AQUALLIANCE
DEFENDING NORTHERN CALIFORNIA WATERS

December 13,2021

California Water Commission
P.O. Box 942836
Sacramento, California 94236-0001
Submitted electronically to: cwc@water.ca.gov

Re: Public Comment for Commission Findings on the Sites Reservoir Project.

Dear Commissioners,

AquAlliance exists to defend northern California waters and to challenge threats to the hydrologic health of the northern Sacramento River watershed. We are prepared and willing to confront the escalating attempts to divert more and more water from the northern Sacramento River hydrologic region.

The agenda for this meeting states (pg 5) that "*the Sites Reservoir Project would result in significant and unavoidable environmental impacts to Surface water quality by violating water quality standards or waste discharge requirements or otherwise substantially degrading surface water quality*." The gigantic Recirculated Environmental document does not address the expert 2017 DEIR comments submitted by Jerry Boles, retired Chief of the Water Quality and Biology Section of the Northern District of the Department of Water Resources. This recirculated draft minimizes the severity of heavy metal, salt and Harmful Algae Bloom problems and presents contradictory mitigation strategies. The Commission explains, "*The Authority anticipates preparing a Statement of Overriding Considerations which will address why the project benefits outweigh its impacts*." But that SOOC is absent in the huge compilation of project documents.

The incomplete description of water quality problems and the admission that the project would create significant and unavoidable environmental impacts to Surface water quality and the failure to prepare a comprehensive SOOC clearly shows it is premature for the Ca Water Commission to issue a finding of feasibility at this time.

Chapter 2 Pg 71 explains that "*Sites Reservoir would be filled through the diversion of Sacramento River water that generally originates from unregulated tributaries to the Sacramento River downstream from Keswick Dam.*" The source water for the Project is not adequately identified. It is insufficient to refer to the Sacramento River as the source of the water for the proposed Project without explaining which tributaries would contribute to the supply and how high flow events can increase toxic metal loads. Boles explains that Cottonwood Creek contributes the most significant input into the Sacramento River during high flow events and that toxic concentrations increase during high runoff events.

There are significant minerals in question such as sodium salt, aluminum, arsenic, cadmium, iron, chromium, copper, lead, manganese, mercury, nickel, selenium, and zinc. These substances

are common in the geological setting that is the western edge of the Central Valley. The Sites DEIS/EIR describes some existing concentrations of these substances in the creeks that flow out of the primary area but downplays how inundation combined with evaporative enrichment can cause elevated concentrations in terminal water bodies. The proposed Sites Reservoir would impound Stone Corral and Funks Creeks, as well as inundate Salt Lake. These creeks are known to contain high levels of heavy metals and salts, especially when inundated by precipitation during major flow events when diversions are likely to occur. Chapter 6 of the RDEIR downplays and obfuscates this fact with irrelevant and clever verbiage: "*For many metals there is a slight tendency for fewer exceedances to occur in the summer and fall*."

The high concentrations of metals likely to occur in the proposed reservoir will impact most, if not all, beneficial uses of the proposed project, including agricultural supply, wildlife and fisheries, and drinking water supplies for communities that divert water from the Sacramento River. Water Quality should be the primary consideration in this investment.

Major sources of total mercury loads to the Sacramento River watershed include runoff and erosion from native soils and natural mineral springs. Chapter 6 focuses on mercury problems. "*It is anticipated that Sites Reservoir would result in net methylation of mercury… Reservoir fluctuations would also contribute to conditions favorable to mercury methylation*." The report explains that mercury methylation in newly inundated reservoirs is greater than in established reservoirs. Expected mercury concentrations after reservoir filling are estimated to be roughly double the long-term concentrations. In another example of downplaying issues, the Authority suggests a ridiculously simple mitigation for this alarming problem on Chapter 6 pdf pg 59: "*Do not stock Sites Reservoir with fish for the first 10 years following its initial filling*."

Another example of downplaying and obfuscating unmitigable water quality problems is to restrict the numerous heavy metal/salt impurity observations in the reservoir source and footprint into a theory that evapoconcentration in the Salt Lake is insignificant: "*At Salt Pond, a few metals were noted to have high concentrations (aluminum, iron, and manganese, arsenic, copper, lead, and nickel). These concentrations may have been high partly due to evapoconcentration of the spring water in the pond and because little discharge leaves the pond*." This sentence in no way addresses the broad water quality challenges outlined by Mr. Boles in his expert 2017 comments.

As stated above, some of the mitigation strategies are poorly formulated. In one case found in Chapter 6 there are blatantly contradictory mitigation strategies suggested. Here is an EXAMPLE: Chapter 6 pg 71 Discussing inevitable HABs that will develop in the warm reservoir. "*Concentrations would likely be higher toward the water's surface where cyanobacteria and algae would be concentrated.* ***Water would be released from lower in the reservoir****.."* On pg 72 discussing releasing water from the surface because expected methylmercury in lower reservoir layers: "*Due to thermal stratification, oxygen in the hypolimnion [lower layer] would become depleted which would in turn stimulate mercury methylation by bacteria.* ***As such, reservoir releases from the epilimnion [The surface layer]… would be less likely to have elevated methylmercury concentrations relative to releases from the hypolimnion***." Emphasis added.

My critique of the project is but a modest contribution to the refusal of water policy experts to accept the unrealistic dream of ever-increasing water supply in the west. Reliability can only be resolved by realistically managing demand. Over the past 35 years at least $950 million of taxpayer cash has been awarded to various iterations of the Sites consortium to implement planning. The Water Commission is now charged with deciding if citizens, agencies, and businesses should continue to pour money into this leaky wishing well or to cut losses and prevent building what may turn out to be the biggest stranded asset in the history of California.

In summary, Sites faces significant feasibility issues that continue to impede the construction and operation of this costly NODOS project.

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