

# WE MISS THE FISH.

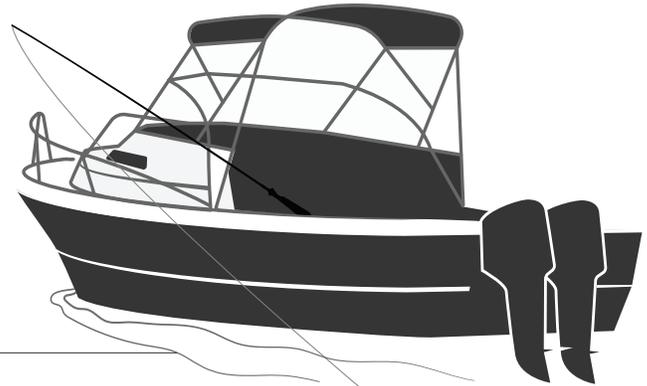
## Washington communities that rely on salmon fisheries are hurting.

On the Upper Columbia River, Sockeye, Chinook, coho, and steelhead fisheries have either been closed or restricted every year for the past four years—meaning no fish, and no fishing. These closures come on the heels of several years of critically low returns, which are largely attributable to the delayed effects of poor ocean conditions and multiple years of fire, drought and flood events in the region.

And the hurt doesn't stop with us. Southern Resident killer whales (orcas) are also struggling to survive. Environmental contaminants and noise from vessel traffic are key factors, but at the top of the list for orcas is the lack of food—specifically, Chinook salmon. One of the best ways we can help more salmon survive is to accelerate restoration on the Upper Columbia and its tributaries.

“The lack of fisheries in the upper Columbia in recent years has resulted in a loss of up to \$3 million to our local communities. The importance of habitat has come to the forefront as a critical element of recovery in our region.

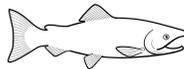
**Dave Graybill, WA Fish & Wildlife Commission Member**  
Citizens Advisory Committee for the UCSRB, “The Fishin’ Magician”



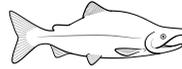
### Delayed impact, delayed recovery.

Impacts from poor ocean conditions, like the warm Blob that peaked during 2015-2017, take years to fully register in the adult fish returning, and years to go away. The delay varies by species, the complexity of their life cycle, and time spent in fresh versus saltwater.

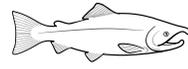
**Chinook**  
≈ 4-5 YEAR DELAY



**Sockeye**  
≈ 2 YEAR DELAY



**Coho + Steelhead**  
≈ 1-2 YEAR DELAY



With delayed impacts, what do past and projected returns look like for each species?

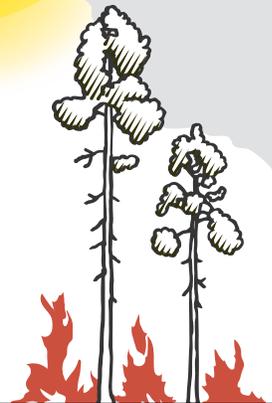


# THE UPPER COLUMBIA

is critical habitat for salmon and steelhead and restoration must accelerate.

## “The Blob” Was a Lethal Blow

A huge mass of warmer water spread in the Pacific from 2015-2017. Only 1 in 4 Chinook expected to return to the Upper Columbia survived the Blob. Ocean conditions are currently improving, but still remain poor—salmon are surviving at lower rates than they used to.



### SEA LIONS MOVE IN

Large populations of sea lions have moved into the lower Columbia River due to lack of food in the waters off California and Alaska. Sea lions can consume anywhere from 10-30% of adult Chinook. Active management of sea lions is helping more fish survive, and new lethal take provisions for sea lions will require careful management.

### BIRDS TAKE A BITE

Birds (such as terns and cormorants) consume a third of the juvenile salmon heading downstream. Strategically limiting bird nesting habitat in the Columbia Basin is helping more young salmon survive. Success is preliminary and the food chain is complex, and continued focus is needed.

### LESS HABITAT, LESS WATER

Landscape changes over the last 100 years have reduced salmon habitat. Droughts, intense fire seasons, and degraded forest and watershed health have further restricted habitat—especially in the last three years when both ocean and river conditions were inhospitable for fish.

Current salmon returns are alarming, but population numbers haven't bottomed out. Why? Because salmon recovery efforts have been working in the Upper Columbia for 20 years. Even with warmer water in oceans and rivers, droughts, predation, and a myriad of habitat changes, the number of natural-origin salmon returning to the Upper Columbia to spawn is still double what it was in 1995-1999, before recovery efforts began. Where there are results, there is hope—for salmon, for communities, for orcas, and for the landscapes we all call home. [Learn more at ucsr.org](http://ucsr.org).

