The Evergreen State College

## The Need for Increased Protection for Baleen Whales in

## Washington State / Puget Sound

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MES Analytical Essay

The protection and regulation of marine mammals came into effect in 1972, with the Marine Mammal Protection Act (NOAA, "Marine Mammal"). This was enacted nationally to "prevent marine mammal species and population stocks from declining beyond the point where they ceased to be significant functioning elements of the ecosystems of which they are a part." (NOAA, "Marine Mammals"). Since 1972, these guidelines and policies have been repeatedly modified to better fit the needs of certain marine mammal species.

One of these species is the Southern Resident Killer Whale (*Orcinus orca*), or SRKWs. There are three different types of orcas in Washington state. Offshore killer whales, Bigg's killer whales (mammal-eating type), and Resident killer whales (fish-eating type), all share part of their habitat with each other, but the Southern Residents are one of two North Pacific orca populations that are severely at risk of extinction (NOAA, "Species Directory"). Added to the endangered species list in 2005, the SRKWs have been highly monitored and were determined to be at risk of extinction if not for added protection (NOAA, "Endangered"). One of these protections was to add a minimum distance at which boaters can view SRKWs. As of right now, recreational boaters need to maintain a buffer of 300 yards on either side, or 400 yards in front of the path or behind an SRKW (Be Whale Wise, "Killer Whales"). Due to a new bill recently signed into law, recreational boaters will need to maintain a 1,000-yard distance from any SRKW beginning in January 2025 (WDFW).

While these changes may be beneficial to these local killer whales, it is also important to consider other marine mammals that frequent the Puget Sound, such as the baleen whales. With their much larger size and unpredictable behaviors, baleen whales are at a greater risk of collisions with boats. Currently, the minimum distance to view any other cetaceans besides a

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killer whale is 100 meters (Be Whale Wise, "Other Cetaceans"). This is a significant difference from the soon-to-be 1,000-yard minimum requirement for our Southern Resident Killer Whales.

Humpback Whales (*Megaptera novaeangliae*), having been hunted to almost the brink of extinction, are finally making a comeback along the Pacific coast and the Salish Sea (Mapes). The population of Pacific Northwest Humpbacks has increased from about 500 individuals in the 1980s, to now over 3,000 individuals (Mapes). Humpback whale sightings have also increased in the Salish Sea every year since 2011 (Mapes). John Calambokidis of the Cascadia Research Collective, who has been studying humpback populations in the Puget Sound since the 1980s, stated "with that recovery for humpback whales has come expansion and increased use of areas that overlap with human activities, that also poses a threat to them." (Boiko-Weyrauch).

With this significant increase in population and area overlap comes a much greater risk of ship strikes. Two years in a row, 2019 and 2020, a humpback whale was struck by a Washington State Ferry (Bush & Brunner). Similarly, a research paper from 2017 gave a yearly estimate for ship strikes on humpback whales in the Pacific Coast and Salish Sea, with an average of 28 whales struck per year from 2006-2016 (Rockwood et al.).

Gray whales (*Eschrichtius robustus*) started entering the Puget Sound on a regular basis during the early 1990s (CRC, "Sounders"). Coinciding with unusual mortality events, these whales were in search of more food during their northern migration (CRC, "Sounders"). The "Sounders", as they are locally named, are now a group of a dozen or so whales that return during the spring months to feed in the North Puget Sound, before continuing their journey North for the summer (CRC, "Sounders").

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Although the Eastern North Pacific Gray Whales are no longer considered endangered, they are still at risk of ship strikes throughout the year. During their annual migration, when they are travelling closest to shore, is when they are at most risk (Silber). One of the "Sounders" was struck by a speeding recreational boat in 2017, though thankfully it survived (Morrow). Just this summer, another Gray Whale was not as lucky, washing up dead ashore Fox Island with injuries consistent with a boat strike (CRC, "Gray Whale").

Ship strikes on large whales are on the rise, and only about 10% of all ship strikes are ever reported, suggesting that the problem is more serious than what we can visibly see (Mapes). Much effort has been put into the protection of our Southern Resident Killer Whales. However, the baleen whales are also an important part of our local ecosystem. Although the population of Humpback Whales is recovering, the species is still currently listed as endangered. With Gray Whales progressively using the Puget Sound as a stopping point on their migration, the risk of ship strikes on these whales will also rise.

One important change to enact would be to increase the distance at which boat traffic (recreational and commercial) can travel around baleen whales. With these whales being so large and slow-moving, it is a danger to not only the whales to have boats close by, but also the boaters themselves. Bigg's transient killer whales require a legal buffer of 200 yards when on the water (Be Whale Wise, "Other Cetaceans"). The legal distance for baleen whales should be increased to this amount at least, if not more. Although it may seem subtle, this would be a significant step to take, and it would have a positive impact on the wellbeing of whales and boaters alike. Washington needs to begin considering the safety of some of its other marine mammal species. With an ever-changing environment, we must consider a starting point in which to modify protection for these magnificent creatures.

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