

Salmon migrate by truck during California drought

June 17 2014, by Terence Chea

In drought-stricken California, young Chinook salmon are hitting the road, not the river, to get to the Pacific Ocean.

Millions of six-month-old smolts are hitching rides in tanker trucks because California's historic drought has depleted rivers and streams, making the annual migration to the ocean too dangerous for juvenile [salmon](#).

"The drought conditions have caused lower flows in the rivers, warmer water temperatures, and the fish that would normally be swimming down the rivers would be very susceptible to predation and thermal stress," said Kari Burr, fishery biologist with the Fishery Foundation of California.

California has been trucking hatchery-raised salmon for years to bypass river dams and giant pumps that funnel water to Southern California and Central Valley farms.

But this year state and federal wildlife agencies are trucking nearly 27 million smolts, about 50 percent more than normal, because of the drought, according to the California Department of Fish and Wildlife.

Each spring, the Coleman National Fish Hatchery usually releases about 12 million smolts into Battle Creek, a tributary of the Sacramento River near Redding. But this year, it trucked 7.5 million of them to San Francisco Bay because the drought had made the 300-mile swim too

perilous.

On a recent morning, a small convoy of tanker trucks carrying Coleman hatchery fish pulled up to the docks of Mare Island north of San Francisco Bay. There, the trucks unloaded 750,000 smolts that gushed out of long plastic pipes into floating netted pens.

The silvery smolts, just inches long, acclimated to the water in the net pens before Fishery Foundation boats took them out to the bay, where the fish were released and pulled to the ocean by tides.

Trucking the smolts ensures a large number will survive and grow to be the California king salmon prized by fishermen and seafood lovers. But skipping the river journey means the migratory fish won't know how to swim home to spawn in three years.

"Because that imprinting cycle is broken, it's unlikely that many fish will make it back to Coleman. In other words, they stray. They won't find that scent to where home is," said Scott Hamelberg, who manages the Coleman National Fish Hatchery.

The federal hatchery in Shasta County did release 4.5 million smolts into Battle Creek in April after rain temporarily improved river flows. Hamelberg hopes at least a small number of them will return in a few years and serve as broodstock for future generations.

The state-run Nimbus Fish Hatchery near Sacramento usually releases 3 million of the 4 million Chinook smolts it raises into the nearby American River, but this year it's releasing all of them into the bay.

"Because of the conditions this year and the mortality, it's better to put them straight into the bay and get them back in three years," said [fish](#) technician Gregory Ferguson, who was herding the smolts in ponds

toward pumps that sucked them into the truck tanks headed for Mare Island.

The commercial and recreational fishing industries have been pushing for the expanded trucking program to increase the chances of a decent salmon season in 2016, when the smolts released this year will be adults.

"I actually make my living just trolling for salmon, so it's pretty important for me," said John Terry, commercial salmon fisherman from Aberdeen, Washington, who was unloading his catch at San Francisco Fisherman's Wharf at the start of commercial salmon season. "We need the help."

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