

Central Valley Spring-run Chinook Salmon

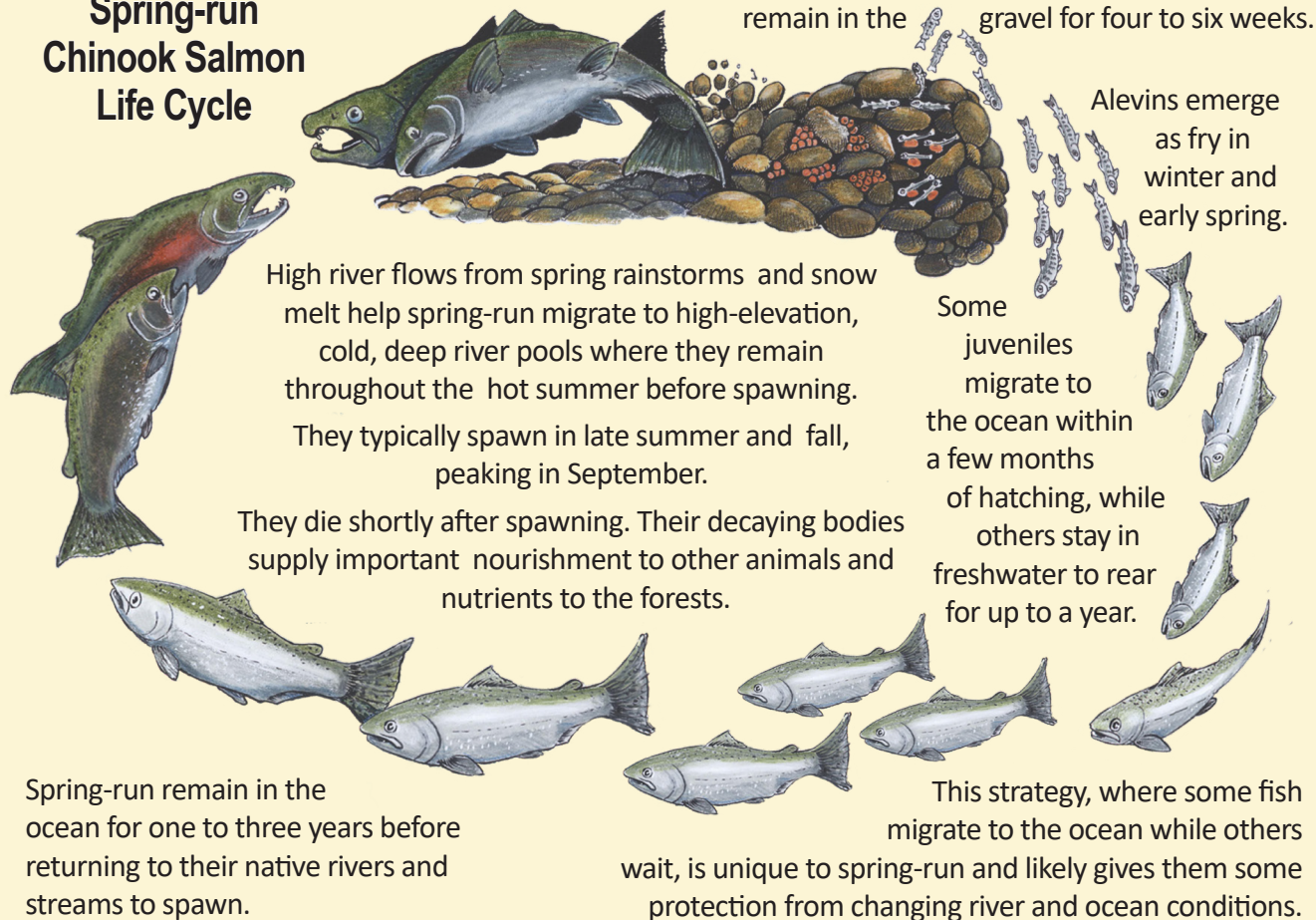
Spring-run Chinook salmon (spring-run) were once abundant throughout rivers and creeks in California's Central Valley. Roughly one million of these fish returned from the ocean to the Central Valley to spawn each year, providing food for native people and settlers, prey for killer whales along the coast, and marine nutrients for the Sierra Nevada Mountains.

The mid-1800s dramatically changed the landscape. Gold mining, dam construction, water

and hydropower management, and other land uses blocked spring-run from much of their habitat, and their numbers began to decline. In 1998, spring-run were listed as threatened under the Endangered Species Act. Today, wild spring-run spawn and rear in only a small fraction of their historic habitat and only number in the hundreds to low-thousands.

Spring-run are important to California's heritage. Collective action is needed to recover this iconic species for future generations.

Spring-run Chinook Salmon Life Cycle



Key Threats to Central Valley Spring-run Chinook Salmon

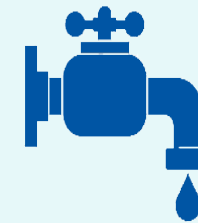


Dams currently block spring-run from 80-90 percent of their historic spawning habitat.

Levees that block access to roughly 95 percent of the Central Valley's floodplains, resulting in reduced growth and survival of juveniles.



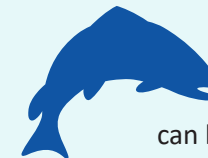
Water diversions at the Jones and Banks Pumping Plants in the Sacramento-San Joaquin River Delta that lower and alter river flows, and decrease fish abundance.



Water diversions in Mill, Deer, Antelope, and Butte Creeks that lower flows, raise water temperatures, and reduce migration success.

Warm water low spring flows in the Sacramento and San Joaquin Rivers that reduce juvenile survival.

Predation by abundant populations of non-native fish species, including striped bass, channel catfish, and largemouth bass.



Spawning with hatchery-origin Chinook salmon that stray into streams with wild spring-run can lead to reduced genetic viability.

Climate change reduces the quantity and quality of freshwater and ocean habitat.

Incidental catch in fisheries targeting other abundant salmon species.



Recovery Actions for Spring-run Chinook Salmon



NOAA FISHERIES
West Coast Region

Central Valley Spring-run Chinook Salmon Historical and Current Distribution



Map Key

- Dam
- ▲ City
- Reintroduction in progress
- Spring-run Chinook salmon current habitat
- Spring-run Chinook salmon historical habitat

A suite of recovery actions were identified by NOAA Fisheries in collaboration with state, Federal, tribal, and other partners. Implementation must happen across jurisdictions to successfully recover spring-run. These will also support other salmonids in the Central Valley.

- Reintroducing spring-run to the Upper Yuba River, McCloud River, and other high elevation and historic habitat.
- Completing the San Joaquin River Restoration Program will help re-establish spring-run in its historic habitat.
- Increasing access to floodplain habitat to reconnect these fish with important juvenile rearing habitat.
- Restoring flows throughout the Sacramento and San Joaquin River watersheds and the Delta.
- Reducing biological impacts of exporting water through Jones and Banks Pumping Plants.



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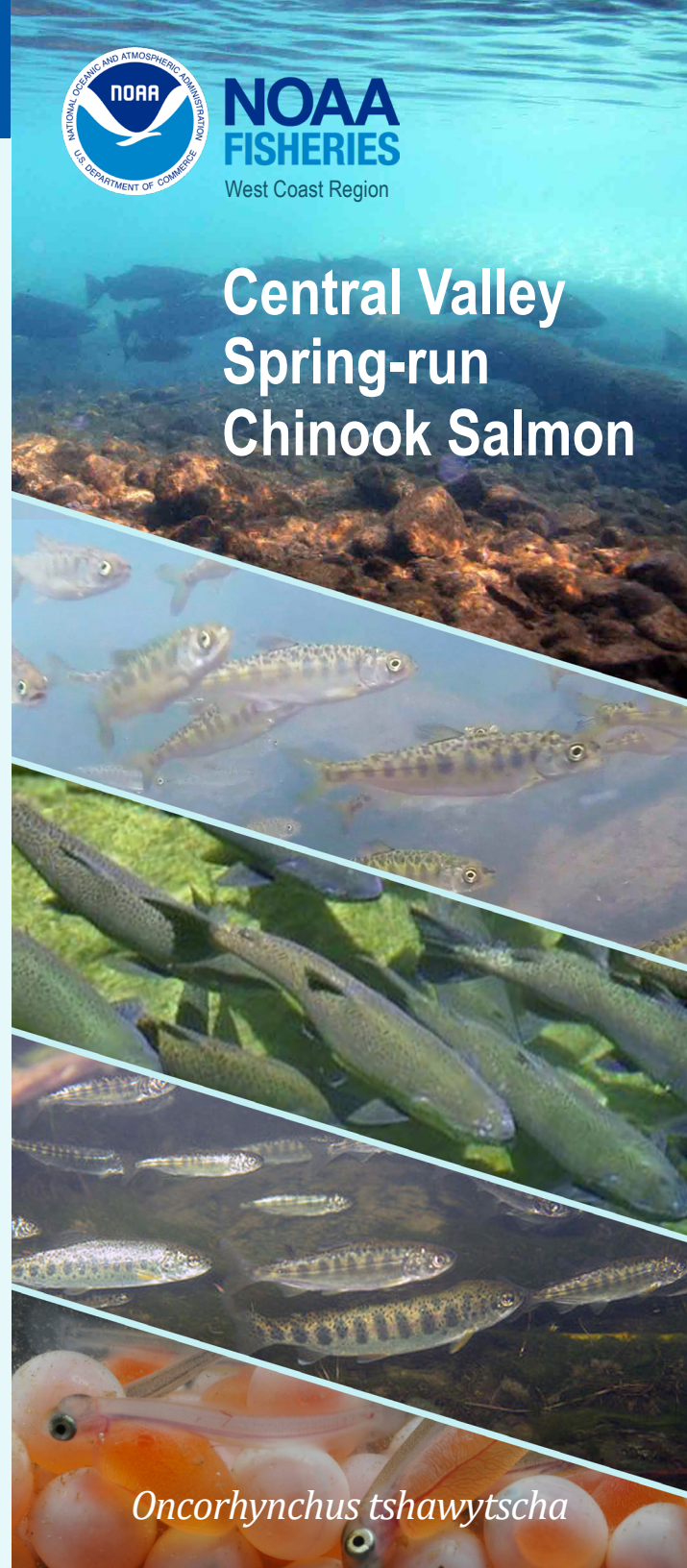
Learn more: www.fisheries.noaa.gov/west-coast/endangered-species-conservation/central-valley-spring-run-chinook-salmon



NOAA FISHERIES

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Central Valley Spring-run Chinook Salmon



Oncorhynchus tshawytscha