

Natural Heritage Ranking Form - Oregon State Rank

Oregon Ranking Form Northern sea lion (*Eumetopias jubatus*)

Oregon Biodiversity Information Center

SPECIES ASSESSED

Scientific Name *Eumetopias jubatus*

ELCODE AMAJC03010

Common Name Northern sea lion

Element ID 7107

Species Concept Reference Citation

Wilson, D. E., and D. M. Reeder (editors). 1993. Mammal species of the world: a taxonomic and geographic reference. Second edition. Smithsonian Institution Press, Washington, DC. xviii + 1206 pp. Available online at: <http://www.nmnh.si.edu/msw/>.

CONSERVATION STATUS RANK

Assigned Rank **S3**

Rank Assignment Author E. Gaines Rank Review Date 5/10/2019

Rank Factors Author E. Gaines Rank Factors Date 01/25/2019

Calculated Rank S3S4 Rank Change Date 05/10/2019

Rank Methodology Used Rank calculator v.3.1x - 2011-2015 rank factors

Rank Adjustment Reasons

Population is vulnerable due to very few occurrences and many potential threats. Although population is currently increasing, this species is of conservation concern. Also Grank of G3 requires srnk equal or lower than S3.

RANGE/DISTRIBUTION

Range Extent

Rating 5000-20,000 square km (about 2000-8000 square miles)

Comments Approx 16,510 sq km.

Area of Occupancy

Grid Cell Size

Rating (as Number of 4 km² Grid Cells) DE = 6-125

Comments Rookeries comprise 11 4 km sq grid cells, but species uses much larger area for feeding, haul-outs, all along Oregon coast and up rivers.

ABUNDANCE AND CONDITION

Number of Occurrences

Rating 6 - 20

Comments 9 extant Eos.

Population Size

Rating 2500 - 10,000 individuals

Comments OSU- SeaGrant estimated Oregon population at about 2000 individuals in 2003. NMFS estimates 5634 non-pups in 2015.

Good Viability/Ecological Integrity

Number of Occurrences with Good Viability/Ecological Integrity

Rating Very few (1-3)

Comments

3 active rookeries, all seem to be viable.

THREATS**Calculated Overall Threat Impact**

Assigned Overall Threat Impact D = Low

Overall Threat Impact Comments

Threats from fish harvest equipment entanglement, oil spill, ocean warming, but population is slowly increasing in Oregon.

TRENDS**Short-Term Trend**

Rating H = Increase of 10-25%

Comments

approx 2% annual population increase, 1990-2015, NMFS

Long-Term Trend

Rating

RANKING REFERENCES

<u>Short Citation</u>	<u>Author</u>	<u>Year</u>	<u>Full Citation</u>
National Marine Fisheries Service		2016	National Marine Fisheries Service. 2016. Steller sea lion (<i>Eumetopias jubatus</i>): Eastern Stock. Marine Mammal Stock Assessment Reports by Species/Stock. https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessment-reports-species-stock#pinnipeds---otariids-(eared-seals-or-fur-seals-and-sea-lions) .
Tidwell et al.		2019	Tidwell, K.S., B.A. Carrothers, K.N. Bayley, L.N. Magill, and B.K. van der Leeuw. 2019. Evaluation of pinniped predation on adult salmonids and other fish in the Bonneville Dam tailrace, 2018. U.S. Army Corps of Engineers, Portland District, Fisheries Field Unit. Cascade Locks, OR. 65 pp.

RESOURCES

Oregon Biodiversity Information Center, Institute for Natural Resources
Portland State University, Mail Stop: INR, PO Box 751, Portland, OR 97207-0751 Phone: 503-725-9950

Additional ORBIC species ranking forms posted at
<https://inr.oregonstate.edu/orbic/rare-species/ranking-documentation>

Information on Natural Heritage ranking methodology is available at
<http://www.natureserve.org/biodiversity-science/publications/natureserve-conservation-status-assessments-methodology-assigning>

The Conservation Rank Calculator is developed and maintained by NatureServe and is available from
<http://www.natureserve.org/conservation-tools/conservation-rank-calculator>

ASSESSMENT CITATION

Oregon Biodiversity Information Center. 2019. Oregon state rank assessment for Northern sea lion (*Eumetopias jubatus*). Institute for Natural Resources, Portland State University, Portland, OR.