



July 17, 2023

Samantha Arthur
Assistant Secretary for Salton Sea Policy
California Natural Resources Agency

Patrick O'Dowd
General Manager
Salton Sea Authority

Juan Perez
Chief Operating Officer
Riverside County

via email

RE: North Lake Pilot Demonstration Project water supply & impacts

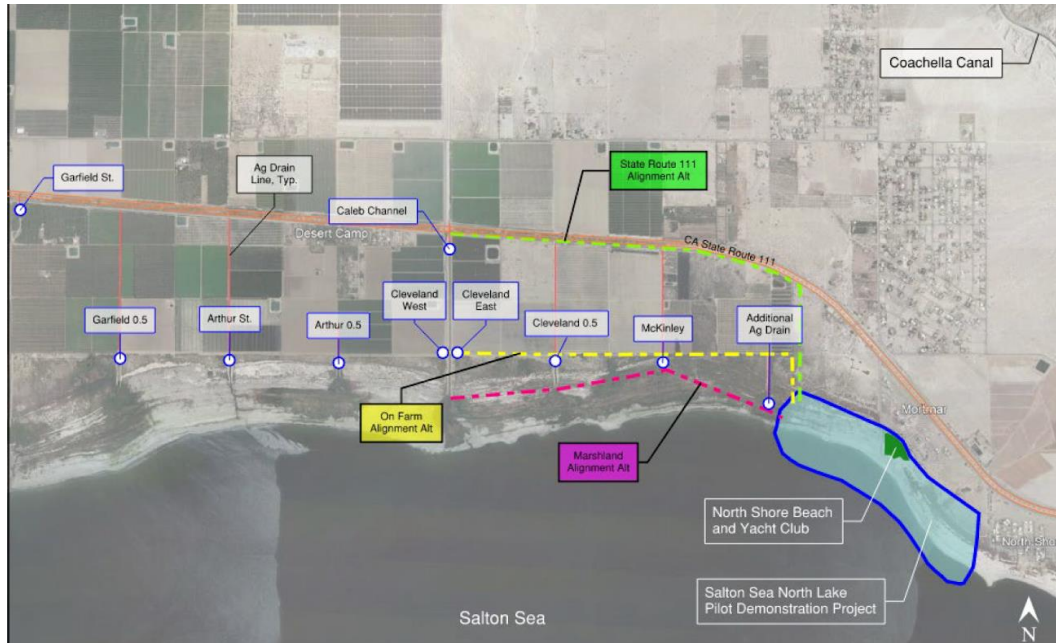
Dear Ms. Arthur, Mr. O'Dowd, and Mr. Perez:

On behalf of Alianza Coachella Valley, Audubon California, Leadership Counsel for Justice & Accountability, Pacific Institute, and Sierra Club California, we write to alert you to some potential challenges associated with the identified water source for the proposed North Lake Pilot Demonstration Project and to suggest alternative water sources to avoid these challenges and expedite construction of this much-needed project. As you may know, we have long advocated for the construction of habitat, dust suppression, and multi-benefit projects at the north end of the Salton Sea, to provide ecological, economic, and recreational opportunities and public health benefits. Please see the attached letter for one example of this support.

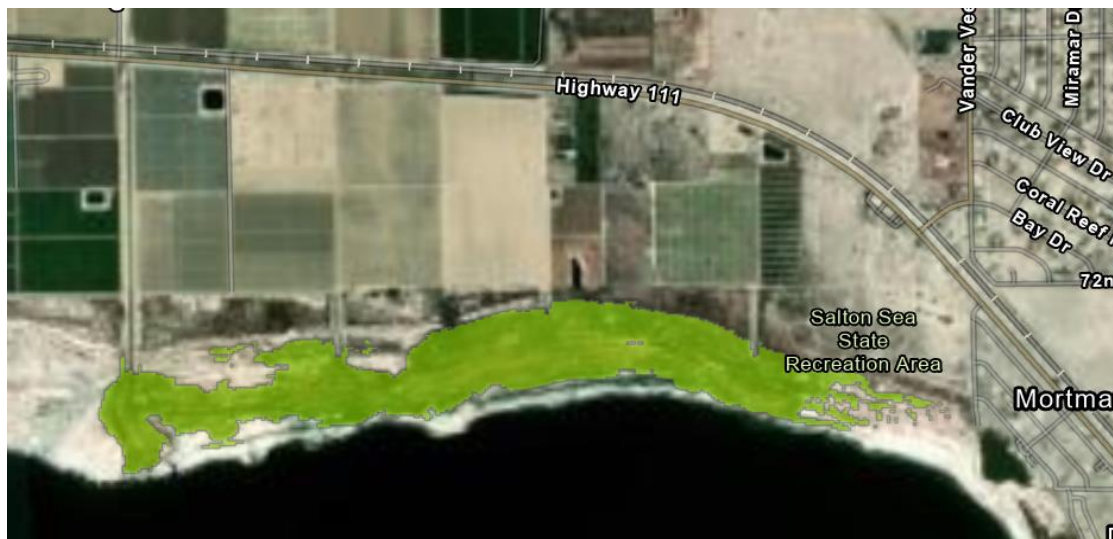
The [June 22nd North Lake Pilot Demonstration Project Update](#), presented to the Salton Sea Authority board, raises two significant concerns that we bring here to your attention. First, the water supply analysis (on slide 8) suggests the construction of a "backbone pipeline" to intercept and convey the flow of five Coachella Valley Water District (CVWD) drains to supply the project. Second, the water supply analysis estimates the water demand for the 156-acre surface lake at 1,900-2,600 acre-feet per year.

Habitat Loss

The June 22nd project update included the following image:



The concern is that capturing the flow of these CVWD drains would desiccate approximately 190 acres of emergent wetlands – habitat for listed species including the endangered Yuma Ridgway's Rail (*Rallus obsoletus yumanensis*) as well as many migratory bird species. The threatened habitat is shown in the image below:



This graphic, compiled by Audubon California using January 2022 aerial imagery, shows the roughly 190 acres of emergent wetlands east of the Cleveland West Drain, in green. On May 24 of this year, Robert McKernan of the Oasis Bird Observatory (OBO) heard two Yuma Ridgway's Rails in this area and briefly observed one adult individual at the edge of a cattail thicket approximately one kilometer west of North Shore (33°31'16.55" N 115°56'50.87" W) (please see attached photographs and description). Dr.

McKernan also noted that this area “had greater biodiversity than other segments of shoreline around the central and north portion of Salton Sea.”

In addition to eliminating habitat for an endangered species, the capture and diversion of CVWD drain water would lead to a net loss of habitat, as these wetlands are produced and maintained by the series of drains and seeps along the northeast shoreline of the Salton Sea. Furthermore, existing shoreline habitats within the footprint of the proposed project are composed of a series of barnacle pools and associated moist soil habitats which are important staging locations for approximately 25 species of shorebirds that use these shoreline haunts during fall and spring migration. Additionally, Snowy Plover (*Charadrius alexandrinus*) (interior population) is considered a common breeding bird along the northeast shoreline haunts of the Salton Sea; the northeast shoreline is one of two locations at the north end of the Salton Sea where Snowy Plover reach their maximum breeding abundance (McKernan, OBO pers. com.).

Wetlands at the Salton Sea sustain high biodiversity, including many species of migratory and resident waterbirds, and also help control dust and store carbon. This raises the broader question of the value of spending more than \$19 million to create 156 acres of new habitat - habitat that will likely not achieve the same levels of biodiversity - at the additional expense of the loss of some 190 acres of existing habitat. This would not be a good use of public funds and would not advance the Salton Sea Management Program’s efforts to achieve the [State Water Resources Control Board’s acreage milestones](#). We raise these concerns now to help you avoid the time and cost that would otherwise be invested in the regulatory compliance required for this project, compliance that will likely identify potential threats to listed species and net loss of habitat as critical flaws.

Water Demand

Secondly, the estimated 1,900-2,600-acre-foot water demand for the project seems very high. Even at the lowest end of that range, this would be more than double the evaporative loss from the surface of the 156-acre lake. At the high end, it represents more than 16.6 acre-feet (AF) per acre of water demand. What is the basis for this projected water demand? What is the target salinity for the lake? Please send us a copy of the “Water Supply Assessment Technical Memo” referenced in the October 28, 2021, North Lake Demonstration Pilot Project Workplan. Has the SSMP Science Advisory Committee reviewed the “Water Supply Assessment Technical Memo”? If so, please also send us a copy of their review.

Water Quality

The 2021 North Lake Demonstration Pilot Project Workplan notes that “The Project will also include the development of habitat, water supply infrastructure, and recreational features” The conceptual renderings included on [the project website](#) show sailing and kitesurfing on the North Lake Pilot Demonstration Project. We commend the inclusion of water-based recreation in the project – the region would benefit tremendously from the inclusion of such a feature. But the proposed use of untreated agricultural drainage for the proposed project raises concerns about the suitability of such water for “Water Contact Recreation” and “Non-Contact Water Recreation,” as defined by the Regional Water Quality Control Board. This is especially important to ensure no more harm to local community residents who will use these amenities and already experience a number of public health concerns related to the impacts of the Salton Sea. The Alianza Coachella Valley community science program regularly monitors

the water quality near similar agricultural drains at 84th Avenue and at the Whitewater River inflow to the Salton Sea. This group has found that several shoreline sites contain *Enterococcus* fecal indicator bacteria concentrations to be greater than 2400 MPN/100ml using the IDEXX Quanti-Tray method. This concentration is far above the primary standard of [100 MPN/100ml as set by California's Region 7 Water quality](#) board for safe water contact. This demonstrates that ECV agricultural wastewater is unsuitable for recreational purposes.

Alternative Water Supply

Fortunately, a clear solution exists for both the water supply and water quality challenges. The Imperial Irrigation District's (IID's) delivery of some 800,000 AF of mitigation water to the Salton Sea, as required by the State Water Resources Control Board and authorized by the federal Colorado River Water Delivery Agreement (CRWDA), provides a clear precedent for sourcing and delivering water to the North Lake Pilot Demonstration Project. The mitigation water language "authorization" appears in [footnote 5 of Exhibit B of the CRWDA](#): "Any amount identified in Exhibit B for mitigation purposes will only be from non-Colorado River sources and these amounts may be provided by exchange for Colorado River water." Footnote 4 to Table 19 of the [2016 Bureau of Reclamation Decree Accounting report](#) states "As referenced in Column 7, Exhibit B, of the CRWDA and the IID/SDCWA Water Transfer Agreement, as amended, IID conserves water for transfer to SDCWA for delivery, by exchange from non-Colorado River sources, to the Salton Sea for mitigation purposes."

[The 2019 Amended and Restated Agreement for Exchange and Advance Delivery; Exchange Agreement Between Metropolitan Water District, Desert Water Agency, and Coachella Valley Water District](#) provides the mechanism for exchanging water from non-Colorado River sources to the North Lake Pilot Demonstration Project. In 2023, CVWD enjoys a 100% State Water Project Allocation – [a total of 138,500 AF of non-Colorado River water](#) and more than 70 years of supply for the proposed project. This year, CVWD will pay an estimated \$170.11/AF for 88,000 AF of water transferred from IID. This provides a reasonable cost basis for securing the water from CVWD for the proposed project and would afford CVWD the additional opportunity to demonstrate initial [support for a practical, reasonable solution to the complex environmental challenge at the Salton Sea](#).

Recreational Access

The project must include a number of multi-benefit infrastructure elements that ensure that recreational opportunities align with the customs and priorities of local residents. Examples of these elements are:

- Tables and benches for rest areas or viewing
- Shade structures to protect from sun exposure and support community gatherings
- Picnic areas and trails systems (minimum of one mile per trail) with green spaces
- Open areas meant for dust suppression projects can incorporate gravel or compact soil to simultaneously suppress dust and allow for public use as desired by the communities
- Urban greening throughout the project
- Educational programing like informational signage throughout projects
- Viewpoints for bird-watching like piers
- Infrastructure for boat and kayak access as identified in the North Lake Projects

These elements were identified in collaboration with residents from the communities in the Eastern Coachella Valley and are meant to provide additional mitigation benefits as well as improve public health, create recreational opportunities to local residents, and increase their access to the outdoors and the Salton Sea. Audubon's "Assessing Landscape Suitability for Public Access at the Salton Sea" study confirms that these are the public priorities. It is vital that the local residents have priority access to these recreational facilities and that these provide benefits to their health and community.

To ensure that local community members have access to the proposed project, we encourage you to incorporate a pedestrian bridge over Highway 111, linking North Shore residents to the new North Lake. An envisioned green bridge would link the community of North Shore to the Beach and Yacht Club, the only community center serving this population with after school programs, fitness activities, and a summer cooling center. This type of multi-benefit infrastructure would assure equitable and safe access to this much-anticipated project. Additionally, this bridge can connect to other proposed plans in the works that can connect community and tourists to the Salton Sea beyond the yacht club (i.e. revitalization at the Salton Sea State Recreational Area and potential expansion of the CV Link into the North Shore community).

Community Outreach and Engagement

While the [project's website](#) states that "partner agencies are prepared to create a structured, accessible, and meaningful process to communicate effectively," the project is now a few years into planning and there have only been a couple of public informational meetings. In order to ensure that the project aligns with the vision and priorities of the local unincorporated community it is vital that the community is properly involved and informed from the beginning stages of the project's development. We ask that there be more consistent collaboration with local communities to inform the design and development of this project.

Thank you for your consideration of these recommendations and suggestions. We strongly support a viable North Lake project and stand ready to work with you to expedite its funding and implementation.

Sincerely,

Michael Cohen
Senior Associate
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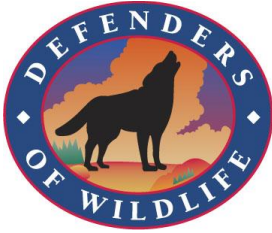
24 May 2023, 2 Yuma Ridgeway's Rails were heard, and one individual was briefly observed at the edge of cattail thicket approximately 1km west of North Shore (33°31'16.55" N 115°56'50.87" W). Although, non-playback incidental surveys have detected YRRA farther west along the NESS shoreline this location is seemingly the eastern most observation of the species in suitable habitat by OBO surveys. The 2 YRRA were heard around 0700 give grunting calls and multiple bouts of *kek kek kek* calls. R. McKernan.



Northeast shoreline: Garfield St., Arthur St., Cleveland St. inflow drains. 15 August 2018

The Northeast shoreline of Salton Sea between years 2018 and 2022 had greater biodiversity than other segments of shoreline around the central and north portion of Salton Sea. Furthermore, these northeast shoreline habitats emerged more stable regarding bird species diversity (Shannon diversity Index). Bird occurrences and use tended to be more spread out over the landscape as the suite of drains or “stable inflows” maintained quality habitats and undoubtedly were more diverse regarding bird species richness than other segments of the NESS.





January 10, 2019

Phil Rosentrater
Executive Director
Salton Sea Authority
82995 Hwy 111, Suite 200
Indio, CA 92201

RE: Proposed North Lake Project

Dear Mr. Rosentrater:

On behalf of Alianza Coachella Valley, Audubon California, Defenders of Wildlife, Environmental Defense Fund, Kouunkuey Design Initiative, Pacific Institute, and Sierra Club California, we encourage the Salton Sea Authority (Authority) to expedite the implementation of a North Lake plan for the Salton Sea. We also offer comments and suggestions on the proposed North Lake concept that was briefly summarized at the [June 12th](#) and [November 13th](#) meetings of California's Salton Sea Management Program (SSMP) 10-Year Plan Committee. As we have noted previously, a North Lake could offer a host of habitat, recreational, and economic development opportunities and should be pursued. A North Lake project also offers the Authority the opportunity to lead on a local project.

As you know, time is of the essence. More than three years have passed since Governor Brown established acreage milestones with his Salton Sea Task Force Agency Actions, yet the state still has yet to construct a single acre of habitat at the Salton Sea. The SSMP has also failed to achieve the

acreage milestone established by the State Water Resources Control Board's [Order WR 2017-0134](#). This inaction does not occur in a vacuum. Since the signing of the Quantification Settlement Agreement in 2003, the salinity of the Salton Sea has increased by more than a third while its surface has dropped by more than eight and a half feet, exposing more than 20,000 acres of lakebed. Populations of fish-eating birds such as pelicans and cormorants have plummeted, while dust emissions have increased, harming the people that live downwind from the Sea.

Fortunately, last June, California voters approved \$20 million for the Authority to construct Salton Sea projects, affording a real opportunity for the Authority to demonstrate leadership and competence and build functional projects at the Salton Sea.

We encourage you to act quickly on this opportunity. Please include a report at the January 24 Authority Board Meeting describing a general planning and construction schedule for a North Lake and a conceptual budget for expending the \$20 million authorized by Proposition 68, as well as other funds currently available to the Authority. We also encourage you to include a report on the status of the North Lake Plan at the January 24 Board Meeting, toward an action item at the February 21 Board Meeting on a preferred alternative and a schedule for project design and implementation. This is an excellent time to demonstrate that the Authority can act decisively on behalf of the Salton Sea, expediting consideration and implementation of the North Lake vision championed by Supervisor Perez a year ago and reviewed by Riverside County in the summer of 2017.

We encourage you to incorporate the following recommendations into the formation of the North Lake Plan:

- **Lake elevation** – The North Lake plan should maximize lake elevation, to increase surface area and depth and to better provide a water supply for other projects. Presumably, the design elevation could be -226.0' (NAVD 1988), roughly the Salton Sea's elevation in 2003. A North Lake should include deep (~10') water habitat for primarily fish-eating birds, such as pelicans and cormorants. A target elevation of -226.0' would rewet exposed playa, help capture drain flows that might otherwise be lost to evaporation and vegetation, and minimize the need to extend existing roads to access the North Lake. Additionally, a higher elevation North Lake could more readily supply water to refill the marinas of shoreline communities to the south.
- **Inflow sources & quantities** – The North Lake should be sized to optimize the capture of Whitewater River baseflows, and as much flood flow from the river as can be captured at reasonable cost. The SSA should task its consultant with determining average annual Whitewater River baseflows and estimating what additional construction costs would be required to capture flood flows. The consultant should also describe the tradeoffs between routing flood flows through the North Lake versus diverting baseflows plus some portion of flood flows into the lake. Any North Lake plan should include the projected water demand for the lake, and an annotated list of sources to meet this demand.

- **Capture and Recharge** – The Authority should work closely with the Coachella Valley Water District (CVWD) to expand CVWD’s floodwater recharge program, benefitting the region’s aquifer and increasing reliable baseflows to the North Lake. Such an approach might be able to leverage additional federal infrastructure funding and expertise. Close coordination with CVWD will also avoid potential conflicts with CVWD’s updated Stormwater master plan or construction of new wastewater recycling facilities.
- **Salinity** – We do not believe the North Lake plan should set specific salinity objectives or targets. Since the state’s preference for higher-salinity water is mainly intended to avoid selenium biomagnification and since selenium should be less of a concern given low-selenium Whitewater River flows, the North Lake should avoid the significant capital and operations costs of pumping remnant Salton Sea water to manage salinity. Instead, the North Lake plan should simply use raw river water to sustain the North Lake. Discharge from the Lake could then be used downgradient to support additional habitat and dust control ponds.
- **Selenium** – The use of lower-selenium Whitewater River flows should be prioritized. Use of drain water with selenium concentrations greater than the 3.1 ppb (identified in the draft EPA criteria) should be avoided. Additionally, please refer to Agrarian’s sediment map (attached), to avoid siting the North Lake atop high-selenium sediments.
- **Torres-Martinez Desert Cahuilla Indians** – The Tribe must be an integral part of the planning process, given their extensive property in the project area. The Tribe might also be able to supply rock for the North Lake impoundment structure.
- **Community Amenities** – The Authority should include community amenities as part of the concept and design of the North Lake to maximize the opportunity for public access and stewardship. These amenities should be developed in conjunction with residents of the Eastern Coachella Valley, and should be included as part of the first phase of the project build-out.
- **Resident Engagement** – The Authority should work with closely with local community groups and residents throughout the design, planning, and construction process. A dedicated engagement budget and strategy that is developed upfront is necessary to serve as a roadmap for outreach and engagement decisions, and opportunities for participatory budgeting should be included within the engagement process.
- **Public Access** – The North Lake plan should designate public access along much of the shoreline and in a portion of the deeper-water lake, but restrict public access near the delta and in a portion of the lake (perhaps 50% of areas deeper than three feet) to offer a refuge for fish and birds.
- **Costs** – The North Lake plan should clearly describe the estimated capital and annual costs associated with different Lake configurations.

Thank you for your consideration of these recommendations and suggestions. We strongly support a viable North Lake project and stand ready to work with you to expedite its funding and implementation.

Sincerely,



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Cc: Bruce Wilcox
Genevieve Johnson, Bureau of Reclamation
Justine Herrig, SWRCB
Arturo Delgado, DFW
Vivien Maisonneuve, DWR