



December 8, 2020

Via email

Board of Directors
Metropolitan Water District of Southern California
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RE: Information provided for December 8, 2020 MWD Board vote on Delta Conveyance funding fails to use Best Available Science

Dear MWD Board members:

Climate adaptation and seismic resiliency are the core objectives of the Delta Conveyance Project. There must be an honest analysis and disclosure of the limitations of the proposed Delta tunnel project engineering designs at all stages of project funding and approval. To date, that has not happened.

The Delta tunnel project is based on the previous WaterFix project, which had extremely flawed analyses of climate change and sea level rise on the project. In 2013, the Delta Independent Science Board commented:

The potential direct effects of climate change and sea-level rise on the effectiveness of actions, including operations involving new water conveyance facilities, are not adequately considered. [...] Similar comments could be made about the treatments of other disrupting factors, such as floods, levee failures, earthquakes, or invasive species, any of which could profoundly alter the desired outcomes of BDCP actions. [...] If the effects of major environmental disruptions such as climate change, sea-level rise, levee breaches, floods, and the like are not considered, however, one must assume that the actions will have the stated outcomes. We believe this is dangerously unrealistic.

In 2018, the Delta Stewardship Council staff draft findings on the WaterFix project's consistency with the Delta plan stated that the Department of Water Resources failed to use best available science on sea level rise in evaluating the project.

The information provided by MWD staff for the Metropolitan Water District Board's vote to fund further development of the Central and Eastern Corridor tunnel designs continues this

failure to use the best available science, as defined by the Delta Stewardship Council in Appendix 1A to the Delta Plan.¹

The Board letter from Mr. Arakawa and Mr. Kightlinger for the December 8, 2020 meeting states, “[t]he DCP is an infrastructure reliability project. Key project objectives included in the NOP are climate change resiliency and seismic resiliency. As with any major rehabilitation and reliability project, it is essential that the investment sustains and provides benefits for the life of the project.” (p. 2.)

The Board letter fails to mention that in June of 2019, the Department of Water Resources rescinded the engineering specifications which required the Delta Conveyance project to be constructed for a lifetime of 100 years, and to withstand a maximum earthquake in the Delta.² The new design lifetime of the project has yet to be specified.

The Board letter also states, “[t]he range of potential DCP benefits include preservation, or protection, of existing water supplies ranging from 100 thousand acre-feet per year to 1 million acre-feet per year.” (p. 2.)

Preliminary estimates of project benefits provided to MWD’s Bay-Delta Committee in September show projected Delta exports under “extreme” sea level rise, but did not clearly show that “extreme” sea level rise is the obsolete value of 55 inches used for the Bay-Delta Conservation Plan / WaterFix project.

It is a known issue that the North Delta intakes have not been evaluated for performance with current estimates of extreme sea level rise at 2100. Further, the performance of the North Delta intakes has not been evaluated with long term flooding of Delta islands, or with flooding in the North Delta, which can become an issue with high sea level rise.³

The estimate of “preliminary benefits” provided to MWD’s Bay-Delta Committee in September included protecting or preserving up to 700,000 af/year under seismic risks. But the estimate fails as an adequate analysis for the Board’s consideration of a seismic remediation project for water supply. It does not use the same seismic source assumptions for the existing system of Delta levees as for the proposed project, as is the standard for water supply lifeline engineering. There is also no disclosure of the DCA’s current proposed seismic standards for the project design.

¹ Delta Stewardship Council, Delta Plan, Appendix 1A, Best Available Science. <https://deltacouncil.ca.gov/pdf/delta-plan/2015-appendix-1a.pdf>.

² California Water Research, DWR rescinds engineering performance standards for Delta tunnel, August 6, 2019. <https://cah2oresearch.com/2019/08/06/dwr-rescinds-engineering-performance-standards-for-delta-tunnel/>

³ California Water Research, Delta Conveyance Assessment Recommendation: Re-Evaluate North Delta Intake Locations and Performance for High Sea Level Rise, June 2019. <https://cah2oresearch.com/wp-content/uploads/2020/12/CWR-SLR-and-2010-Intake-Loc-Eval-fnl.pdf>.

Preliminary Project Benefits

SWP Reliability and Resilience Compared to Future Conditions

Without Project may result in ~300,000 AF to 1 MAF reduction in SWP supplies

CLIMATE RESILIENCY

Protect up to ~900 TAFY under extreme sea level rise

SEISMIC RESILIENCY

Protect or preserve up to ~700 TAFY under seismic risks and Delta island flooding

WATER SUPPLY RELIABILITY OPERATIONAL RESILIENCY

Protect or provide ~100 TAFY to ~1000 TAFY
More restrictive South Delta
Increased Delta Outflow Requirements



TAFY = Thousand acre-feet per year on average

Note: Project has potential to increase SWP reliability or mitigate losses under many plausible future risk scenarios

Bay-Delta Committee

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In general, there has been a lack of disclosure of the methodology used by MWD and other PWAs for the estimates of preliminary benefits of the Delta Conveyance project. “Best available science” requires transparency about methodology and the opportunity for informed public comment.

Please delay commitments of funding for further development of this project until adequate information on project benefits for adaptation to climate change and sea level rise is made available.

Sincerely,

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cc:

The Honorable Gavin Newsom, Governor

The Honorable Wade Crowfoot, Secretary of Natural Resources

Susan Tatayon, Chair, Delta Stewardship Council

Jessica Pearson, Executive Director, Delta Stewardship Council

Daniel Constable, Environmental Program Manager, Delta Stewardship Council

Karla Nemeth, Director, California Department of Water Resources

Carrie Buckman, Environmental Program Manager for Delta Conveyance, Department of Water Resources

Oscar Villegas, Chair, Delta Protection Commission

Erik Vink, Executive Director, Delta Protection Commission