

As independent scientists, engineers, natural resource managers, recreation managers, and environmental lawyers, we feel compelled to raise a voice of warning about a proposal that could severely damage Utah Lake.

Utah Lake is the largest freshwater lake in Utah and a keystone ecosystem in western North America. The lake creates billions of dollars of value by providing world-class recreational opportunities, water rights, enhanced property values, pollution removal, local precipitation, and habitat for 50 million birds, fish, and other wildlife. Utah Lake has great historical and cultural significance as the homeland of the Timpanogos Nation and the source of food that saved the Mormon Pioneers during crop failures in 1854 and 1855. Decades of local, state, and federal restoration efforts within and around Utah Lake have resulted in ecological recovery, including declining algal blooms, removal of invasive species, recovery of the endangered June Sucker fish (downlisted in 2021), healthy sediments, and establishment of senior water rights protecting the lake level despite the ongoing megadrought.

In 2018, the *Utah Lake Amendments* (HB 272) weakened constitutional protection for Utah Lake, opening the lakebed to possible development. Since then, a company called Lake Restoration Solutions (LRS) has been seeking support for a proposal to build 20,000 acres of artificial islands on Utah Lake (1/5th of the lake's surface). Here is the project [website](#) and [proposal](#). LRS claims their project will provide "comprehensive restoration" of the lake ecosystem at no cost to the people of Utah, referencing \$6.4 billion in undisclosed investments and connections with artificial islands built in Dubai. In 2021, LRS requested and received \$10 million in loan guarantees from the Utah Legislature. In August of 2021, they requested \$893 million in federal loans through the Environmental Protection Agency (EPA) Water Infrastructure Finance and Innovation Act (WIFIA) program, but they were not invited to submit a proposal.

As a group of experts, we have serious concerns about the viability of the LRS proposal, including:

1. ***Intentional disregard of available science about the lake's history, status, and trajectory:*** LRS falsely claims that Utah Lake used to be deep and clear, that waves and evaporation are damaging, that sediment is heavily polluted, that algal blooms are worsening, and that the lake is deteriorating. These claims contradict virtually all [scientific evidence](#), including the state's ongoing [Utah Lake Water Quality Study](#), which has been presented at events attended by LRS.
2. ***Departure from the principles and methods of ecological restoration:*** LRS proposes to dredge the entire lakebed, create artificial islands to house 500,000 people, split the lake into dozens of small and deep impoundments, kill all 10 million fish with rotenone, and then use mechanical water circulators to prevent thermal stratification and dead zones. These efforts do not align with restoration best practices and are likely to reverse the lake's recovery.
3. ***Unprecedented size and scope:*** LRS claims that similar projects have been successfully completed elsewhere. In fact, the proposed islands would be 8-times larger than the world's biggest dredged island (Kansai Airport), and the dredging would be 370-times larger than the largest freshwater dredging project ever completed (Hudson River Cleanup).
4. ***Inadequate expertise:*** Large restoration projects in sensitive ecological areas typically involve teams of researchers, engineers, legal experts, local stakeholders, and government oversight. On the ecological side, LRS has no Ph.D. scientists on their team. On the engineering and legal sides, no project of this scope has been completed anywhere in the world.
5. ***False claims of endorsement and permitting:*** To reassure local and state leaders, LRS has claimed to have endorsement, permitting, or financing from the EPA, Army Corps of Engineers, FFSL, Utah Governor's Office, Utah Legislature, and the Utah Lake Commission. We have heard from most of these entities, none of which have endorsed the project.
6. ***Flawed model:*** LRS' chief design director Robert Scott designed the failed "Palm Deira" in Dubai, which appears to be the inspiration for this project. Even with nearly unlimited money from the Sheikh of Dubai, the island developer Nakheel incurred tens of billions of dollars in debt, only completing 1 of 4

planned archipelagos. Even the partial construction of those islands created massive ecological damage including creation of algal blooms, degradation of water quality, erosion of coastlines, and asphyxiation of sea life. The proposed Utah Lake islands would be 14-times larger than the only completed island project in Dubai (Palm Jumeirah).

7. **Legal and permitting barriers:** The LRS proposal depends on the largest privatization of sovereign state land in Utah history. While the 2018 *Utah Lake Amendments* make this theoretically possible, the transfer would likely result in judicial challenges based on the [public trust doctrine](#). Utah courts have policed this doctrine strictly, including a 2019 clarification by the Utah Supreme Court ([USAC v. VR Acquisitions](#)). At the federal level, this project would be the largest destruction of lake and wetland habitat in modern U.S. history. The islands would cover 1/5th of the lake area, and the dredging to build them would impact the entire lake and surrounding shoreline (at least 150 square miles). [The Environmental Impact Statement](#) would likely take more than a decade before being rejected given the requirements of the National Environmental Policy Act, Clean Water Act, and the Rivers and Harbors Appropriation Act.
8. **Shifting liability:** The LRS proposal imposes enormous economic and environmental risk on the citizens of Utah while providing no opportunity for reward. Project failure during design or permitting would leave the state with loan guarantees and reduced credibility regarding management of sovereign state lands. Project failure during construction or development would leave the people of Utah with a multi-billion-dollar cleanup and decades of lost restoration and recreation potential. Even the unlikely prospect of project completion would create a permanently diminished lake stripped of the natural characteristics that have sustained its ongoing recovery.

We urge local, state, and federal leaders to oppose this project and make whatever changes are necessary to prevent similar projects in the future. The 2018 *Utah Lake Amendments* and continued state support of this project damage Utah's credibility and amplify LRS' efforts to spread misinformation about the status and recovery of Utah Lake. Their claims have influenced public perception and shaped the political debate over Utah Lake, undermining legitimate restoration and education efforts.

In this time of dramatic change, we need evidence-based management and legislation to protect this unique, beautiful, and dynamic lake. Utah Lake has sustained our predecessors and ancestors for thousands of years. It is now our opportunity and responsibility to sustain Utah Lake for future generations.

Sincerely,

The undersigned

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In addition to these 103 public signatories, 8 additional experts in lake ecology, water resources, recreation management, or atmospheric science signed anonymously because of employer restrictions or political considerations.