



March 13, 2017

Jeanine Townsend, Clerk of the Board
State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 95814-0100

Dear Ms. Townsend,

My name is Julia Thollaug and I'm writing because I care deeply about the health of the San Francisco Bay-Delta and the watersheds which feed it.

It is vital to the health of the Bay-Delta that at least half of the natural flow from the Stanislaus, Tuolumne, Merced, and lower San Joaquin Rivers make it all the way to San Francisco Bay. More than 500 species of wildlife depend on the estuary, which is the largest on the West Coast. It serves as a major stopover for birds using the Pacific Flyway, and is a migration pathway for salmon, steelhead, and sturgeon traveling to and from their home streams and the Pacific Ocean. Historically, populations of spawning salmon may have exceeded 400,000 fish in the San Joaquin River Basin. However, in recent years, that figure has plummeted to just a few thousand. Salmon are a keystone species, providing food for other animals and transporting nutrients from the ocean to upland habitats. More than 100 species depend on salmon, so this issue is not just about restoring salmon – it's about restoring our salmon-based ecosystem.

Reduced freshwater inflow has changed the chemistry of the Delta, enabling cyanobacteria to thrive. These blue-green algae produce neurotoxins that can make people sick and kill plankton and wildlife. On average, less than 50% of the freshwater flow from the Central Valley reaches the Bay – and in some years, less than 35%. Reducing inflows shifts the size and location of the ecologically-important *salinity mixing zone*, which affects everything from plankton to marine mammals. Between 1975 and 2014, the natural unimpaired runoff in the watershed was only low enough to create a “supercritically dry” year once. However, upstream diversions captured so much runoff during those four decades that the Bay experienced “supercritically dry” conditions in 19 years instead of just once. Flows should be sufficient to inundate floodplains, which serve as critical habitat for juvenile salmon and other fish.

Through better management of snowmelt, water efficient irrigation technologies and practices, and the replacement of lower-value, water-intensive crops with higher-value, water-efficient crops, California could grow more food with less water. In the South San Joaquin Water District, a pressurized irrigation system *reduced* water use by 30% while *increasing* crop yields by 30%. In the Hetch Hetchy service area, water use decreased by 30% between 2006 and 2016 as a result of water conservation. We can accomplish great things when we all work together.

Please carefully consider the health of the San Francisco Bay-Delta and the wildlife who call it home when making decisions about water usage in our state. Thank you.

Sincerely,

Julia Thollaug
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