

Tribe signs pact with California to work together on efforts to save endangered salmon

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A California tribe has signed agreements with state and federal agencies to work together on efforts to return endangered Chinook salmon to

their traditional spawning areas upstream of Shasta Dam, a deal that could advance the long-standing goal of tribal leaders to reintroduce fish that were transplanted from California to New Zealand more than a century ago and still thrive there.

Members of the Winnemem Wintu Tribe have long sought to restore a wild [salmon](#) population in the McCloud River north of Redding, where their ancestors once lived. The agreements that were signed this week for the first time formally recognize the tribe as a partner participating in efforts to save the endangered winter-run Chinook salmon.

"We're very hopeful," said Caleen Sisk, the tribe's chief and spiritual leader. "It allows us to have a bigger voice in the process of bringing the salmon back."

She said state and federal officials "realized that they really have to have us as partners."

"I think it'll take everybody's knowledge to really have them restored," Sisk said.

She signed the agreements Monday with state and federal fisheries officials at a ceremony next to Shasta Lake, near where the McCloud River flows into the reservoir. Once the signing was finished, members of the Winnemem Wintu and Pomo tribes danced around a fire.

Chinook salmon haven't been able to reach the McCloud River since 1942, when the construction of Shasta Dam blocked the fish from swimming upstream in the Sacramento River and sealed off their spawning areas, leaving the population in decline.

The past three years of extreme drought have taken a worsening toll on endangered winter-run salmon. At times, the Sacramento River water

downstream from Shasta Dam has warmed to a point that is lethal for salmon eggs.

Last year, the fish had their worst spawning season ever recorded. Recent rains and snow have boosted Shasta Lake to 98% of full capacity, promising better conditions for salmon this year. But the Chinook still face major threats as global warming brings more intense droughts.

Scientists have also found that California salmon are suffering in part because of thiamine deficiency, which they suspect is occurring because fish are feeding too heavily on anchovies, which have grown abundant along the coast.

Chinook salmon are central to the Winnemem Wintu Tribe's cultural and spiritual traditions. They call salmon Nur.

The McCloud River lies at the heart of their traditional homeland, which the tribe lost when the reservoir was filled.

For years, the tribe has advocated an approach to reintroducing salmon that would involve developing a "swimway" so that fish could travel upstream and downstream around Shasta Dam.

The tribe also wants to use eggs from Chinook salmon that were transplanted to New Zealand more than a century ago. Sisk said she and others are convinced that these fish, because they are wild and adapted to swimming up cascading mountain streams, are better suited to the conditions in the McCloud River than other fish raised in hatcheries in California.

Under the agreements, state and federal agencies pledged to study the possible reintroduction of Chinook from New Zealand. The agreements also call for analyzing the feasibility of building a fish passage that

would allow salmon to travel around the dam.

Without that sort of passage, Sisk said, "we know there's no point in bringing New Zealand salmon back or putting salmon on the McCloud."

"That's the only way that those salmon are going to restore their numbers," she said.

Biologists track the populations of distinct runs of salmon in the Sacramento River, each named for the season they return from the Pacific. In addition to the endangered winter-run Chinook, there is the spring-run Chinook, which is listed as threatened under the Endangered Species Act.

The most numerous are the fall-run and late-fall-run Chinook, which support commercial and recreational fisheries. But this year, regulators decided to shut down the fishing season along the California coast for the second time in history because of the major declines in salmon populations.

The California Department of Fish and Wildlife and NOAA Fisheries agreed to include the tribe as a "co-equal" in decisions about efforts to rebuild the salmon population. The tribe has agreed to share traditional ecological knowledge, just as their ancestors once did for fisheries expert Livingston Stone, who established the first Chinook salmon hatchery on the McCloud River in 1872.

The state Department of Fish and Wildlife has also provided a \$2.3-million grant to support the tribe's efforts.

Chuck Bonham, the department's director, said the "co-management" agreement is long overdue.

"We can't change the wrongs that were done in the past, but we have an obligation in the present to make it better," Bonham said. "With this agreement we are bringing life back to the McCloud River."

The tribe's "co-stewardship" with NOAA Fisheries came about "because we collectively identified both the risk to the remaining population, but also the opportunities that we had to truly pull together and set a new course for restoring salmon," said Cathy Marcinkevage, the agency's assistant regional administrator.

Last year, tribal members worked with state and federal biologists on an experimental project on the McCloud River, releasing thousands of juvenile winter-run salmon that were brought from a nearby hatchery. By mid-December, more than 1,600 of the fish had been recaptured, loaded into aerated coolers and trucked downstream of the dam, where they were released to continue their journey.

State officials have also been testing a system for collecting juvenile salmon in Shasta Lake.

Plans for this year have yet to be decided, but the new agreements "give us more confidence that we can undertake a similar joint effort of moving winter-run to the McCloud again this year," said Michael Milstein, a spokesperson for NOAA Fisheries.

The agreements offer an example of how government agencies should work with Native leaders to restore ecosystems, said Daniel Cordalis, co-principal of Ridges to Riffles, an Indigenous conservation group.

"We think that a lot of restoration work can and must be done with the support of the indigenous communities that are there," Cordalis said. "Having them as a part of all these restoration projects, and having their voice to be part of it, is extremely important for the longevity and the

durability of restoration."

Sisk said the willingness of government officials to include the tribe represents a big change.

"They're actually letting us at the table. Before, they wouldn't even let us on the steering committee," she said.

Sisk said she hopes to be able to reintroduce fish from the New Zealand population within three years. "We need to think creatively," she said.

Sisk said she hopes the government biologists will focus on studying how to "keep the fish wild" to help them survive. She said she also hopes that once the salmon are returned to the McCloud River, the [tribe](#)'s 126 members may, too, be able to regain a home and thrive along the river.

"We believe that whatever happens to the salmon happens to us," she said.

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