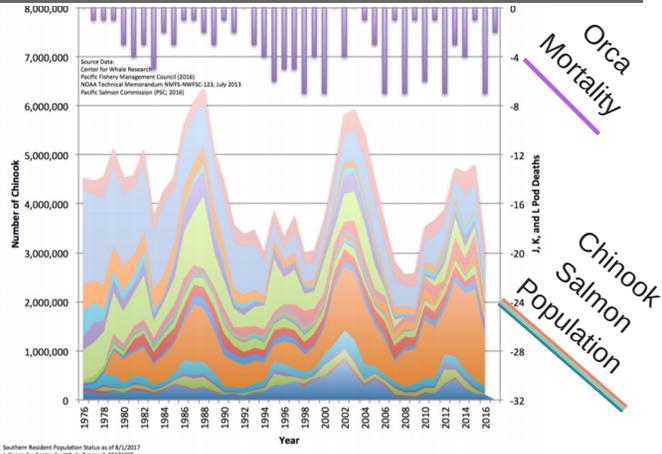


"The coast-wide decline in Chinook salmon abundance is likely to be the most significant factor contributing to the decline in our orca population." - The Center for Whale Research



Source: 2016 SRKW Population Update & 2016 Whale Sighting Data, Center for Whale Research & J. Cogan

Northwest rate payers and tax payers have spent billions on salmon recovery measures that haven't worked for Snake River stocks.

**50,000 PEOPLE SUPPORT 2018 SNAKE DAM BREACHING**  
**WHY DOESN'T GOV. INSLEE & THE ORCA TASK FORCE?**

**BREACHING THE SNAKE RIVER DAMS SAVES 4 MILLION YOUNG SALMON**  
**THE QUICKEST WAY TO GET ORCAS MORE FOOD**

L-92 (Crewser) in better days. Missing Southern Resident killer whale is presumed dead (CWR 6/15/18)



- 75 Critically Endangered salmon-eating Southern Resident orcas remaining in the wild!
- Time is running out! The effective breeding population of these orcas is now less than 30.
- 50% of orca diet from Endangered Chinook salmon produced in the Columbia & Snake river basins

learn more at [www.damsense.org](http://www.damsense.org)  
 petition at: [www.tinyurl.com/timeisout](http://www.tinyurl.com/timeisout)



# TAKE ACTION

**Contact Governor Inslee**  
 (360) 902-4111\*  
*\*if comfortable doing so, request a meeting*

**Contact Senator Murray**  
 (425) 259-6515  
*\*if comfortable doing so, request a meeting*

**Contact BPA**  
 (503) 230-5102

**Contact NOAA, Barry Thom**  
 (503) 231-6266

**US Army Corps of Engineers**  
 (202) 761-0000

Hi, the government efforts to save the chinook salmon and the southern resident killer whales are failing and costing billions. We need to breach the 4 Lower Snake River Dams! The Corps of Engineers can and should begin breaching in 2018!

**Learn More**  
[www.damsense.org](http://www.damsense.org)



**SAVE ALL THREE**  
 by immediately removing the 4 lower snake river dams

Photo Courtesy of CWR

# WHY?

## SOUTHERN RESIDENT ORCA

The endangered Southern Resident Orca have **only 76 members left**; with an effective breeding population of 30 members.

Chinook salmon comprise over 50% of southern resident orcas diet, which primarily flow out of the Columbia River basin.



Orca are often seen near the mouth of the Columbia; and are known to eat chinook salmon.

Without proper food sources, the Southern Resident orcas begin to metabolize their fat storage, dumping the contaminants into their blood stream, potentially leading to death."

Above: NOAA tracking data of the Southern Residents off of the mouth of the Columbia.

Source: [https://www.nwfsc.noaa.gov/research/divisions/cb/ecosystem/marinemammal/satellite\\_tagging/index.cfm](https://www.nwfsc.noaa.gov/research/divisions/cb/ecosystem/marinemammal/satellite_tagging/index.cfm)

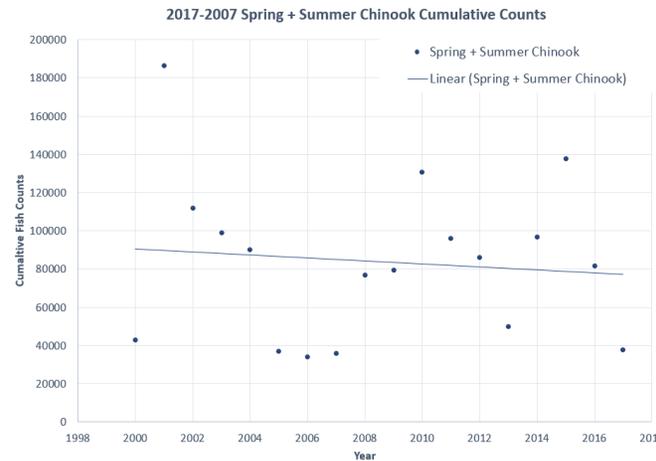
These contaminants can lead to death.

Transient Orca (Biggs) are another ecotype that live in the Salish Sea. They do not interbreed with the Southern Residents. There are around 250 Transient orcas who frequent the Salish Sea.

The main difference between Transients and Southern Residents? Transients eat mammals, Residents eat fish.

## SALMON

Chinook salmon running during spring and summer (the orca's primary feeding times) have been declining since the 4 Lower Snake River Dams (4LSRD) installments. Over the past 10 years, the number of Chinook salmon to successfully cross the Ice Harbor dam (the first dam) and the Lower Granite dam (the last dam) have dropped significantly. Currently, stocks have not reached the 10-year average. Wild Snake River salmon have less than a 1% return rate—far below what is needed for their recovery.



Graph: Total chinook salmon count for spring and summer runs. Numbers include Hatchery & Wild salmon. Source: [http://www.cbr.washington.edu/dart/query/adult\\_daily](http://www.cbr.washington.edu/dart/query/adult_daily)

Removing the 4LSRD immediately increases survival of juvenile fish in the millions and opens up miles of pristine habitat for spawning.

## TRIBES

Northwest tribes, many with salmon fishing treaty rights, have experienced incredible loss following construction of the lower Snake dams including the decimation of wild salmon.

Salmon are a cultural, spiritual, and economic resource for the tribes; they continue to fight in court for removal of the dams and restoration of wild salmon.

Furthermore, the tribal community in the Salish Sea are intimately connected to the Southern Resident Killer Whales.

## WHAT ABOUT THE BARGING, FLOOD CONTROL, & IRRIGATION?

**Barging:** Barging on the Snake River is declining and can be replaced by rail at equal costs.

**Irrigation:** Only one LSR reservoir provides irrigation. Fewer than 15 farmers use it. If the dams were breached, the farmer's irrigation pipes can be extended and financed through BPA fish mitigation credits.

**Flood control:** These dams do not provide any flood control.

## WHAT WOULD THE BREACH LOOK LIKE?

Breaching is completed by removing the earthen berm barrier as shown below.



Source: 2002 Environmental Impact Statement, US Army Corps of Engineers

## HOW CAN IT HAPPEN THIS YEAR?

The US Army Corps of Engineers has inherent fiduciary responsibilities to insure existing projects continue to provide economic benefit.

The dams currently have a Benefit to Cost ratio of 15¢ on the dollar (0.15 to 1) in terms of National Economic Development, the standard by which the Corps must measure economic benefit. Breaching the dams has a benefit of \$4.30 on the dollar.

The Corps can put the projects into a “non-operational” status. This does not change the project Purpose thus does not need Congressional Authorization.

**BREACHING THE 4LSRD CAN & MUST BEGIN IN 2018**