

NOAA
FISHERIES

Southern Resident Killer Whale (SRKW) Status and Recovery

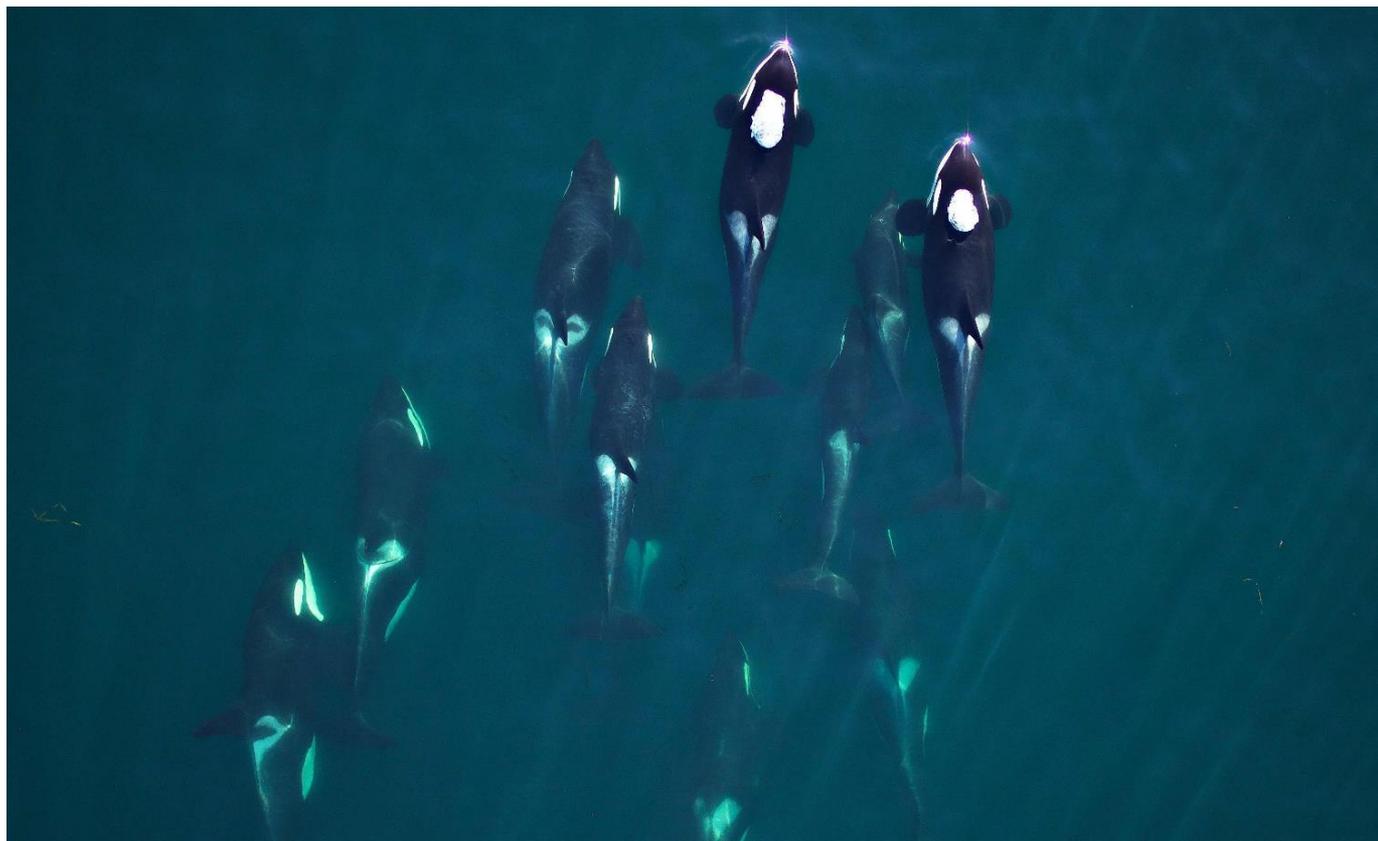


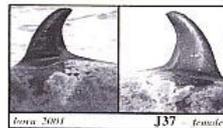
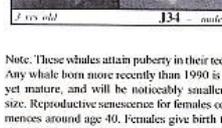
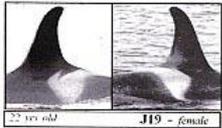
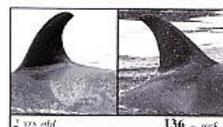
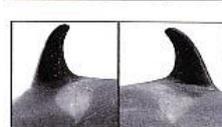
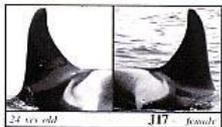
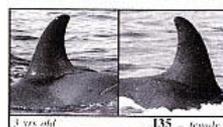
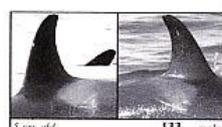
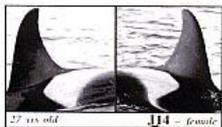
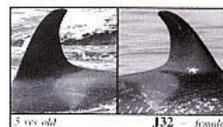
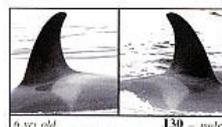
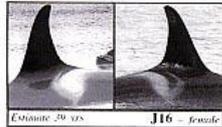
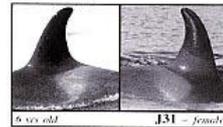
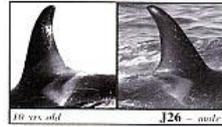
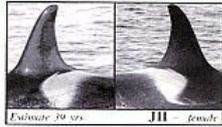
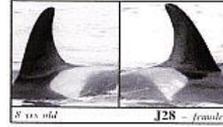
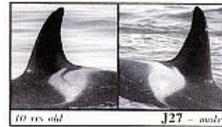
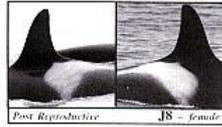
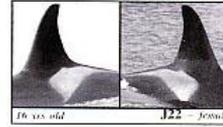
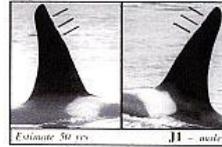
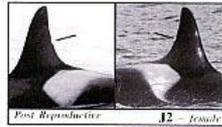
Photo provided by:
J. Durban and
H. Fearnbach

Agenda Item B.1, May 23, 2019

Teresa Mongillo, NOAA/WCR/PRD

STATUS & RECOVERY

J-Pod quick look ID guide



Note: These whales attain puberty in their teens. Any whale born more recently than 1990 is not yet mature, and will be noticeably smaller in size. Reproductive senescence for females commences around age 40. Females give birth to a single calf at five year intervals on average.

© 2001, Center for Whale Research

- J, K, L pods
- Photo-ID
- Listed as Endangered under ESA in 2005
- Recovery Plan in 2008
- 5-Year review in 2016

Photo Catalogue - Center for Whale Research

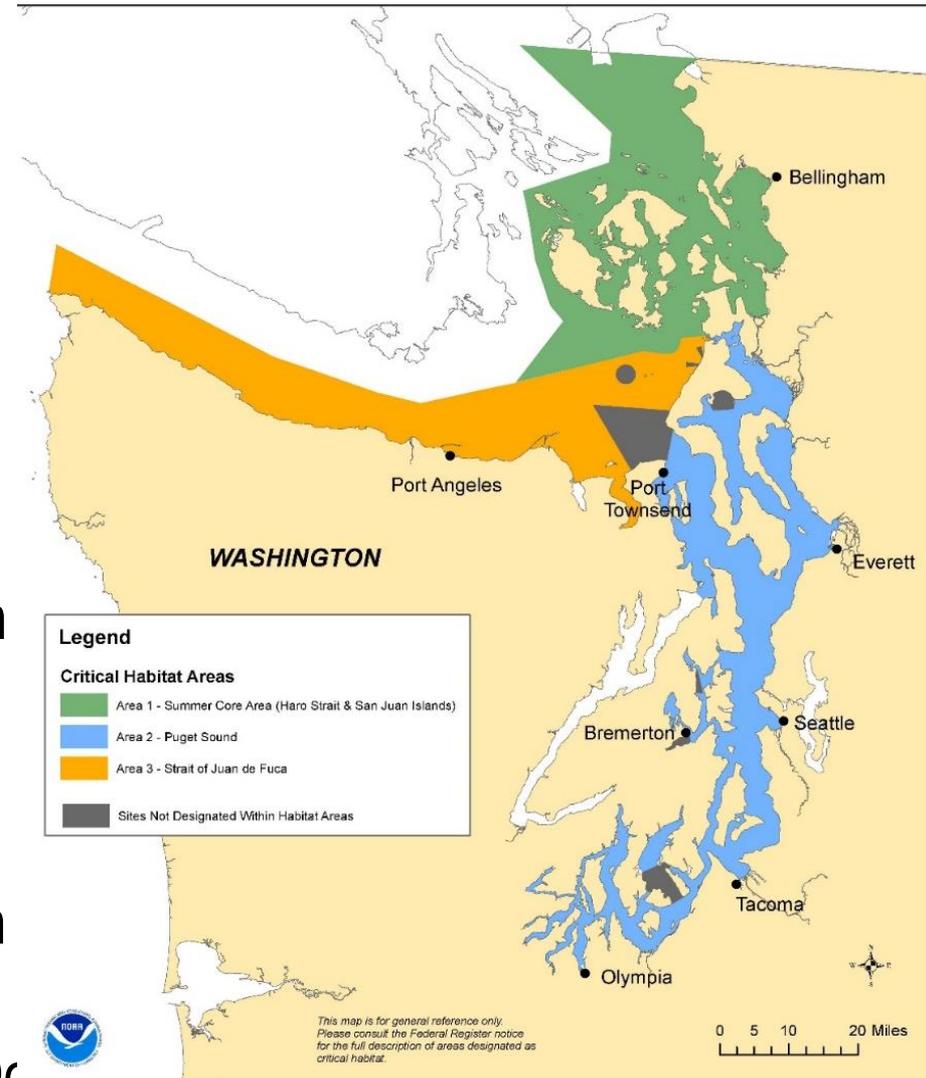
STATUS & RECOVERY

Critical Habitat designated in 2006

Physical & Biological features:

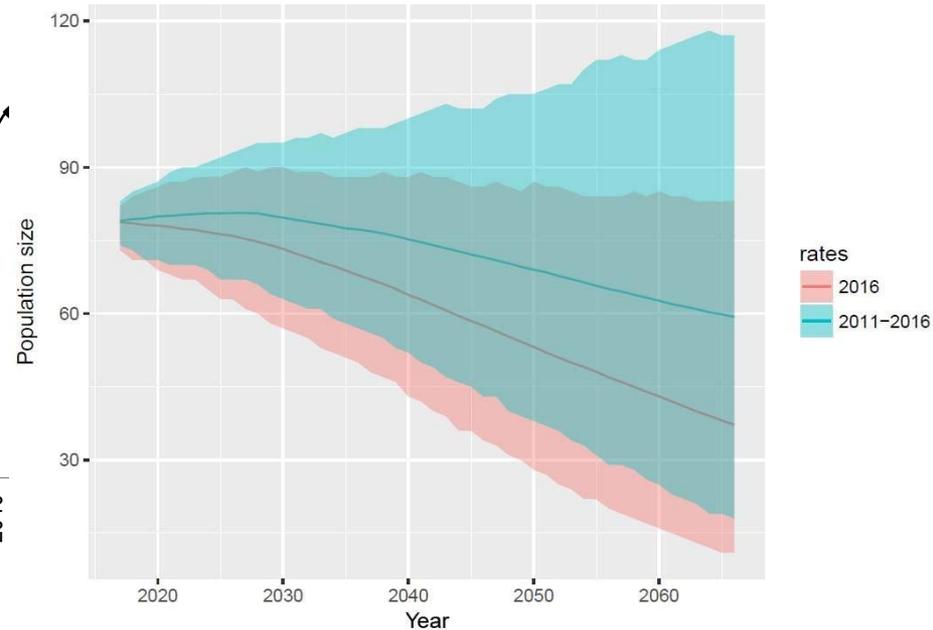
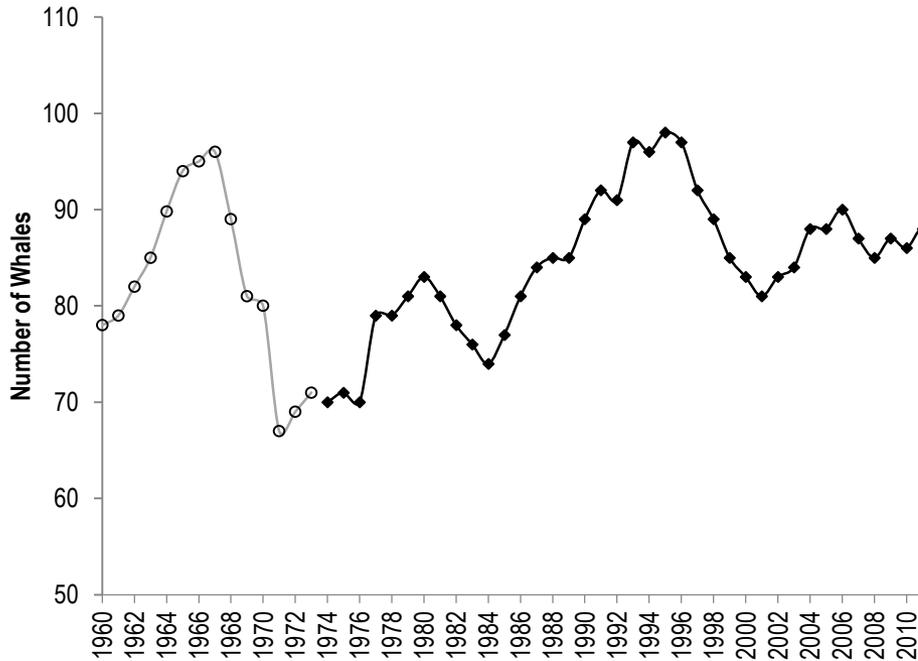
1. Water quality to support growth & development
2. Prey species of sufficient quantity, quality, & availability to support individual growth, reproduction, development, & overall pop. growth
3. Passage conditions to allow for migration resting & foraging

- Feb 2015, NMFS issued a 12-month finding to revise CH
- Proposed revisions to CH by Sept/Oct.



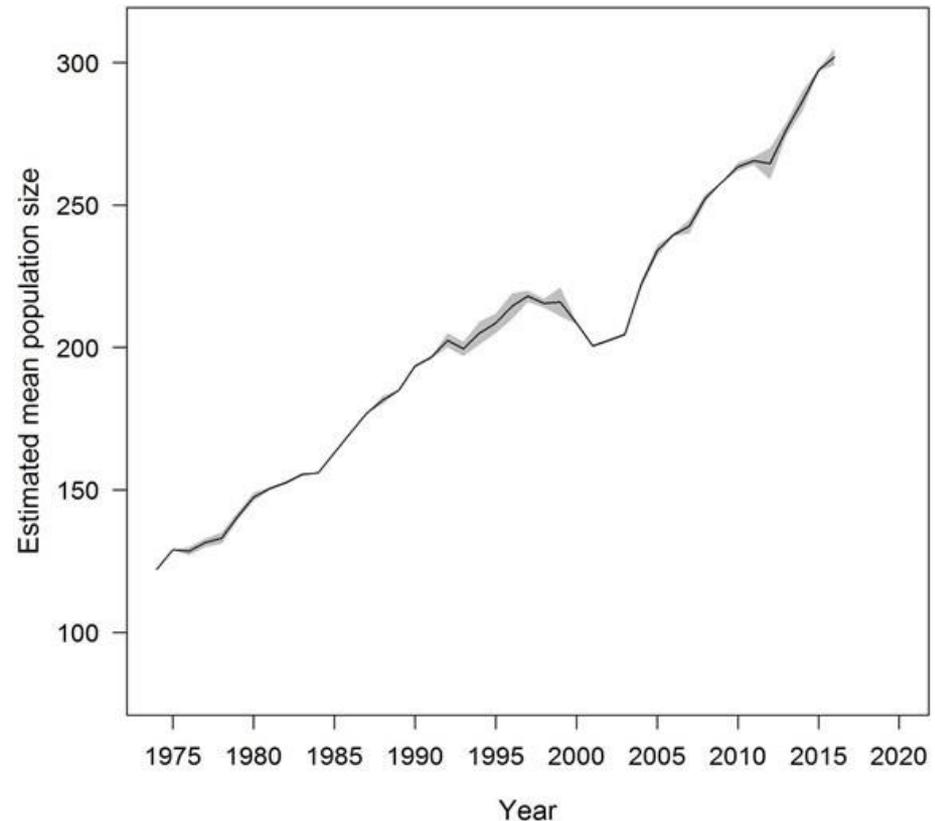
STATUS & RECOVERY

- Peak of 98 animals in '95, currently 75 individuals
- Aquaria trade removal ~50
- Listing following concern from decline in the 90s



PACIFIC NORTHWEST ECOTYPES

- Transients
 - Marine mammal eaters
 - Small groups
- Offshores
 - Limited information
 - Eat fish, sharks
 - Large groups
- AK, Northern and Southern Residents



PRIMARY THREATS



Illustration by Kelley
Balcomb-Bartok



NOAA

RECOVERY- DELISTING CRITERIA

1. SRKWs has exhibited an increasing population trend at an average growth rate of 2.3% per year for 28 years (two full cycles).

2. Available information on social structure, calf recruitment, survival, population age structure, and gender ratios of SRKWs are consistent with a growth rate of 2.3% and are indicative of an increasing or stable population.

Objective: Ensure sufficient quantity, quality, and accessibility of prey species.

Criteria: A1. Observations indicating that lack of prey is not a source of mortality or a factor limiting recovery of Southern Residents. Consistent observations or measurements of good body condition in a significant number of individuals, and no or limited observations of reduced feeding behavior or recovery of emaciated stranded animals.

Criteria A2. Sufficient knowledge of the foraging ecology of Southern Residents to determine that established fishery management regimes are not likely to limit the recovery of the whales. a. Fisheries management programs that adequately account for predation by marine mammal populations when determining harvest limits, hatchery practices, and other parameters. b. Fisheries management programs that are consistent with recovery of salmon stocks and that support sustainable salmon populations.

RECOVERY – DOWNLISTING CRITERIA

1. The SRKWs has exhibited an increasing population trend at an average growth rate of 2.3% per year for 14 years (one cycle).
2. Available information on social structure and population structure are consistent with 2.3% per year for 14 yrs, and they are indicative of an increasing or stable population.

To be considered for downlisting from endangered to threatened status, we must have some indication that we are making progress toward filling the data gaps on threats to Southern Resident killer whales.

A2. Research is underway to increase knowledge of the foraging ecology of Southern Residents and inform fishery management programs that determine harvest limits, hatchery practices and evaluate consistency with recovery of salmon stocks and SRKWs.