

Winter Water Conveyance

Historical records show that, even during drought years, there are plentiful water supplies in the Russian River in Sonoma County between October and May resulting from winter rainfall – even after accounting for the in-stream water required to support aquatic life.

Right now, this excess Russian River winter water flows out into the Pacific Ocean. The Winter Water Conveyance Project could change that by providing the necessary infrastructure to divert some of this excess winter water, as needed, from the Russian River to our reservoirs to be stored for later use. This winter water source is not reliant on Sonoma County's stored supply but instead capitalizes on rainfall and excess river flows.

Formally named the "Marin Atmospheric River Capture Project for the construction of the Nicasio Aqueduct," this project would construct a 36-inch wide pipeline running 13.2 miles from the North Marin Aqueduct (Russian River pipeline) to Marin Water's Nicasio Reservoir. During dry years, this new infrastructure could replenish our local supply with as much as 3,800 acre-feet of stored water annually in its first phase, while a latter phase provides up to 8,100 acre-feet per year.

Benefits

Cost. Capital costs for the initial phase of the project are ~\$168M. While not insignificant, this cost is less than that of other options examined. Additionally, because the conveyance project would be utilized only when Marin Water needed to augment its existing water supply (during dry years), the conveyance option's operating costs would be an average of \$3 million per year.

Flexibility. The conveyance facilities would be relatively straightforward to operate and integrate into Marin Water's system. The project could also augment a future water storage project that could potentially allow for up to 8,100 acre-feet per year.

Implementation. While the project will require detailed environmental analysis and some permits, it appears to be substantially less impactful than many other options considered, and therefore less likely to incur major delays for permitting. It's reasonable to believe the project could be online in as few as four years.

Supports Regional Resiliency. The project adds to the resilience of the North Bay's overall water supply during times of drought.

Disadvantages and Challenges

Reliability. This project relies upon water being available for purchase during dry years. However, even in dry years, the Russian River watershed generates substantial flows.





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