft SEIS for which a link is provided in footnote 3.

⁷⁸ On November 28, 2022, the Department of the Interior, the California Natural Resources Agency, and IID announced a joint Memorandum of Understanding including a conditional provision for payment of \$250 million from federal Inflation Reduction Act monies to cover costs largely associated with proposed projects in the SSMP's draft 10-Year Plan. That payment amount was made contingent on voluntary reductions in Colorado River water use previously proposed by California water agencies on October 5, 2022 totaling 400,000 acre-feet per year through 2026, including a reduction of 250,000 acre-feet per year by IID. Currently negotiations are underway to finalize an arrangement for IID to reduce its water consumption by a total of 800,000 acre-feet during 2024-2026. The federal funding of \$250 million specified in the 2022 MOU to support measures in the 10-Year Plan remains contingent upon the accomplishment of that water-use reduction by IID during 2024-2026.

additional future reductions in Salton Sea inflows that will occur because of post-2026 Colorado River management.⁷⁹ In order to ensure full and permanent Salton Sea restoration happens as quickly as possible so that a maximum amount of harm can be prevented, it is essential for restoration planning to begin immediately in a focused and effective manner. I suggest that the final SEIS and Record of Decision for near-term Colorado River operations should explicitly discuss this matter, and should identify the relevant planning activities to be undertaken by federal agencies, including but not limited to Reclamation, during 2024-2026. I analyzed pertinent issues and made relevant suggestions in my August 2023 comments to Reclamation concerning development of post-2026 Colorado River management strategies. Please refer to those comments for further details.⁸⁰ As noted previously, I fully incorporate those comments herein by reference.

V. Drier hydrology than modeled must be anticipated, and the reasonably foreseeable Salton Sea Impacts must be avoided or minimized to the greatest feasible extent

The Revised Draft SEIS does not analyze, or present potential remedies for, the Salton Sea Impacts that may occur if Reclamation’s modeling of Colorado River water availability for 2024-2026 is overly optimistic, and/or if the agency’s “Salton Sea Modeling” underestimates decreases in Salton Sea inflows. I suggest it is essential for those analyses to be included in the final SEIS and Record of Decision. It is reasonably foreseeable that the hydrology of the Colorado River basin from January 2024 through December 2026 may be drier than anticipated in the modeling performed by Reclamation for the Revised Draft SEIS and relied upon in formulating the Proposed Action. If that very dry hydrological scenario occurs, substantial additional reductions in water deliveries to Colorado River water rights holders will likely be required. Similarly, it is also reasonably foreseeable that the “Salton Sea Modeling” may underestimate the actual decreases in Salton Sea inflows that could occur during 2024-2026. Consequently, there could be far worse impacts than Reclamation currently expects for the Salton Sea, the wildlife reliant on the Salton Sea ecosystem, the environment across the Salton Sea region, the climate, and people throughout the areas surrounding the lake including, but not limited to, Tribes and other environmental justice communities. Although the Revised Draft SEIS mentions the possibility of drier hydrology than modeled for 2024-2026, the text does not discuss the

⁷⁹ As long as the Salton Sea remains dependent upon huge volumes of Colorado River wastewater continuously flowing into the central Salton Basin, there will always be an unavoidable conflict between the need to rectify untenably high levels of consumptive use of the Colorado River’s water and efforts to restore the Salton Sea and sustain its essential ecosystem. As I explained in my comments to Reclamation on development of post-2026 Colorado River management strategies, utilizing imported ocean water to accomplish permanent restoration of the Salton Sea is the only way to decouple the fate of the lake and its wildlife from an uncertain and shrinking supply of Colorado River water while successfully advancing sustainability of Colorado River water use. It is therefore essential that the federal government expeditiously perform a comprehensive, objective, and scientifically sound feasibility-level analysis of options to use importation of ocean water to permanently restore the Salton Sea and the lake’s essential ecosystem. It must be determined objectively and scientifically whether seawater importation is a feasible long-term restoration approach—whether it can successfully restore the Salton Sea and sustain the number and diversity of species originally reliant on the lake’s ecosystem, while avoiding the severe harm to public health, wildlife, the environment, the climate, and the regional economy that will occur if full and permanent restoration of the Salton Sea is not accomplished. The Army Corps of Engineers is currently conducting a feasibility study related to long-term Salton Sea restoration, but details concerning the precise scope of that study are not publicly available. In the event that, for whatever reason, the Corps does not fully evaluate the feasibility of ocean water importation as a method for comprehensively and permanently restoring the Salton Sea, I suggest that the agencies of the Department of the Interior, including but not limited to Reclamation, should promptly conduct that crucial study. This essential investigation should be done during the planning period for post-2026 Colorado River management, and a method for permanently restoring the Salton Sea should be selected during that period pursuant to legal requirements. Full Salton Sea restoration should then be implemented promptly in the post-2026 time-frame in order to support sustainability of the Colorado River system, and to protect wildlife, people, and the environment in the Salton Sea region from further serious harm.

⁸⁰ My comments on development of post-2026 Colorado River management strategies are available online here: https://www.academia.edu/106768974/Comments_on_Development_of_Post_2026_Colorado_River_Management_Strategies.

ramifications of that situation for Salton Sea Impacts, and does not identify effective mitigation measures to be implemented in the event such dire circumstances materialize. I suggest that a crisis of that nature and magnitude must be anticipated and appropriately analyzed by Reclamation, and the agency must plan to avoid or minimize the resulting harm to wildlife and people at the Salton Sea to the greatest feasible extent.

VI. Additional Defects in the Revised Draft SEIS

VI.A. Irrelevant Matters

At various places in the Revised Draft SEIS where the text discusses impacts on locations and resources along the Colorado River not including the Salton Sea, the document presents the following statements:

- “No cumulative effects would occur on the landscape character near Lake Powell and Lake Mead from the proposed management plan evaluated in the Salton Sea 10-Year Plan or the environmental assessment for the implementation of the 10-Year Plan’s projects.”⁸¹
- “No cumulative effects would occur on the landscape character along the Colorado River from the proposed management plan evaluated in the Salton Sea 10-Year Plan or the environmental assessment for the implementation of the 10-Year Plan’s projects.”⁸²
- “No cumulative effects would occur on previously submerged archaeological sites [at Lake Powell and Lake Mead] from the proposed management plan evaluated in the Salton Sea 10-Year Plan or the environmental assessment for the implementation of the 10-Year Plan’s projects.”⁸³
- “No cumulative effects would occur on TCPs [Traditional Cultural Properties] and resources of concern to Native Americans [at Lake Powell and Lake Mead] from the proposed management plan evaluated in the Salton Sea 10-Year Plan or the environmental assessment for the implementation of the 10-Year Plan’s projects.”⁸⁴
- “No cumulative effects would occur on previously submerged paleontological resources [at Lake Powell and Lake Mead] from the proposed management plan evaluated in the Salton Sea 10-Year Plan or the environmental assessment for the implementation of the 10-Year Plan’s projects.”⁸⁵
- “No cumulative effects would occur on water deliveries to Tribes [holding Colorado River water rights] due to the proposed management plan evaluated in the Salton Sea 10-Year Plan or the environmental assessment for the implementation of the 10-Year Plan’s projects.”⁸⁶
- “No cumulative effects would occur on TCPs [related to Tribes holding Colorado River water rights] due to the proposed management plan evaluated in the Salton Sea 10-Year Plan or the environmental assessment for the implementation of the 10-Year Plan’s projects.”⁸⁷

These irrelevant assertions seem to be based on, or were copied and pasted from, an unrelated NEPA analysis. They do not belong in the Revised Draft SEIS. Moreover, they inappropriately turn on its head the

⁸¹ Revised Draft SEIS, page 3-144.

⁸² Revised Draft SEIS, page 3-145.

⁸³ Revised Draft SEIS, page 3-154.

⁸⁴ Revised Draft SEIS, page 3-157.

⁸⁵ Revised Draft SEIS, page 3-162.

⁸⁶ Revised Draft SEIS, page 3-334.

⁸⁷ Revised Draft SEIS, page 3-335.

analysis of Salton Sea issues that Reclamation is required to perform in the Revised Draft SEIS. Reclamation is obligated to evaluate the direct, indirect, and cumulative adverse impacts of the Revised Draft SEIS's Proposed Action for near-term Colorado River operations *on the Salton Sea*, the wildlife reliant on the Salton Sea ecosystem, the environment, and people across the surrounding area. But in the above statements Reclamation is essentially doing the reverse of what it is supposed to do. The agency is purporting to evaluate potential impacts *on the Colorado River* from projects proposed in the draft Salton Sea 10-Year Plan. That is improper. The draft 10-Year Plan is not part of proposed near-term Colorado River operations; rather, it is a pre-existing plan intended to accomplish short-term mitigation of harm that is occurring to the Salton Sea, wildlife reliant on the Salton Sea ecosystem, the environment, and people throughout the Salton Sea region because of previous Colorado River management decisions related to the QSA water transfers. It is not within the scope of the Revised Draft SEIS for Reclamation to evaluate the possible effects of the draft Salton Sea 10-Year Plan on the Colorado River or related mainstream resources.⁸⁸

VI.B. Tribal Consultation and Coordination

In part 4.4 “Tribal Consultation and Coordination,” the Revised Draft SEIS states, “For purposes of this NEPA process, Reclamation is consulting and coordinating with Tribes who have entitlements to or contracts for Colorado River water and those that may be affected by or have interests in the proposed federal action.”⁸⁹ However, it appears that Reclamation did not consult or coordinate with Tribes in the northern Salton Trough, including but not limited to the Torres Martinez Desert Cahuilla Indian Tribe, concerning the Revised Draft SEIS and the details of the Proposed Action and its reasonably foreseeable effects.⁹⁰ I suggest that is a significant omission that should be remedied. Tribes in the northern Salton Trough will foreseeably suffer negative effects if Reclamation selects and implements the Proposed Action, or any other action alternative that substantially reduces freshwater inflows to the central Salton Basin. In particular, the Torres Martinez Desert Cahuilla Indians, whose traditional lands and reservation include portions of the Salton Sea and directly adjoin the increasingly exposed lakebed, are especially likely to suffer direct, indirect, cumulative, and disproportionate harm. I suggest it is crucial for Reclamation to consult and coordinate with the Torres Martinez Desert Cahuilla Indian Tribe regarding the Proposed Action, and regarding measures that should be implemented by USBR to avoid, or to minimize to the maximum feasible extent, all harm to Tribal members, lands, and resources that could result if Reclamation proceeds with the Proposed Action.⁹¹

VI.C. Endangered Species Act Section 7 Consultation

In part 4.5 “Endangered Species Act Section 7 Consultation,” the Revised Draft SEIS states:

...ESA Section 7 interagency consultations (16 USC 1531) were initiated with the Service in January 2023. They continued through a series of meetings and email exchanges, during which listed species were identified, actions and action areas were discussed, and conservation measures were developed. Two

⁸⁸ It is worth noting that there is no reason to think any proposed projects in the 10-Year Plan will have any negative impacts on the Colorado River mainstream, locations adjoining it, or the resources related to it that the above quoted statements reference. But, regardless, the Revised Draft SEIS is not the proper document in which to consider such matters.

⁸⁹ Revised Draft SEIS, page 4-3.

⁹⁰ Table 4.4 lists numerous Tribes with which Reclamation has consulted and coordinated, but no Tribes in the northern Salton Trough are mentioned. In addition, Table 4-5 presents a “Summary of Tribal Consultation Efforts” that occurred between publication on November 17, 2022 of the Notice of Intent to prepare the SEIS and August 30, 2023, and again no Tribes in the northern Salton Trough are mentioned.

⁹¹ As noted previously in footnote 47, I do not represent or speak on behalf of the Torres Martinez Desert Cahuilla Indians or any other Tribe. I offer these comments solely as a concerned citizen and as someone who has extensive knowledge about matters related to the past, present, and future of the Salton Sea and associated issues affecting people throughout the surrounding region, including but not limited to Tribes.

biological assessments were developed, one for the Lower Colorado River in relation to the Multi-Species Conservation Program, and one for the Upper Colorado River in relation to LTEMP. Consultation is ongoing with an anticipated finalization of two biological opinions in the spring 2024.⁹²

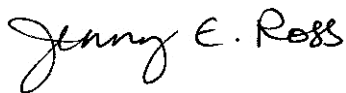
It appears that no ESA Section 7 interagency consultation occurred, and no biological assessment was developed, with regard to any listed species reliant on the Salton Sea ecosystem and potentially affected by the Proposed Action’s impacts on the Salton Sea ecosystem. I suggest that such consultation and assessment, and issuance of a final biological opinion, are required.

VII. Conclusion

Effective actions must be undertaken by Reclamation and Colorado River stakeholders to address the ongoing water supply deficit on the Colorado River during the period 2024-2026. But for too long the Salton Sea, the wildlife reliant on the lake’s ecosystem, and disadvantaged communities throughout the surrounding region have improperly been an afterthought, or entirely ignored, in Colorado River management decisions; and they have therefore borne the brunt of many harmful consequences stemming from those decisions. While the Revised Draft SEIS takes a stab at addressing that major problem, it misses the mark and falls short. Salton Sea Impacts resulting from the Proposed Action will likely be less severe than the adverse impacts from some previously proposed alternatives that have since been rejected by Reclamation; however, it is clear the Proposed Action will have injurious effects on the Salton Sea, wildlife, the environment, the climate, and people who live and work in areas adjacent to the lake—including, but not limited to, Tribes and other environmental justice communities. The Revised Draft SEIS does not adequately or even appropriately discuss many foreseeable and significant negative Salton Sea Impacts of the Proposed Action, and fails to suggest effective mechanisms for avoiding those impacts or for minimizing the detrimental effects that are impossible to avoid. In these and other respects, the Revised Draft SEIS does not satisfy applicable legal requirements. In preparing the final SEIS and Record of Decision, Reclamation must properly address all deficiencies in the Revised Draft SEIS related to the Salton Sea. Most crucially, Interior must expeditiously plan and undertake effective actions to ensure that significant injurious consequences for people, wildlife, and the environment in the Salton Sea region do not occur as a result of Reclamation’s near-term Colorado River operations.

Thank you for considering these comments.

Sincerely,



Jenny E. Ross, J.D.

Research Affiliate, Stout Research Center⁹³

Cc:

Gavin Newsom, Governor of California
Deb Haaland, Secretary of the U.S. Department of the Interior
Camille Calimlim Touton, Commissioner of the Bureau of Reclamation

⁹² Revised Draft SEIS, page 4-13.

⁹³ As a Research Affiliate of the Stout Research Center, I study a variety of scientific issues related to the Colorado River system, the Salton Trough, and the past, present, and future of the Salton Sea, including Pliocene-to-Holocene geology, paleontology, hydrology, climatology, and ecology. These comments are submitted in my personal capacity and not on behalf of the Stout Research Center.

Alex Padilla, U.S. Senator for California
Wade Crowfoot, California Secretary for Natural Resources
Yana Garcia, California Secretary for Environmental Protection
Karla Nemeth, Director of the California Department of Water Resources
Raul Ruiz, M.D., U.S. Congressman for the 36th District of California
Ken Calvert, U.S. Congressman for the 41st District of California
Steve Padilla, California State Senator, District 18
Eduardo Garcia, California Assemblymember, District 36
Michael Brain, Assistant Secretary for Water and Science, U.S. Department of the Interior
Samantha Arthur, Assistant Secretary for Salton Sea Policy, California Natural Resources Agency
Jeremy J. Brooks, Salton Sea Program Manager, Bureau of Reclamation
Joaquin Esquivel, Chair of the California State Water Resources Control Board
G. Patrick O'Dowd, Executive Director/General Manager, Salton Sea Authority
Christopher Harris, Executive Director, Colorado River Board of California
J.B. Hamby, Chair, Colorado River Board of California
James Newcomb, SSMP Lead and Assistant Deputy Director, California Dept. of Water Resources