

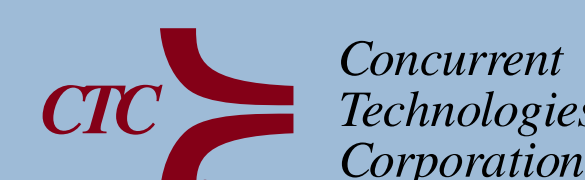
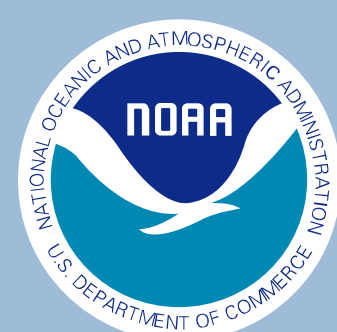
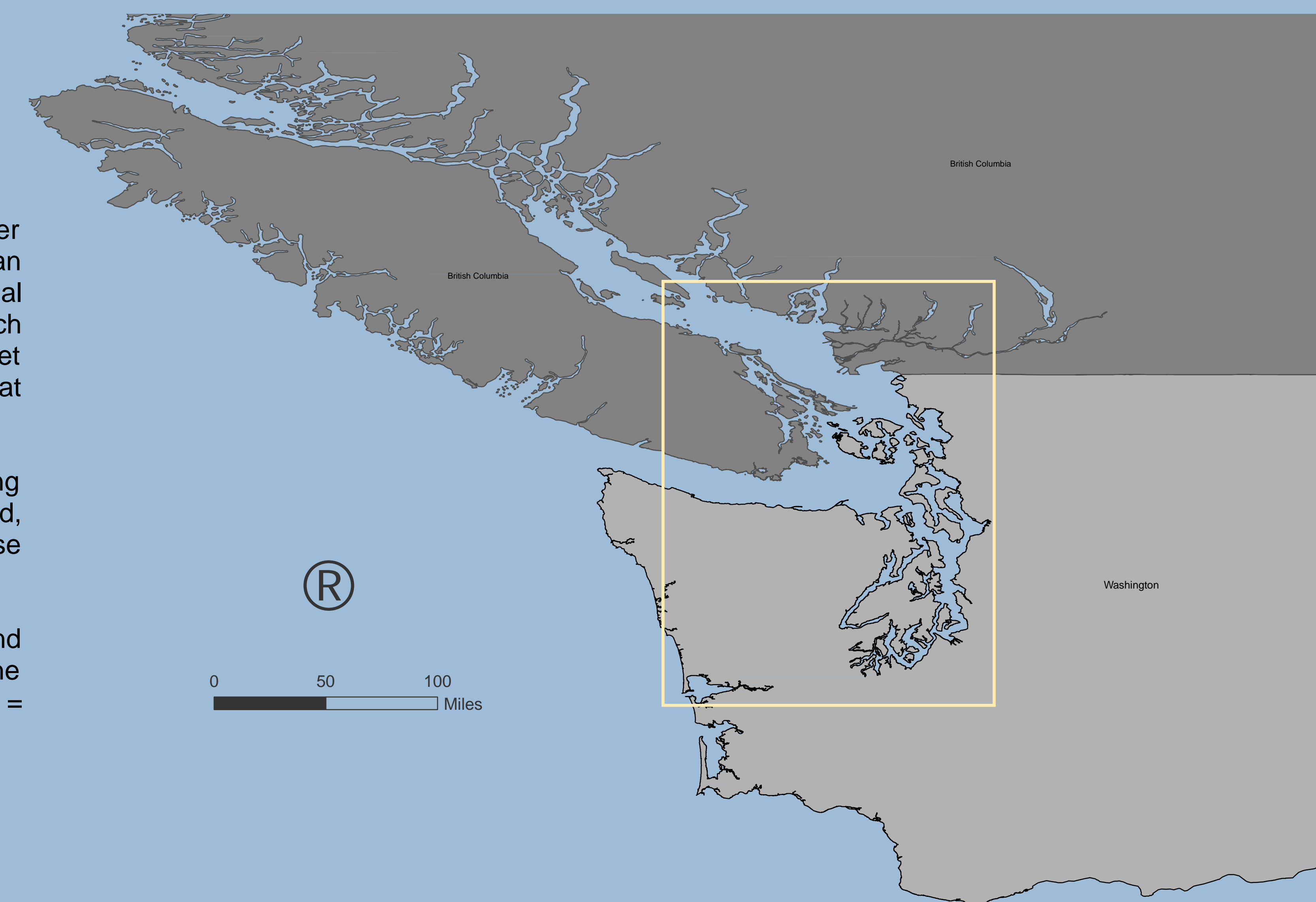
# Number of Sightings Per Season of Eastern North Pacific Southern Resident Killer Whales



In 1978, The Whale Museum in Friday Harbor, Washington, began managing the Whale Hotline public sighting network. The purpose of the network was to enable the public to document killer whale (*Orcinus orca*) sightings in Washington State. The Whale Museum has received an average of 400 to 1,000 calls per year to report sightings of marine mammals and has maintained an archived database of these sighting data until the present. The Whale Museum data are predominantly opportunistic sightings from a variety of sources (public reports, commercial whalewatching industry pager system, Soundwatch, Lime Kiln State Park land-based observations, and independent researcher reports). Nearly half of the data are from the Whale Watch pager system created by the commercial whalewatch industry and available to subscribers. A validation of recent pager data revealed greater than 90% accuracy in locating whales (Hauser et al in prep). The Whale Museum personnel match the location data from each of the sighting reports to The Whale Museum's historic quadrant system. Sightings are displayed as points that represent the center of each quadrant.

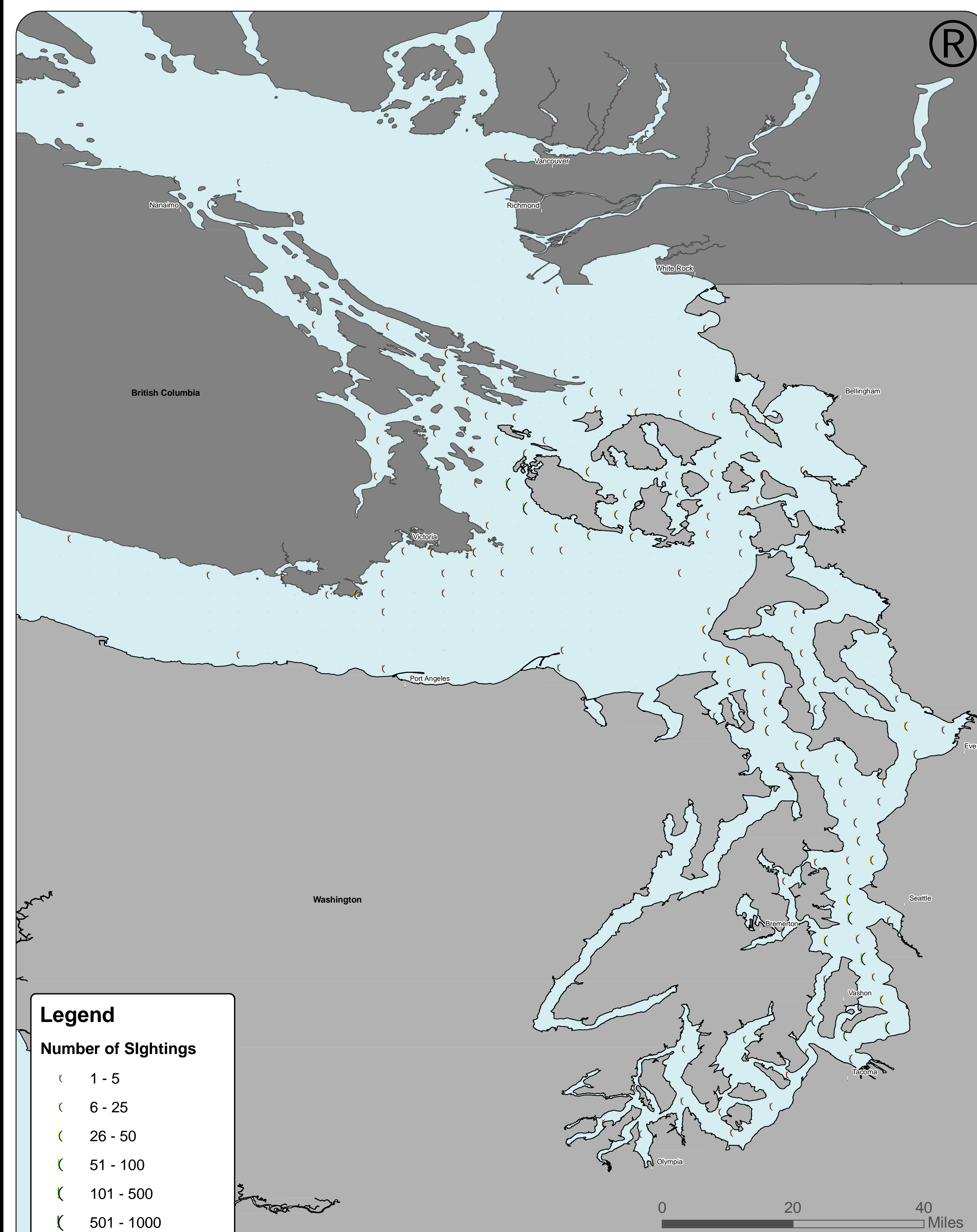
In July 2004, The Whale Museum prepared for the National Oceanographic and Atmospheric Administration (NOAA) a compilation and summary of its available historical killer whale sighting data from 1990 through 2003, the "Southern Resident Killer Whale Sighting Compilation 1990-2003." The dataset does not account for level of observation effort by season or location and, therefore, the sampling method and data are biased. The 1990-2003 Whale Museum dataset is, however, the most comprehensive long-term data available to evaluate broad scale habitat use by Southern Residents in inland waters at this time (total number of sighting records = 22,509).

Based on previous observations of the whales, NOAA delineated the year into three seasons per year: Fall – Winter (October through January); Winter – Spring (February through May); and Summer (June through September). For each of these seasons, NOAA determined the number of times killer whales have been sighted within each quadrant. NOAA limited its analysis of the dataset to one sighting per quadrant per day to reduce the bias introduced by multiple sightings of the same whales in the same location on the same day (total number of unique sightings = 11,836).

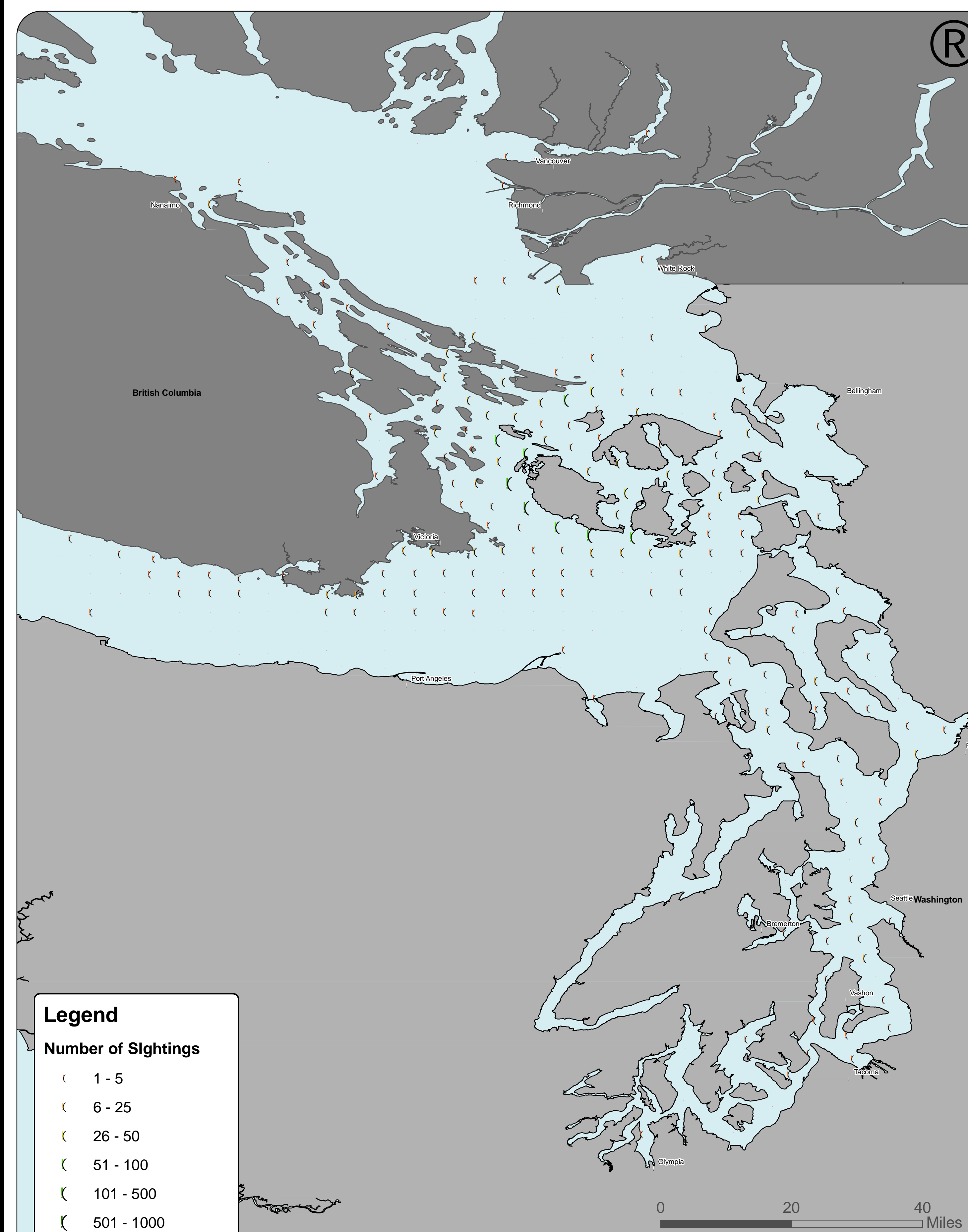


Data Source: Rich Osborne (2005). The Whale Museum Orca Master 1990 – 2003. The Whale Museum. Friday Harbor, Washington.

## Fall-Winter Sightings (October - November - December - January)



## Winter-Spring Sightings (February - March - April - May)



## Summer Sightings (June - July - August - September)

