

## What are we doing?



- Monitoring the health of the population through adult and juvenile fish surveys.

- Monitoring the population size, based on returning adult fish and spawning adult fish.



- Working to open up tributaries for spring Chinook to access additional spawning and rearing habitat by manually enhancing fish passageways. Historically, as noted through oral tradition, spawning took place largely in the creeks.



- Enhancing rearing habitats by adding cover and complexity with woody debris and riparian vegetation.



- Re-connecting and restoring winter and summer rearing habitats.



There are other questions that we have about Spring Chinook that would make for good research projects, given the time and resources:

- What's the down river extent of spawning in the Salmon River?
- How many Spring Chinook are rearing in the Salmon River for a year or longer?

## How can you help?

- This year we are expecting record low water and warm river conditions. Creek mouths are critical refugia for stressed fish, and likely spots to see sick and dead fish. **People should avoid swimming at cold water refuges.** When fish are nosing into the cold water, it is because they are too warm, lacking oxygen and vulnerable to stress.
- Come out and participate in some activities with the Salmon River Restoration Council! Check out the calendar on our web page ([www.srrc.org](http://www.srrc.org)) to learn about volunteer events, educational activities and stakeholder meetings.
- Please report any observations of large numbers of dead or dying fish to the Office of Emergency Services Warning Center 1-800-852-7550. *When reporting a fish kill, please provide the following information: Location of fish (road mile, river mile or other known points), Time of day, Condition of fish (size, sick, dead, gill rot), Estimated number of fish and species. Any other specific information will be appreciated.*



Gill rot in a Springer carcass found during 2014 Survey. Right, a less developed case.



C. Shasta in a juvenile trout showing distended belly.



Our Watershed Center is located in Sawyers Bar  
 Salmon River Restoration Council  
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 Sawyers Bar, CA 96027  
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[www.srrc.org](http://www.srrc.org)

Cover photos top to bottom by Scott Harding, JanJaap Decker, Tom Hotaling  
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Salmon River



A Refugia for Spring Chinook



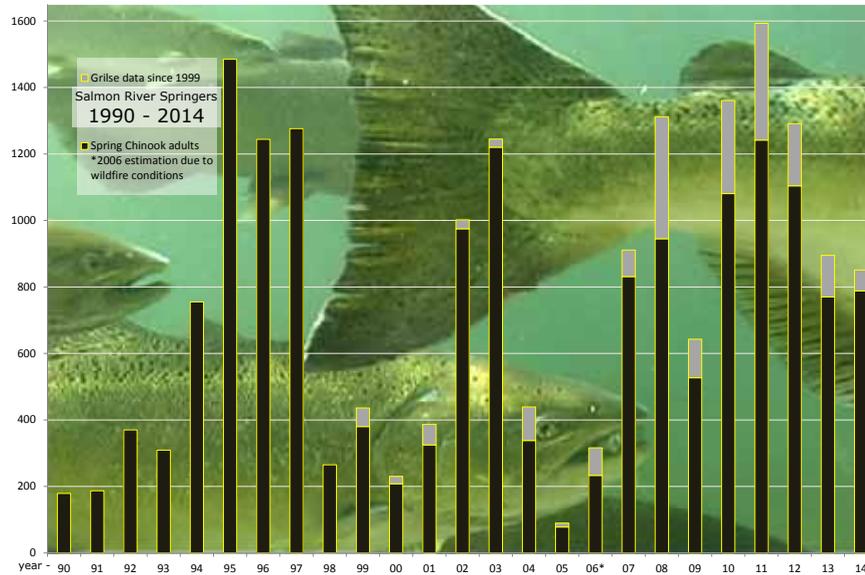
## WHO ARE SPRING RUN CHINOOK?



Since spring Chinook have a different life history from fall Chinook salmon, they represent a distinct population. The challenges faced by spring Chinook—many of them related to residing in the river through the hot summer months—are different than those faced by fall Chinook.

*Springer photos by Nat Pennington from the SRRC archives.*

Spring Chinook require large stores of fat to make the long journey to their spawning grounds. These abundant fat reserves give them their famously rich taste that everyone craves, from babies to bear cubs, and is the key adaptation that allows this unique life-history pattern. Between dams, habitat degradation and harvest, Spring Chinook are hit the hardest by the impacts of human development.



### Tribal Relationship to Spring Chinook

- The Springers that make their way up the Klamath, into the Trinity and Salmon Rivers connect the Yurok, Hupa, Karuk, Shasta, and Klamath Tribes that have subsisted on these fish for physical nourishment and spiritual nourishment.
- The Karuk World Renewal Ceremonies began with the Spring Salmon Ceremony, called “saruk’ámkuuf” which means “downhill smoke”.
- The smoke comes from the priests’ sacrifice of the first spring salmon caught at “ameekyáaraam” near the confluence of the Salmon and Klamath Rivers. That smoke signified the beginning of the harvest.
- This traditional annual event also indicated the importance of managing fish as a sustainable resource, as no one was allowed to harvest fish until after the Spring Salmon Ceremony was done by the Karuk “upriver” people.

Spring-run Chinook	Fall-run Chinook
Enter the river as sexually immature (gonads undeveloped) in March-June	Enter the river sexually mature (gonads fully developed) in September-November
Returning adults spend the summer months in freshwater, holding in cold, deep pools.	Returning adults spend very little time in freshwater.
Spawning begins in early September, when water temperature begins to drop, fish move from holding pattern of behavior to spawning.	Spawning occurs almost immediately as fish enter the river, upon returning from the ocean.
Juveniles may spend over a year in freshwater before migrating to the ocean.	Juveniles migrate to the ocean within one year of hatching.
Migrate far upstream to spawn.	Spawn lower in the watershed.

## Historic Klamath Basin Spring Chinook Range



• Spring-run Chinook were once the predominant run of salmon in the Klamath Basin. Historically, the Shasta, Scott, Sprague, Wood, and Williamson Rivers all supported large runs.

• In the Klamath River Basin, only the Salmon River and the Trinity River still host viable spring Chinook runs. Unlike the Trinity River, the Salmon River does not have a hatchery, making this a unique refugia for wild Spring Chinook.

• Spring Chinook runs on the Salmon River are startlingly small, ranging from 80 to 1,600 fish.

• Spring-run populations are at less than 10% of their historic level.

## Current Spring Chinook Range

