



# Conserving the Southern Resident Killer Whales

"As the killer whale goes, so goes our world" - Ken Hansen 2001

The Samish recognize other species in nature as part of an extended family to whom we are related and have responsibilities. We have long understood the significance of the Southern Residents to this region.

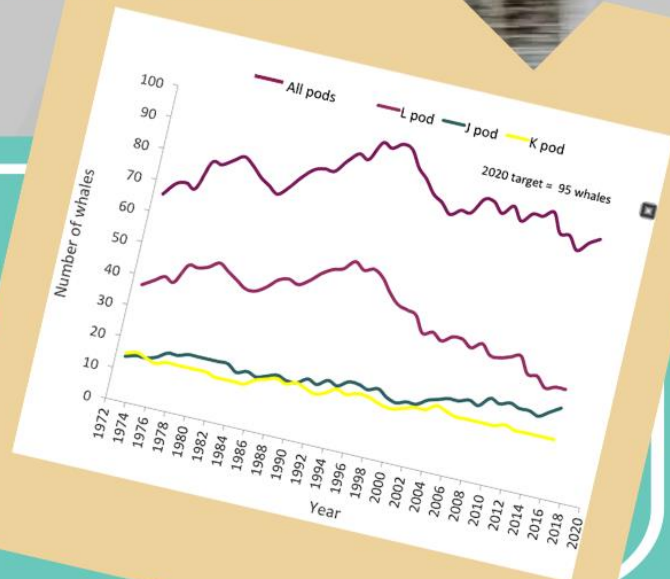


Range/Distribution

The Southern Resident Killer Whales (SRKW), or Orcas, are actually a large extended family comprised of three pods: J, K, and L pods. The SRKWs are frequently seen, from spring through fall, in the protected inshore waters of the Salish Sea.



Despite recent births in the second half of 2015 and beginning 2016, there has been a net loss of four SRKWs since 2011. This trend, along with the continued decline of Chinook salmon and the noted appearance of emaciation among members of the local pods, are reasons for concern.



### Key Challenges:

Listed as endangered in both the United States and Canada, and their population is closely tied to the overall health of the ecosystem. Key threats include:



Prey Availability



Pollution and Contaminants



Vessels and Noise



# How is Climate Change impacting Orcas?

Q'ellhólmechen



Survival and birth rates in Southern Resident Killer Whales (SRKWs) are correlated with coastwide abundance of salmon. The abundance of their preferred prey, Chinook salmon, has declined from historical levels in the Salish Sea. Declines in Chinook abundance could lead to further decreases in fertility and survival of SRKWs.



Our Orca Family

Climate change is predicted to impact salmon:

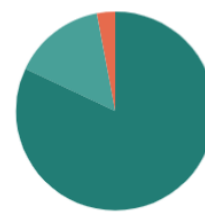
- ✿ Increased winter flooding.
- ✿ Decreased summer and fall stream flows
- ✿ Increased temperatures in streams and estuaries.

Small shifts in water temperature could alter the timing of migration, reduce growth and availability of oxygen in the water, and increase salmon susceptibility to toxins, parasites and disease.

Further, salmon survival during their first few months at sea is linked to ocean conditions such as surface temperature and salinity. Ocean conditions also affect food supplies, numbers of predators, and migratory patterns for salmon.

In addition, ocean acidification and ocean warming may interact to intensify exposure and potential bioaccumulation of toxins and other pollutants in the Salish Sea, producing elevated concentrations in top predators, like Orcas.

## Southern Resident Killer Whale Diet



- Chinook (82%)
- Other Salmon (15%)
- Other (3%)

## How can YOU do your part:

We all share in the responsibility to help assure that the whales have a clean, productive and serene environment. The following are some things YOU can do:

- ✿ Get involved in efforts to protect and restore salmon habitat in your community!
- ✿ Eat sustainably-harvested salmon and other seafood.
- ✿ Dispose of unused medicine and chemicals properly.
- ✿ Watch whales responsibly - they are sensitive to noise and disturbances from boats.

What climate issues are most important to you?  
HELP Samish prioritize climate issues and actions!



Participate in a survey!



Scan this or go to the DNR Climate Change webpage on the Samish website!

Please contact Stacy Clauson with any comments or questions.



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