

Can California fish catch break with giant tunnels? Depends

July 1 2017, by Ellen Knickmeyer



In this Aug. 29, 2016 file photo, Jared Davis hauls in a salmon caught off the coast of Stinson Beach, Calif. Gov. Jerry Brown's plan to route much of California's mightiest river into two massive tunnels poses new perils for salmon and other struggling native species, but could give them a couple breaks as well, experts and project supporters and opponents say in the wake of two newly issued wildlife rulings on the \$16 billion project. (AP Photo/Eric Risberg, File)

Gov. Jerry Brown's plan to route much of California's mightiest river

into two massive tunnels poses new perils for salmon and other struggling native species, but could give them a couple of breaks as well, experts and project supporters and opponents say in the wake of two newly issued wildlife rulings on the \$16 billion project.

Ultimately, water experts say, whether Brown's two 35-mile (55-kilometer) tunnels hurt salmon, whales and other imperiled species depends, as always, on the intent and smarts of the officials who manage the Sacramento River's delta with the San Joaquin River, that fought-over, over-tapped spigot for the U.S. state with the most people, most crops and the biggest estuary on the West Coast.

"People just don't trust that it will be operated as planned," Peter Moyle, a professor emeritus and fishery expert at the University of California at Davis, notes of Brown's tunnels project.

The giant tunnels would make it easier to ship water from California's wetter north to cities and farms in the San Francisco Bay and Central and Southern California, even during droughts. They got an initial, crucial OK from federal fish and wildlife officials this week.

Moyle's career has followed decades of decline of native fish in California's Sacramento and San Joaquin rivers and their Delta, now re-engineered with dams, pumps, levees and canals to supply at least part of the water supply for two-thirds of the state's people. The complex north-south water delivery system has helped put three-fourths of the state's salmon and trout species on the path to extinction within 100 years, according to a study Moyle and others released earlier this year.

Another Delta native fish, the small and silvery Delta smelt, is so near extinction that scientists talk of freezing samples to preserve its genes. In the 1980s, the smelt were so plentiful that researchers once sampled them by the pickup load, Moyle recounts.

Brown's father, the late Gov. Pat Brown, helped put in the water projects that the younger Brown now wants to modernize. He is pushing to get the tunnels approved before he leaves office next year.

Moyle is on the side of those open to letting Brown's administration and a bloc of influential local water districts put in their tunnels. If nothing else, getting their way will incline supporters to follow through on separate, longstanding pledges to restore a big part of the Delta as fish habitat, he hopes.

"Personally, I feel we don't have a choice but to trust them," given the bad state of much of the Delta, Moyle said.



In this Aug. 29, 2016 file photo, a salmon flails in a water tub after being caught off the coast of Stinson Beach, Calif. Gov. Jerry Brown's plan to route much of California's mightiest river into two massive tunnels poses new perils for salmon and other struggling native species, but could give them a couple breaks as well, experts and project supporters and opponents say in the wake of two newly issued wildlife rulings on the \$16 billion project. (AP Photo/Eric Risberg, File)

Brown and officials from various local water districts—most of them in Central and Southern California, but a few in the San Francisco Bay Area —want to run two, four-story-high tunnels underground to take

water from the Sacramento River just above its delta with the San Joaquin River. Backers say the tunnels would take no more water from the Delta than present, although the tunnels would have the capacity to divert nearly the full flow of the Sacramento during summers or droughts.

The National Marine Fisheries Service and the U.S. Fish and Wildlife Service declared last week that the project would not drive any endangered species to extinction. Other state and federal agencies still have to rule on the project. Water districts also have to decide whether to fund it.

California's once bountiful salmon and other species already have a tough time. Dams block most of their upstream spawning ground. Huge pumps at the south end of the [delta](#) often make the water, and the fish in it, flow in reverse. Salmon are an anchor species, and their decline makes life harder for everything from forests in the Sierras to whales in the Pacific.

In 2014 and 2015, drought and pumping left so little water in Northern California that fishery managers used trucks to carry millions of baby salmon downstream to the ocean. Almost all of the state's baby winter-run salmon—among the most threatened of the state's salmon species—died anyway in those years.

Brown and other supporters of the tunnels argue fish will be better off with the tunnels because water managers will use the giant pumps in the south Delta less. The state newly agreed to dedicate another roughly 3 square miles (8 square kilometers) in the Delta to fish habitat, on top of about 50 square miles (130 square kilometers) that it already promised to restore.

The federal agencies pointed out new problems for fish, as well. The

project will turn the river into a construction site for more than 10 years. The tunnels will take what is cleaner, colder river water from the north of the Delta, leaving less water for salmon there. The tunnels will carry away sediment, making it easier for predators to spot [native fish](#), and making the Delta more vulnerable to algae blooms.

Officials promise to take care of problems as they arise.

"It requires a commitment to having monitoring in place ... so that we can, going forward, have a stronger sense of what's necessary to support these [fish](#)," Paul Souza, regional U.S. wildlife service director, told reporters.

Accepting that approach takes trust, something [tunnel](#) opponents lack. That includes suspicions water districts would press to take as much water as the tunnels can carry, whether that leaves enough [water](#) for wildlife or not, said Doug Obegi, a senior attorney for the Natural Resources Defense Council. The group was one of several conservation organizations filing suit last week to block the project.

Bad as it is for native species in the Delta, this is "worse than the status quo," Obegi said.

© 2017 The Associated Press. All rights reserved.

Citation: Can California fish catch break with giant tunnels? Depends (2017, July 1) retrieved 23 April 2024 from <https://phys.org/news/2017-07-california-fish-giant-tunnels.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--