



GOLDEN STATE SALMON ASSOCIATION

THE STATE OF SALMON

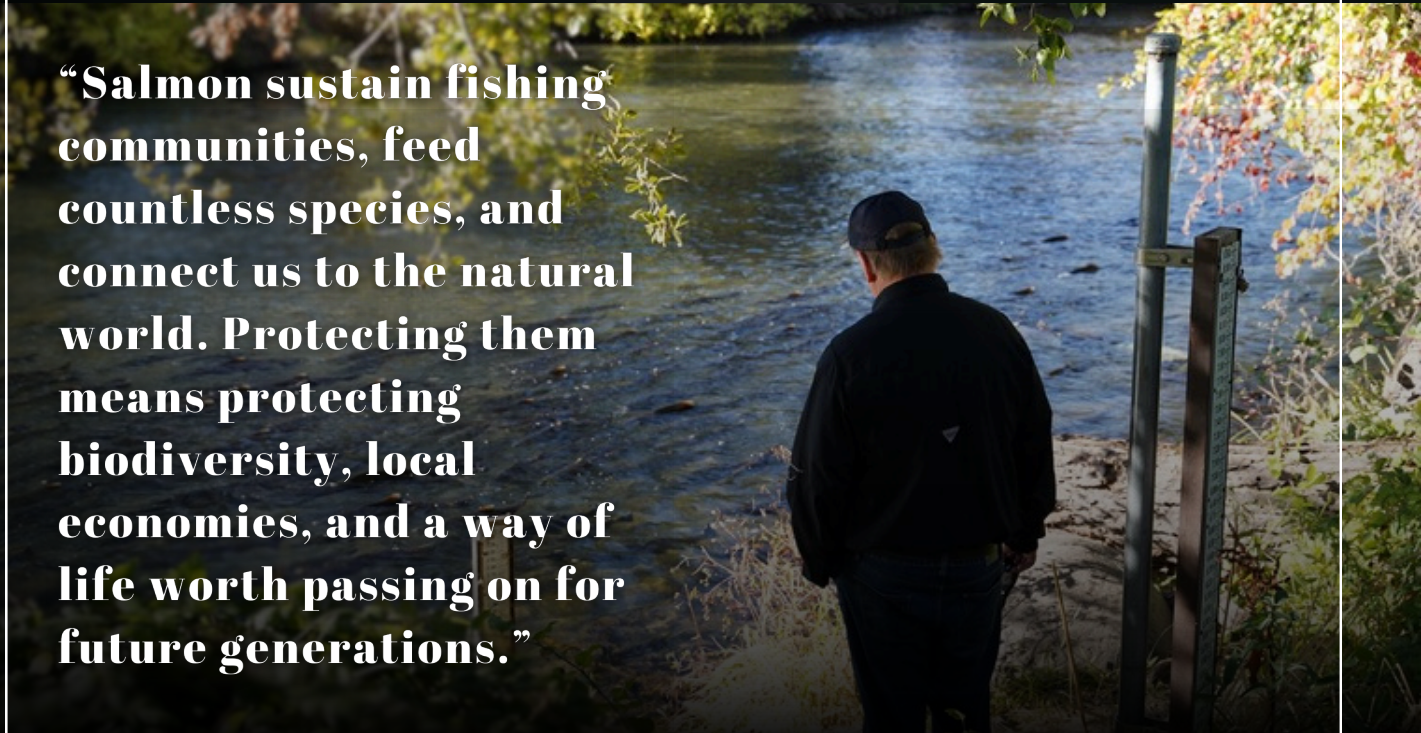
2025 FISHERY REPORT

*GSSA's mission is to restore California salmon for
their economic, recreational, commercial,
environmental, cultural and health values.*

Overview

The 2025 State of the California Salmon Fishery report highlights a worsening crisis for salmon and the industries that depend on them. A key part of California's fishing economy, these salmon runs support thousands of jobs and generate billions in revenue. With 2024 returns among the lowest ever recorded, this report calls for urgent reforms to water policy and hatchery practices to prevent further collapse.

Despite the dire outlook, there is still hope for the future. GSSA is leading the charge to restore salmon populations by fighting for smarter water policies, better hatchery practices, and science-based solutions that protect both fish and fishing families. GSSA remains committed to ensuring that salmon not only survive, but thrive in California's rivers and ocean — for the sake of ecosystems, coastal economies, and generations to come. [The work continues, and we're not backing down.](#)



“Salmon sustain fishing communities, feed countless species, and connect us to the natural world. Protecting them means protecting biodiversity, local economies, and a way of life worth passing on for future generations.”

Mapping

Central Valley Chinook Salmon



The Sacramento Index (SI) is the area which California Department of Fish and Wildlife and the Pacific Fisheries Management Council use to count and estimate abundance of salmon in California. The SI is comprised of the mainstem Sacramento River and its connecting tributaries including the Feather River and the American River, both of which have hatcheries to help bolster salmon populations. Coleman Hatchery on the Sacramento is a federally-managed hatchery, while the remaining three hatcheries are managed by the state.

Virtually all of the salmon caught in California, and most of the fish caught in Oregon, come from the Sacramento River system.



The Mokelumne River Hatchery is not included within the SI as it is a tributary of the Delta. Fish from both the Mokelumne and the San Joaquin are not counted towards the abundance estimate in any way, both the in-river returns as well as the hatchery production. Additionally, California is divided into further population zones such as the Klamath Management Zone and the California Coastal Chinook.

Timeline

WHY WE ARE, WHERE WE ARE

1992: The 1992 Central Valley Project Improvement Act (CVPIA) made fish and wildlife protection a coequal purpose of the Central Valley Project, alongside water supply. This led to reduced water diversions and helped prevent the collapse of California's salmon fishery



2008: Bush Administration issues a biological opinion under the Endangered Species Act (ESA) to protect the imperiled Delta Smelt



2016: Interior Secretary sends the White House a memo stating the biological opinions have failed to protect listed species based off 2008/2009 biops



2019: Governor Newsom vetoes SB 1, which would have given the State new tools to resist federal water-related rollbacks

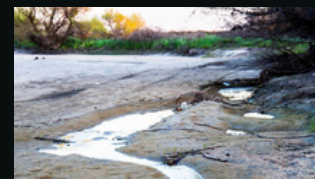


2004: In the 2000s, Bush Jr.'s biological opinions (biops) for salmon and Delta smelt found "no jeopardy" from CVP operations, enabling major water diversions. Fishermen and conservation groups sued and overturned them, leading to stronger 2008–2009 biops that helped save California's salmon fishery



2009: Obama Administration issues a biological opinion to protect Central Valley salmon, steelhead and green sturgeon

2018: State Water Board (SWB) adopted – but did not implement – requirements to increase environmental flows on the Stanislaus, Tuolumne and Merced Rivers



2019: Trump Administration issues new biological opinions slashing the already inadequate protections from 2008 and 2009

WHY WE ARE, WHERE WE ARE

2020: Newsom backs a closed, unscientific Voluntary Agreement process over water that excludes fishing and environmental groups and lacks enforceable protections



2020: California issues a waiver to weaken California ESA protections, including protections for salmon

2020: Inadequate flow and temperature conditions during the drought results in catastrophic losses of juvenile salmon in the 2020-year class

2021: State Water Board fails to exercise authority under state law to regulate temperature conditions below Shasta Dam – resulting in disastrous temperature driven mortality

2021: Salmon suffered from poor spring outmigration flows and poor flow conditions in the Delta



2023: Salmon fishing closes statewide in California due to low in-river returns and a decreasing ocean abundance forecast

2022: Salmon populations recorded in the fall of 2022 reach disastrously low levels, causing concern for the upcoming season



2023: Agencies conduct emergency plan to save the critically endangered spring-run Chinook salmon species

2024: California closes its salmon fishery state-wide for a second consecutive year



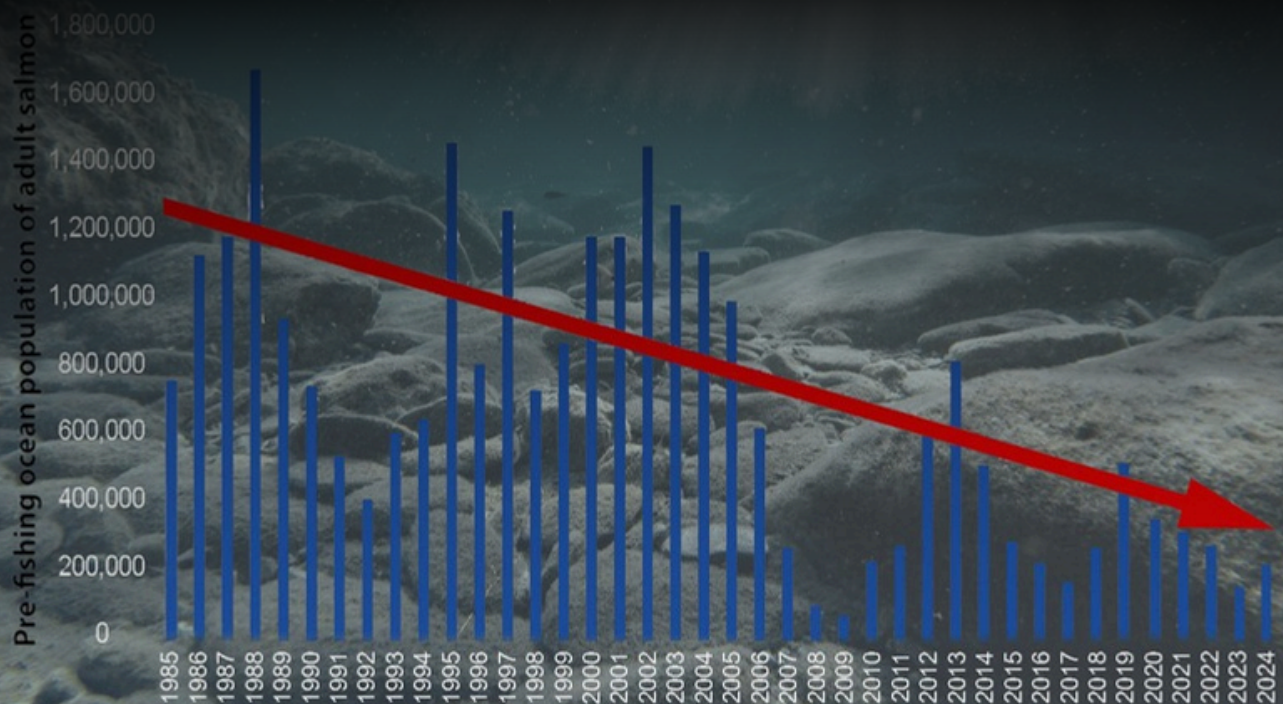
2025: California sees an unprecedented third year closure to the commercial salmon industry and extremely constrained recreational fishing

California's

**2025 Fall-Run Chinook
Ocean Abundance: 165,655**

Salmon Fishery

California's Chinook salmon populations, which include the spring-run, fall-run, late fall-run, and winter-run, are in a precarious state, with all four runs struggling to survive in a river system increasingly hostile to their survival. Each of these runs depends on cold, clean water for migration, spawning, and juvenile rearing, yet excessive water diversions, rising river temperatures caused by dam operations and water policies, and loss of critical habitat in previous decades have pushed their numbers to record lows.



Above Graphic: Ocean salmon abundance estimates dating back to 1985

In addition to the decline of California's only remaining commercially and recreationally viable Chinook salmon, other runs are facing catastrophic reductions. The critical status of spring and winter runs are warning signs for the future of fall-run salmon if adequate cold water flows in our salmon rivers are not immediately protected. Furthermore, the decline of these runs, separate from the decline of the fall-run, create additional restrictions on the commercial salmon fishing fleet.

A large Chinook salmon is being held horizontally by a person wearing a white shirt and dark pants. The fish is silver with a pinkish-red belly and fins. The background shows a body of water and a boat.

Fall-Run

Chinook

Once the foundation of California's commercial and recreational salmon fisheries, Central Valley fall-run Chinook have experienced severe declines, leading to three consecutive commercial fishing season closures.



Preliminary 2024 return estimates indicate one of the lowest returns on record, with 99,274 spawning adults returning to the Sacramento River system—far below historical averages that once exceeded 750,000. [Reduced reservoir releases during key migration windows and high water temperatures](#) have significantly increased pre-spawn mortality, threatening future generations of this critical run.

Historically abundant throughout the Central Valley, spring-run Chinook have been reduced to a fraction of their former population, persisting in only a few tributaries. The 2024 adult return was devastatingly low, with numbers in Butte Creek, a stronghold for the run, showing another year of high pre-spawn mortality due to **lethal summer water temperatures**.

Spring-Run

Chinook



Winter-Run

Chinook



The endangered Sacramento River winter-run Chinook continues to teeter on the edge of extinction. **The 2024 return was estimated at fewer than 4,000 adults**—far below the minimum recovery target. The survival of this run is entirely dependent on cold-water releases from Shasta Dam, yet prolonged drought conditions and competing water demands have led to dangerously warm river conditions during spawning season, killing eggs before they hatch. Without immediate changes in water management policies, winter-run Chinook face a high risk of collapse.

A close-up photograph of several salmon swimming in shallow, rippling water. The fish are silvery with hints of pink and orange, and their fins are visible as they move through the water.

Drivers of Decline

Efforts to restore habitat have been relatively slow and insufficient to counteract the ongoing losses caused by poor flow and temperature conditions along with poor water management during drought in California's salmon rivers. Across all salmon runs, two primary threats continue to drive declines, worsen the historic loss of spawning and rearing habitat, and are directly responsible for the crash in naturally spawning salmon populations and the resulting fishing closures in recent years.



Low river flows and high water temperatures are the primary drivers of decline. That's why GSSA is leading the way with improved hatchery practices, innovative release strategies, and the development of a new hatchery system on the main-stem Sacramento River.

A person wearing a cap and a life vest is in a small boat, looking towards a large dam structure. Water is being released from the dam, creating a turbulent flow. The background shows a body of water and some vegetation.

Rising

Water Temps

Rising Water Temperatures from Dam Operations and Water Policies

Water management decisions, including reduced reservoir “cold water pools”, low reservoir releases and increased diversions, have led to lethal water temperatures in key salmon-bearing rivers. Without adequate cold-water flows, egg and juvenile survival rates plummet, and adult salmon experience increased pre-spawn mortality.



Central Valley salmon try to spawn in rivers that are often too hot to successfully incubate fertilized eggs. River temperatures above 53.5 degrees kill incubating salmon eggs. **When dam operators release too much water from reservoirs for industrial or agricultural use during the summer, it leads to higher river temperatures during the fall spawning seasons that can kill salmon eggs and juvenile fish.**





Inadequate Protections Causing Lethal Flow Conditions

Lethal Flows

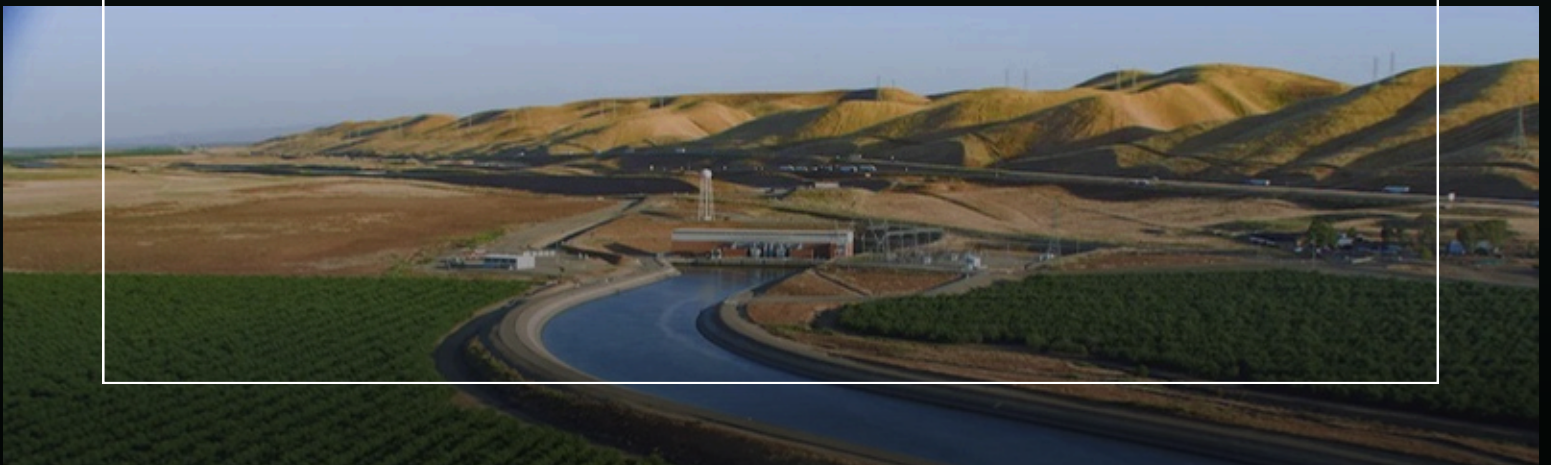
The existing state standards for salmon temperature and flow were adopted in 1995. Those standards have failed, and do not include any protection to ensure adequate flows for outmigrating salmon on Central Valley Rivers.

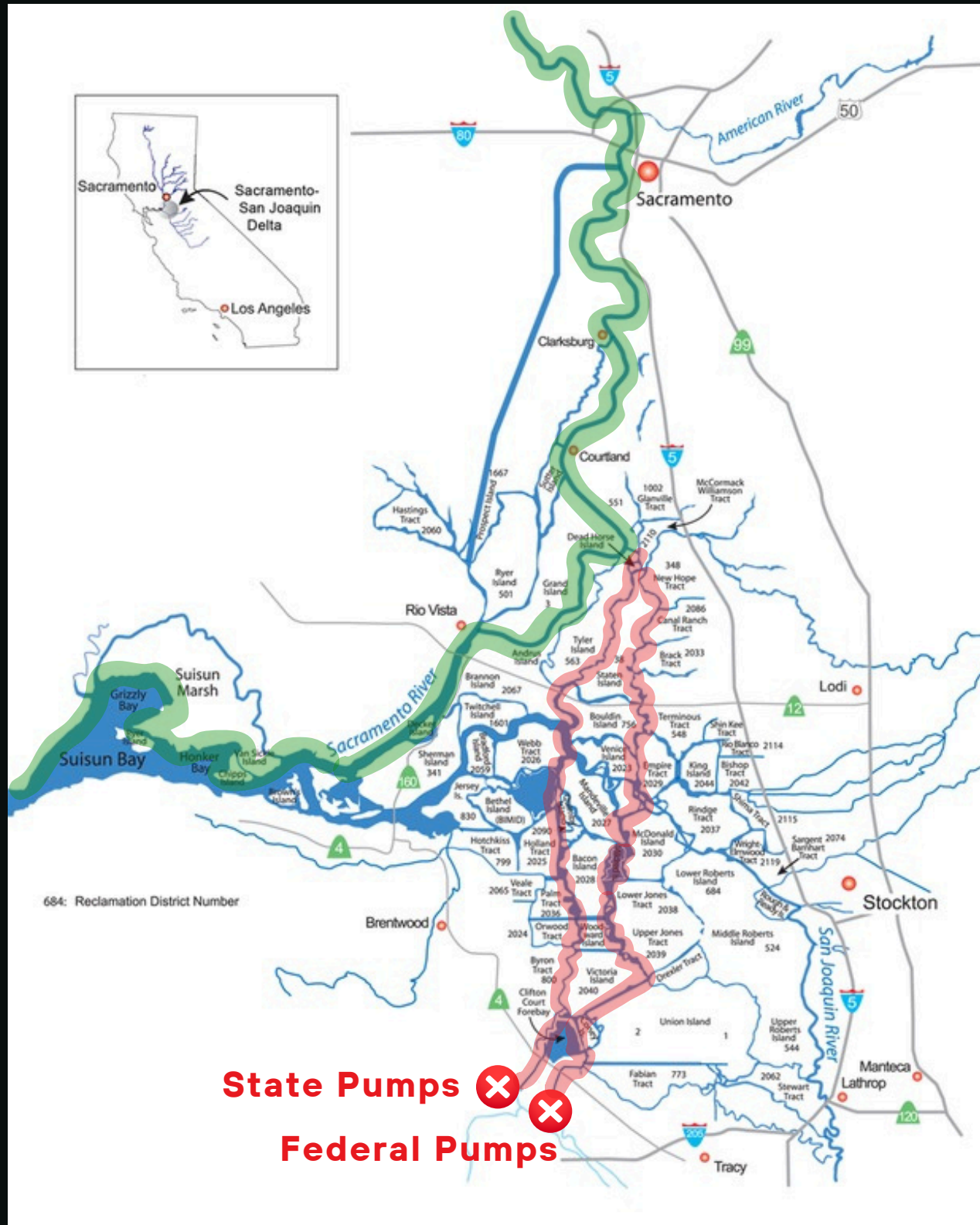
California diverts massive amounts of water to supply cities in Southern California and to support industrial agriculture, including hundreds of thousands of acres of almond orchards planted in arid regions—using water that salmon need to survive.



Outmigrating juvenile salmon trapped during pumping operations

A series of massive pumps, strong enough to make the San Joaquin River run backwards, pull juvenile out-migrating salmon off their route. The National Marine Fisheries Service estimates that as much as 90% of baby salmon pulled off their natural migratory route to the bay and ocean are lost to predators in the interior Delta or pulled into these pumps.





When the Delta Pumps are sending water south, Sacramento salmon get pulled off their natural migratory path (marked in green) and are sucked towards the two pumping stations in the south Delta (marked in red) through the Delta (marked in pink). NOAA has estimated that 90% of the fish pulled off their normal migratory path are lost to either predators or the pumps themselves.

SocioEconomic Impacts

Devastating Human, Economic and Community Impacts

For the third consecutive year, the closure and restriction of California's Chinook salmon fishery has sent shockwaves through the state's coastal and inland communities, devastating businesses and livelihoods tied to the once-thriving industry.



As reported in 2012, a healthy California salmon industry generates \$1.4 billion in economic activity and supports 23,000 jobs annually within the state. Oregon also benefits, with thousands more jobs and millions of dollars added to its economy, spanning from Southern California to Northern Oregon. Today, financial losses have reached hundreds of millions of dollars, leaving many businesses on the brink of collapse.



Commercial Fishermen & Women: A Vanishing Livelihood

For generations, California's commercial salmon fleet has relied on the fall-run Chinook to sustain their way of life. Three consecutive closures have forced many fishermen and women to sell their boats, take on debt, or leave the industry altogether.



Those who have weathered the storm so far fear that a third consecutive closure in 2025 could be the final blow. With no salmon to catch, incomes have evaporated, and financial relief programs have fallen short of covering mounting costs.



Recreational Fishing: Charter Boats & Coastal Economies at Risk

The shutdown of the salmon fishery has devastated the state's recreational fishing industry, dealing a severe blow to charter boat operators, guides, and tourism-dependent communities.



In ports like Bodega Bay, Half Moon Bay, and Monterey, charter boats that once carried eager anglers now sit unused, with captains scrambling to make ends meet by targeting other species or leaving the business entirely. Coastal towns, once bustling with visiting fishermen, are reporting sharp declines in hotel stays, restaurant sales, and tourism spending.





Fishing Tackle Manufacturers and Retailers: Declining Sales and Closures

From tackle shops in the Bay Area to major fishing gear manufacturers, businesses that supply the industry have suffered massive declines in sales. Bait and tackle shops that once catered to salmon anglers now report unsustainable revenue losses, with some closing permanently.



Fish Brokers and Processors: An Industry Without a Product

With no wild California salmon available, buyers have turned to imports and farmed fish, weakening California's role in the seafood market and removing a local, sustainable food source from restaurants and communities.

Fighting for the Future



As California faces another year of dangerously low salmon returns, it is clear that without immediate policy changes to prioritize salmon survival, the state's once prolific salmon runs will continue their downward spiral. The future of California's Chinook salmon—and the fishing communities that depend on them—hinges on bold, science-driven action to restore flows, protect water temperatures, and reconnect salmon to their historic habitat.



The Golden State Salmon Association is leading the fight to restore salmon numbers, protect critical habitat, and support fishing communities. Through a combination of advocacy, policy, and legal action, GSSA is working to ensure that wild and hatchery salmon can once again thrive in California's rivers and coastal waters.

Modified

Release Strategies



Over 6 million fish have been trucked to the bay through release practices pioneered by GSSA, in addition to the Half Moon Bay and mainstem Sacramento fish releases.



Additional in-river release locations on the mainstem Sacramento River include Butte City and Scotty's Landing.

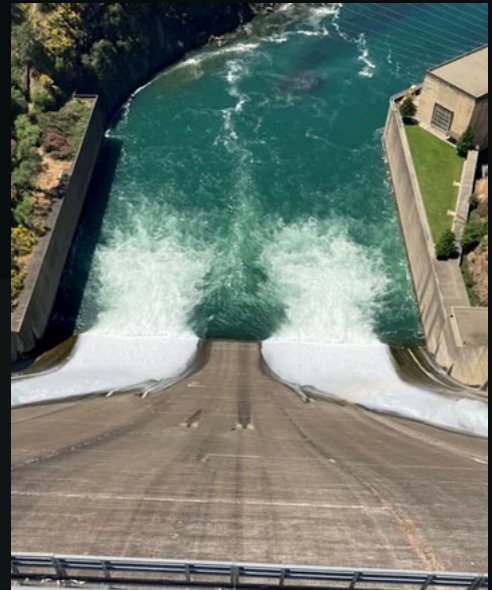
In 2025, CDFW released 3.5 million juvenile fall-run Chinook salmon from state hatcheries into the mainstem of the Sacramento River for the first time. These fish are part of an additional 9.7 million salmon produced in 2025 and more than 28 million fall-run Chinook salmon in total will be raised and released in 2025.

GSSA has pioneered new hatchery release strategies with trucking to the bay to mitigate predation, avoid the delta pumps, and bypass low and hot water in the rivers. The in-river return data shows that fish trucked to the bay survive at significantly higher rates than traditional release practices. Paired with net pens that additionally boost survival rates, these enhanced release strategies offer hope and a vital lifeline for salmon at a time when their populations face unprecedented challenges.

Flows & Infrastructure

Securing Adequate Cold-Water Flows and Legislative Support

GSSA is fighting to secure adequate cold-water flows in salmon-bearing rivers like the Sacramento and Feather. By developing legislative allies and pushing for stronger protections, GSSA is working to ensure that salmon receive the water they need to successfully migrate and spawn. This includes advocating for policies that prioritize water releases from reservoirs during critical times, rather than leaving eggs and fish stranded in overheated, stagnant rivers.



Legal Battles Against Salmon-Killing Infrastructure Projects



GSSA is actively opposing the **Sites Reservoir** and the **Delta Conveyance Project**. Both would divert more freshwater away from salmon-bearing rivers. Through litigation and public advocacy, GSSA is working to prevent these projects from moving forward.

A Major Key for California's Salmon Future

Parent-Based Tagging

GSSA has been a strong advocate for expanding parent-based tagging (PBT) practices to improve tracking and management of hatchery salmon. PBT uses genetic identification instead of traditional coded-wire tags (CWT), allowing scientists to trace individual fish back to their hatchery origin with greater accuracy. PBT allows for hatcheries to release salmon at a smaller size (fry) compared to CWT which requires the juvenile fish to grow larger to accept the tag. With PBT, hatcheries can release salmon earlier in the year when water conditions are more favorable, flows are higher, and predation is lower. It also allows for increased production out of the hatcheries as the time to grow and release is shorter, freeing up valuable space and time as hatcheries are rearing fish.



Thanks to GSSA's leadership, \$25 million for PBT and hatchery upgrades is now in the voter approved Climate Bond. GSSA rallied thousands of fishing voices and worked directly with lawmakers to secure this funding, which will diversify salmon release strategies, boost production and put more fish in the ocean and rivers for recreational and commercial fishing.





Putting Fish

On Back Decks



Richmond Net Pen:

A Community-Based Conservation Effort

To boost salmon survival and support local fishing communities, GSSA is leading a new net pen project in the Richmond Marina. The pen will help hatchery fish adapt before ocean release to increase survival and will hold 200,000 trucked fish per year.



Fixing Thermalito Afterbay to Protect Salmon Smolts

Thermalito Afterbay has become a deadly barrier for young salmon, with hot water and mismanagement causing high mortality. GSSA is urging state agencies to act now and manage water releases in ways that protect juvenile salmon on their journey to the ocean.



\$25 Million Secured in Bond Funding

GSSA led a successful campaign to secure \$25 million in hatchery funding in the California Climate Bond by working with lawmakers and thousands of supporters. The funding will boost PBT use, expand hatcheries, and ultimately increase Chinook salmon production. The bond also includes an additional \$75 million for dam removal, aiding salmon recovery on the Eel River, Putah Creek, and Battle Creek.



Together, We Can Save Salmon & Communities That Rely On Them

Through legal action, policy advocacy, and hatchery improvements, GSSA is working tirelessly to reverse the decline of California's Chinook salmon. We're redoubling our efforts because without immediate and sustained action to protect cold-water flows and modernize fisheries management, California risks losing not just its salmon—but an entire industry, culture, and way of life.

With your help, GSSA is committed to ensuring that future generations can experience the bounty of wild California salmon, thriving fishing communities, and healthy, biodiverse river ecosystems. From commercial fleets to weekend anglers, countless people depend on salmon; not just for their livelihood, but for a way of life deeply tied to the environment. The time for action is now, and GSSA is leading the charge to protect and restore California's Chinook salmon and the rich natural and cultural heritage they support.





Scott Artis
Executive Director



"Every baby salmon we help get to the ocean fuels a family, a business, and a way of life. GSSA fights every day to bring our salmon home—for the people who depend on them."

Cat Kaiser
Operations and Event Director

"We all have one common goal, to put more fish on the back decks of boats. The salmon industry relies on GSSA's vital work and we will continue to stand up for the communities that rely on these incredible fish."



Barry Nelson
Policy Advisor

"We fight for more balanced management of Central Valley water. Adequate flows and cold temperatures are the essential ingredients for healthy rivers and strong wild salmon runs."

GSSA is grateful for a diverse membership that includes informed consumers, commercial fishermen, commercial fleet professionals, Native Americans, environmentalists, scientists, business owners, and chefs and restaurant owners. If you would like to contribute to GSSA and their efforts towards protecting salmon, scan the QR code to the right and sign up today!

**GOLDEN STATE
SALMON
ASSOCIATION**





GOLDEN STATE SALMON ASSOCIATION

2025 State of Salmon Fishery Report

Thank you for being a prominent member of GSSA and we thank you for your continued support of both the organization and for salmon. Without your help, GSSA could not continue to fight for salmon and protect these fish for future generations.

If you have any further questions or would like to learn more about anything contained in the 2025 State of Salmon Fishery Report, feel free to contact us.



info@goldenstatesalmon.org



(855)-251-4472

Golden State Salmon Association fights every day to restore salmon runs, protect vital rivers, and hold decision-makers accountable. But we can't do it alone. Please consider making a tax-deductible contribution today to power this critical work forward.

Give now and be part of the solution.

www.goldenstatesalmon.org

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donate today!**

