

Kent Lake Storage Expansion

Benefits

Ongoing Reliability. Kent Lake is a very productive watershed and fills in most years. Reliability of the additional drought supply would therefore be strong as the lake tends to refill quickly in between droughts.

Flexibility. The additional water supply would blend seamlessly with Marin Water's existing supplies, and would require no additional costs.

Social. The project would not require the conversion of any private property or disruption of existing permanent land uses (though some hiking trains would need to be relocated). The dam and new area of inundation are on Marin Water property.

Ongoing Operating Costs. Once built, the project would have essentially no operating costs or energy usage relative to today's practices.

Disadvantages and Challenges

Implementation. Construction and associated work would likely exceed 10 years due to complex technical and environmental requirements, as well as a multi-year construction period.

Reliability During Construction. The need to drain the reservoir for initial construction may pose an unacceptable risk that renders the project infeasible given that the lake is Marin Water's most important water supply. Prior implementation of a conveyance project could greatly reduce that construction risk.

Construction Cost. The initial capital cost is estimated at \$520 million, the highest of the projects screened for evaluation so far. That high initial cost is somewhat offset by extremely low operating costs, as well as the long lifetime of the project – easily 100+ years. Kent Lake is Marin Water's largest reservoir and is a highly productive watershed, consistently filling with rainfall in most years. Building on the proven reliability of this watershed, this expansion project proposes to raise the existing dam at Kent Lake to increase the capacity of the reservoir by 20,000 acre-feet, making the new total capacity about 53,000 acre-feet.

Rainfall would fill this additional available storage, which would serve as an emergency drought reserve. The total yield would be 5,000 acre-feet per year.



This map shows Kent Lake's location relative to Lagunitas Creek and San Geronimo, among other landmarks.

