‘Whale’ You Turn That Down?!: Noise Pollution and BC’s Southern Resident Killer Whales

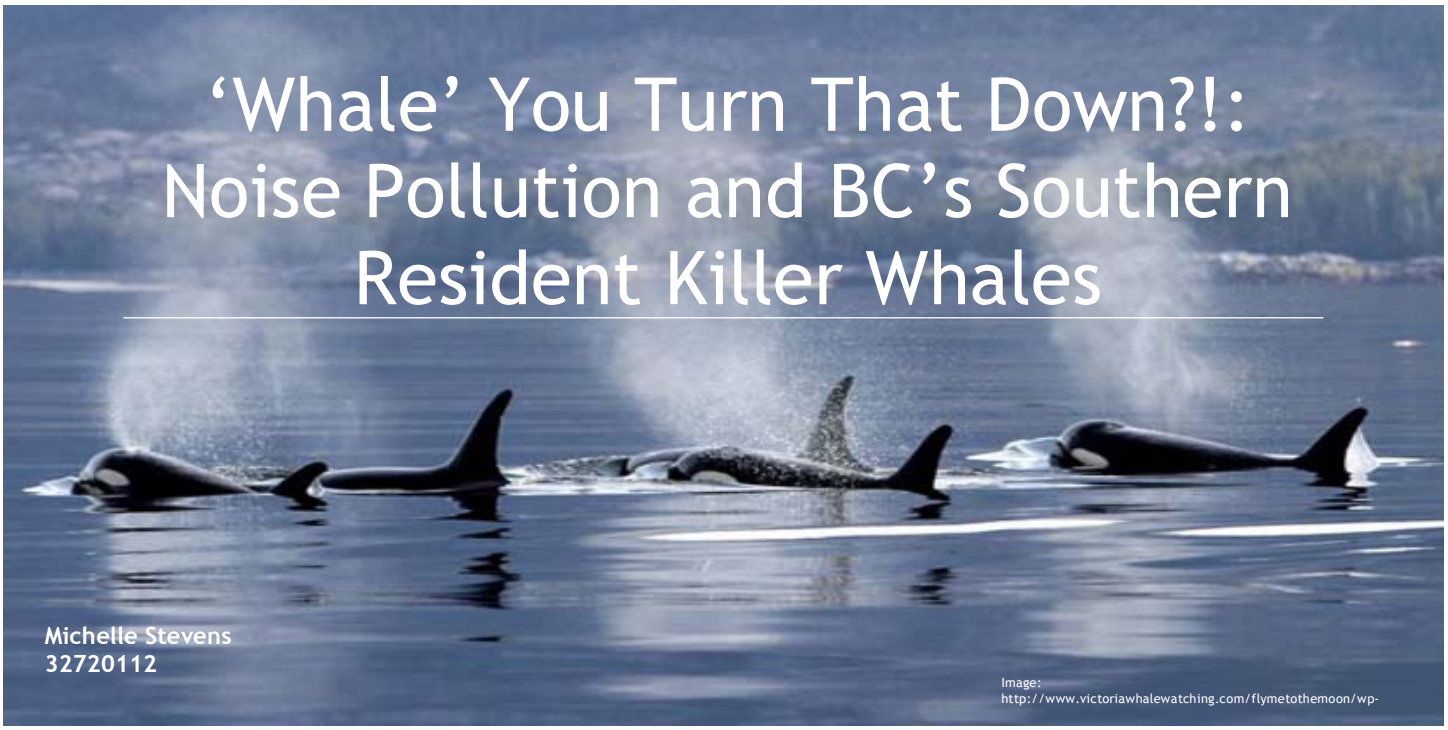

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Image: http://www.victoriawhalewatching.com/flymetothemoon/wp-

The southern resident killer whales of BC are in a vulnerable position facing a declining population. Underwater noise pollution created by nearby marine vessels can hinder killer whales’ ability to feed, mate, communicate, and even result in hearing loss. Marine traffic in the southern residents’ habitat must be regulated in order to ensure the longevity of this species.

BC is home to two different populations of killer whales (*Orcinus orca)* – the northern residents and the southern residents. Both populations have faced challenges, but especially the southern resident killer whales who are listed as Endangered on COSEWIC (Committee on the Status of Endangered Wildlife in Canada) because of their low reproductive rates and small population size. The causes of the decline are not fully understood but disturbance from marine traffic has been identified as a contributing factor. BC’s southern resident killer whales live in a very busy and noisy commercial shipping lane where a variety of boats end up being in close proximity to them. **The effects on the whales are serious.** The noise produced by marine traffic can reduce the ability of the killer whales to find food efficiently, cause them to spend more energy, inhibit them from communicating between one another, and even cause hearing impairment or loss in the whales. **If the amount of marine traffic is not regulated and reduced in the southern resident killer whales’ habitat, we could end up driving these amazing creatures closer to extinction.**

Image: https://www.eaglewingtours.com/wp-content/uploads/2012/12/10-07-25_2941valshore.jpg

Image: https://farm8.staticflickr.com/7449/11969909766_09b979de93_c.jpg

Did you know...

- COSEWIC listed BC’s southern resident killer whales as **Endangered** and the northern resident killer whales as **Threatened** in 2001
- Both populations are also listed under the Species at Risk Act (SARA)
- Historically, the southern resident killer whale population was in the hundreds. Due to **shootings and captures for marine parks**, the population dropped drastically. As of July 2015, the population is at about **80 killer whales**.

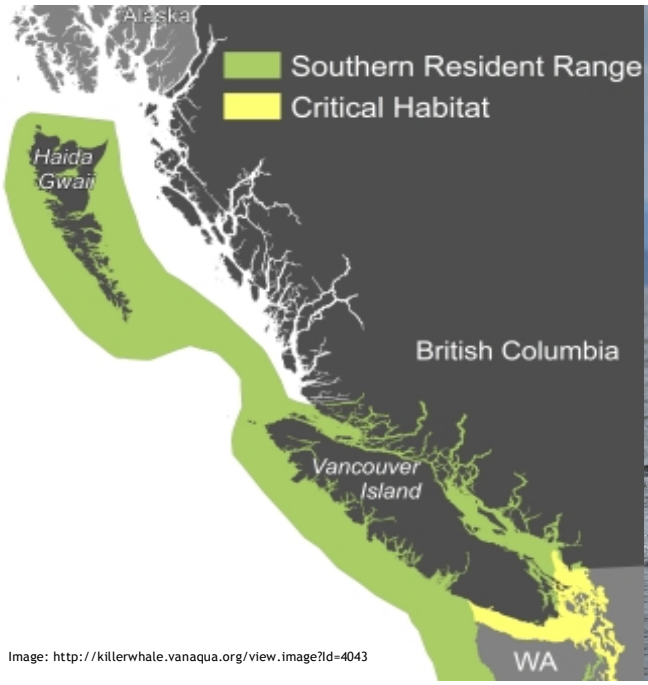

Image: http://killerwhale.vanaqua.org/view.image?id=4043

Image: http://pugetsoundblogs.com/waterways/files/2014/06/SouthernResidentKillerWhalePhoto.jpg

Where Are the Southern Residents Being Effected?

A **'critical habitat'** for the BC southern resident killer whales has been identified in the Haro Strait, Boundary Pass, parts of the Strait of Juan de Fuca, and part of the Strait of Georgia. This area is termed a 'critical habitat' due to the consistent and prolonged occupancy of the whales during the summer and fall. Unfortunately, this region also doubles as one of the busiest shipping routes in the world. Around **11,000 large vessels navigate through these waters** every year in addition to recreational boats, ferries, whale watching ships, and fishing boats.

What is at Stake for the Killer Whales?

Underwater noise pollution can negatively affect killer whales in several ways. Killer whales use whistles and clicks to determine what is in their environment and to find food; this is called echolocation. The noise from boats in close proximity to the whales can **interfere with their use of echolocation to forage for food and communicate with one another, reducing the chances of reproduction**. The chance of a killer whale being **injured or killed by an accidental ship strike** also increases when underwater noise pollution is present.

POLICY RECOMMENDATIONS:

- Policy that **boats must keep 100m away from killer whales** should be changed from being a voluntary guideline to one that is **required and is enforced** by the BC Coast Guard in order to improve the future outlook of the species
- The Coast Guard should also enforce that any boat within 400m of killer whales must **reduce their speed** to lower noise pollution
- Transport Canada should implement a **killer whale education component to their Pleasure Craft Operator Card certification** to ensure recreational boats are informed about how to safely whale watch as these are often the vessels who do not follow the established guidelines
- The **number of vessels within the southern resident killer whales' 'critical habitat' should be restricted**, especially during summer and fall months, to reduce the chance of a vessel-whale collision and to further reduce noise pollution that has such negative effects on the whales

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