

Southern Resident Orca Listing Petition

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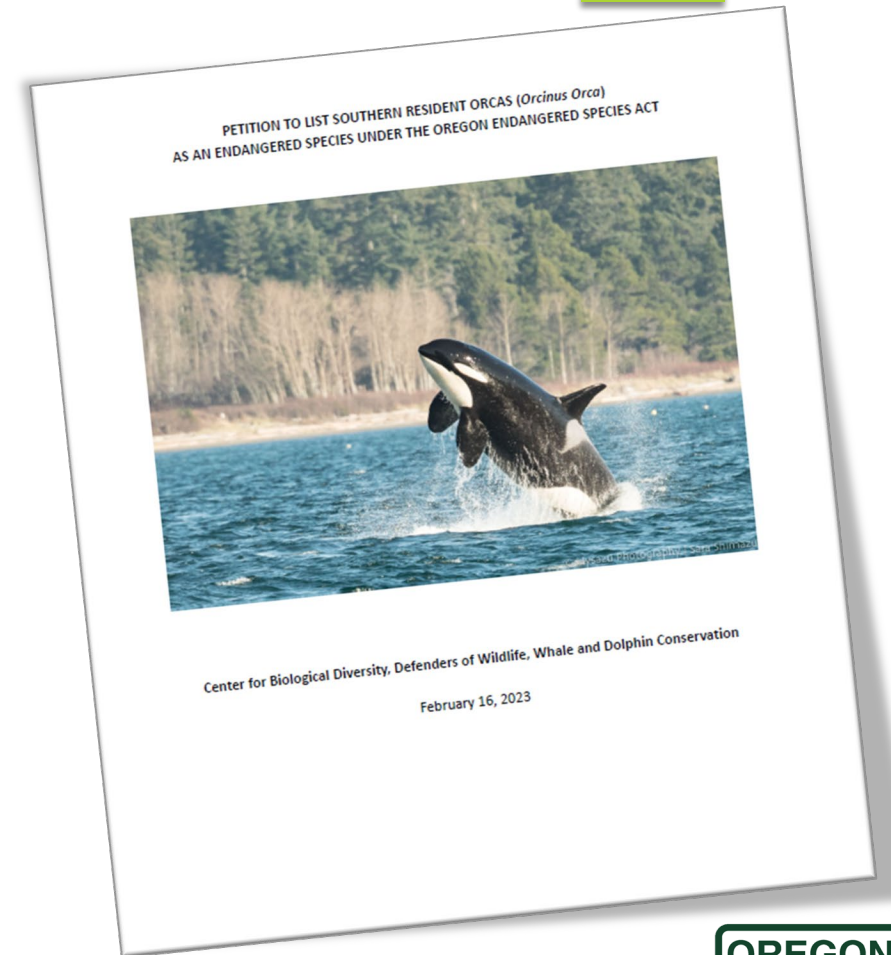
APRIL 21, 2023



Petition to list Southern Resident Orcas received

- ▶ Received February 16
- ▶ Petitioners: Center for Biological Diversity, Defenders of Wildlife, Whale and Dolphin Conservation
- ▶ Request: Adopt rule listing Southern Resident Killer Whale (SRKW) population as endangered under Oregon Endangered Species Act (OESA)

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ORS 496.176 Listing species; procedure; matters to be considered; periodic review

- ▶ “Any person may petition the commission to, by rule, add, remove or change the status of a species on the list”
- ▶ Petition must present documented and substantial scientific information
- ▶ Commission must respond in writing within 90 days
- ▶ Final determination due one year from receipt (with the option of 12-month extension)

Topics

Biology

Population Status

Habitat

Key Threats

Validity of Petition

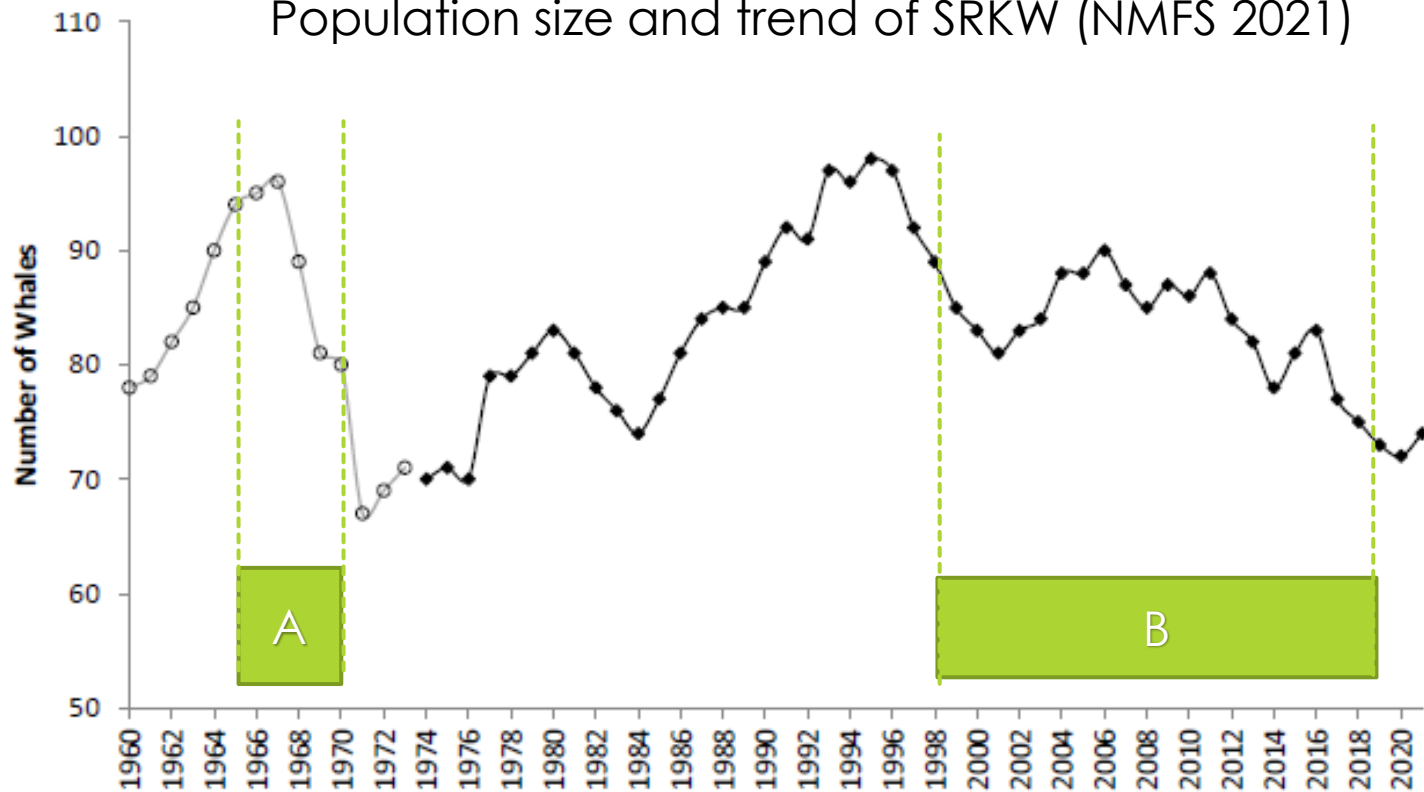
Biology

- ▶ Global population of ~50,000 with ~2,500 in northeastern North Pacific
 - ▶ Females mature at 10-17 years
 - ▶ Reproduce for 20-30 years
- ▶ Resident ecotypes include Northern and Southern Distinct Population Segments (DPS)
 - ▶ Fish eaters, especially Chinook Salmon
 - ▶ Both populations Federally-listed



Population status

Population size and trend of SRKW (NMFS 2021)

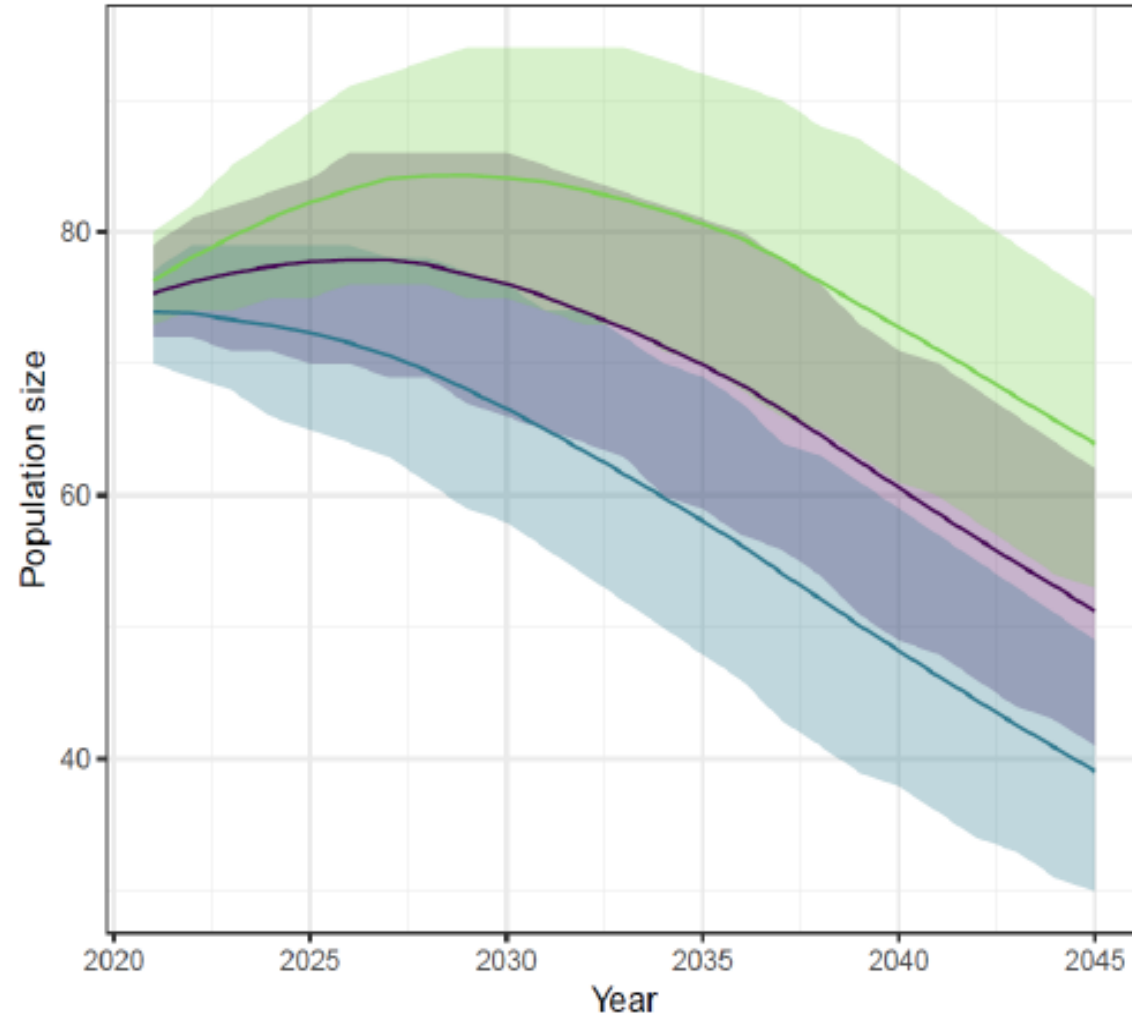


- ▶ 73 individuals in three pods
 - ▶ 24 in pod J, 16 in K, 33 in L
- ▶ A: Decline associated with captures for marine parks
- ▶ B: Likely a result of multiple threats

Population projections

- ▶ Three projections using different fecundity and survival rate data
- ▶ Green = highest observed rates (1985-1989)
- ▶ Purple = entire time series (1985-2021)
- ▶ Blue = recent five years (2017-2021)

SRKW Population Projections
(Murray 2021 from NMFS 2021)



Critical habitat

- ▶ Spend significant time in Puget Sound during the summer and fall
- ▶ Also utilize coastal waters off Washington, Oregon, and California
- ▶ Inland Washington waters designated as critical habitat in 2006
- ▶ In 2021 coastal waters from Washington to Central California were designated as critical habitat



Threats

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Scarcity of prey

High levels of contaminants from pollution

Disturbance from vessels and sound

Inbreeding

Scarcity of prey

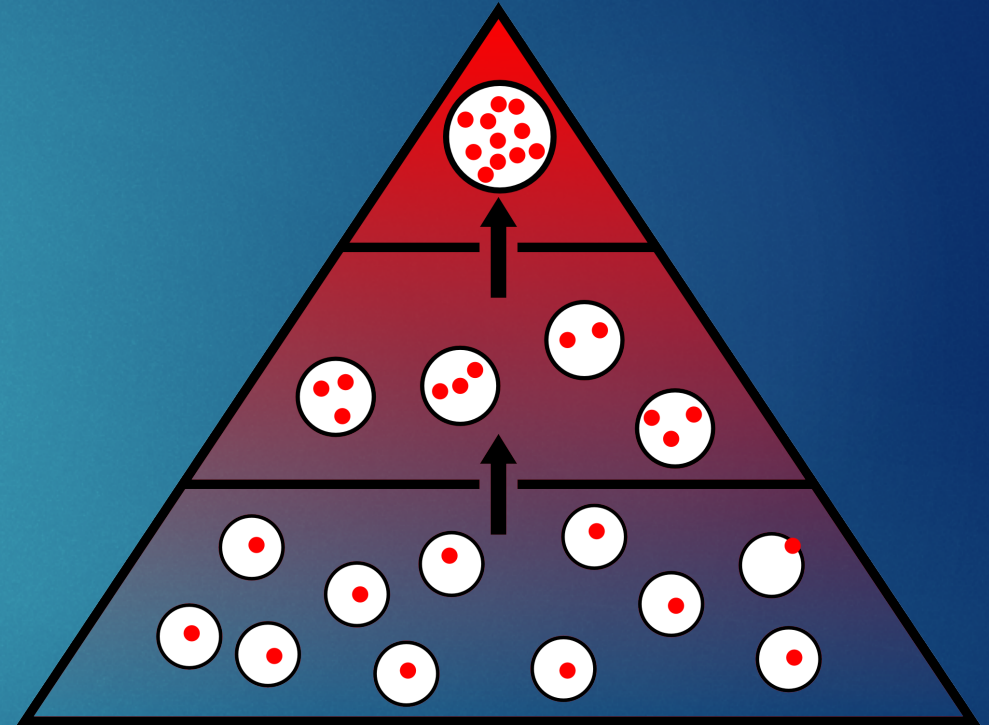
- ▶ Low quantity and quality of prey
- ▶ Washington SRKW Task Force identified increasing Chinook abundance as a primary goal
- ▶ Chinook abundance can affect habitat use by SRKW's
- ▶ Abundance and density of Chinook prey needed for recovery of SRKW's is unclear



High levels of contaminants from pollution

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- ▶ Bioaccumulation: contaminants move up the food chain, accumulating in blubber reserves
- ▶ Research indicates persistent organic pollutants (POPs) are a particular concern
- ▶ High concentrations of POPs are linked to numerous health and reproductive issues



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Disturbance from vessels and sound

- ▶ Physical disturbance from whale watching
- ▶ Acoustic vessel noise interferes with feeding, communication, and orientation
- ▶ Washington has implemented a variety of programs to restrict vessels near SRKWs



Inbreeding

- ▶ Over 50% of offspring born from 1998-2015 sired by two males
- ▶ Inbreeding is linked with shorter life spans and decreased reproductive potential

Conclusion

Validity of Petition

- ▶ Staff concludes the petition provides substantial scientific information to warrant the requested action

Staff Recommendation

- ▶ Determine the petition to list the SRKW DPS as endangered under the OR-ESA is warranted
- ▶ Respond to petitioners (in writing) acknowledging the petition meets the requirements outlined in ORS 496.176

Next steps

- ▶ Final determination on need for listing required by 2/16/2024 unless extended additional 12 months
- ▶ If the petition is accepted, staff will begin preparing for a listing determination

Draft motion

I move commence a rulemaking process to consider adding the Southern Resident Orca to the State endangered species list, as the petition presented substantial scientific information to justify commencement of rulemaking.



Questions?