

Pinto Abalone Recovery Plan

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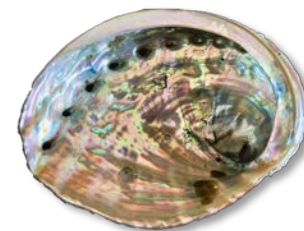




Pinto Abalone

Marine gastropod known for iridescent shell

Only abalone species in Washington



Historic importance to Native American cultures

Abalone are **broadcast spawners**. Males and females must be near each other for gametes to meet and fertilize in the water.

Key species in kelp forest ecosystem – grazes drift kelp, enables settlement of new kelp and invertebrates

Listing Process

Status Review (2018)



Public Comment (2019)



Commission Listing (2019)



Status reviews every five years



Draft Recovery Plan (2021)



Public Comment (2021-22)



Director Adopts Plan (2022)



Timeline

- 1959 – Classified for recreational harvest
- 1979 – First surveys conducted
- 1992 – Index stations established
- 1994 – Recreational fishery closed
- 2002 – Restoration partnership formed
- 2009 – First hatchery juveniles released
- 2015 – Petition for federal listing declined
- 2019 – Listed as State Endangered

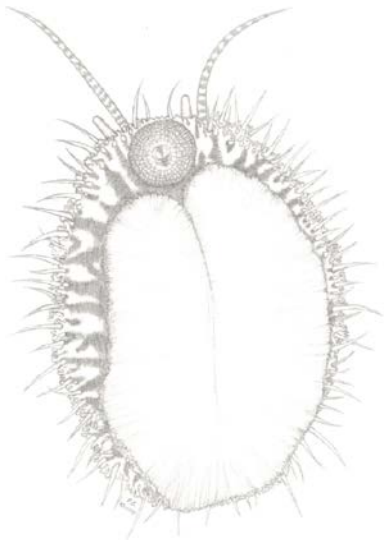
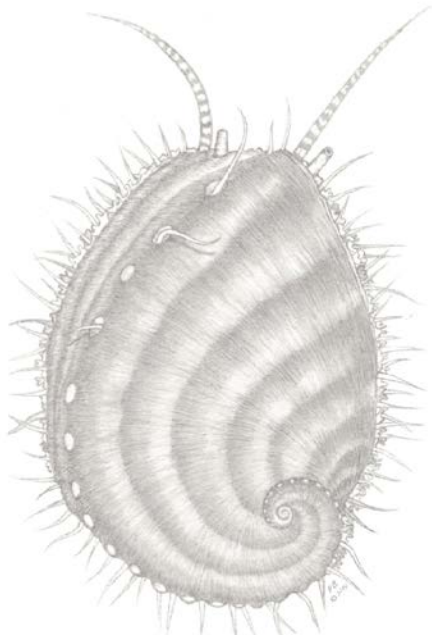
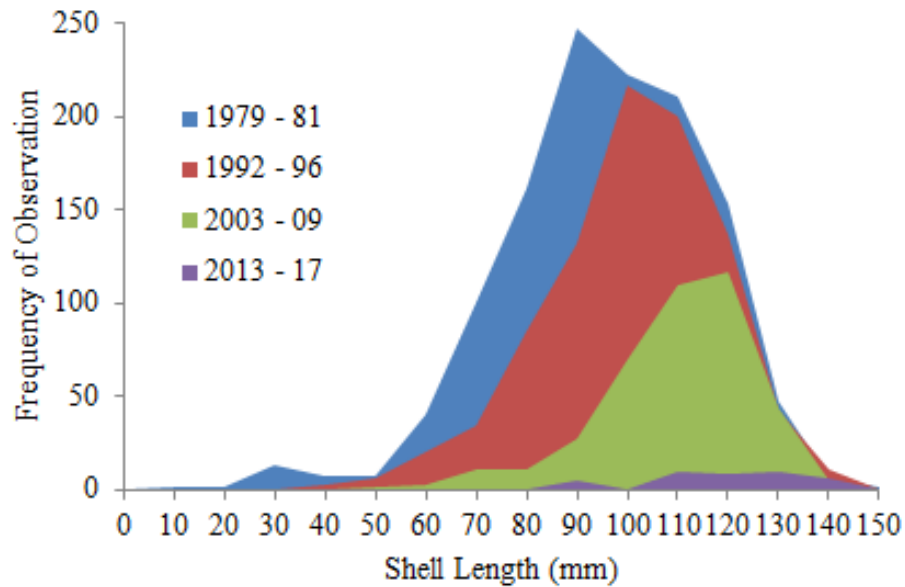


Illustration by Pam Baum

Since data show an aging population without reproduction, hatchery supplementation is the backbone of the recovery strategy.



Draft Recovery Plan

Authored by staff from WDFW, PSRF, and NWIFC

STATE OF WASHINGTON

DRAFT September 2021



Pinto Abalone Recovery Plan



Six Sections:

I: Background

II: Restoration Efforts

III: Key Knowledge Gaps

IV: Recovery Goal & Downlisting Criteria

V: Recovery Strategies & Tasks

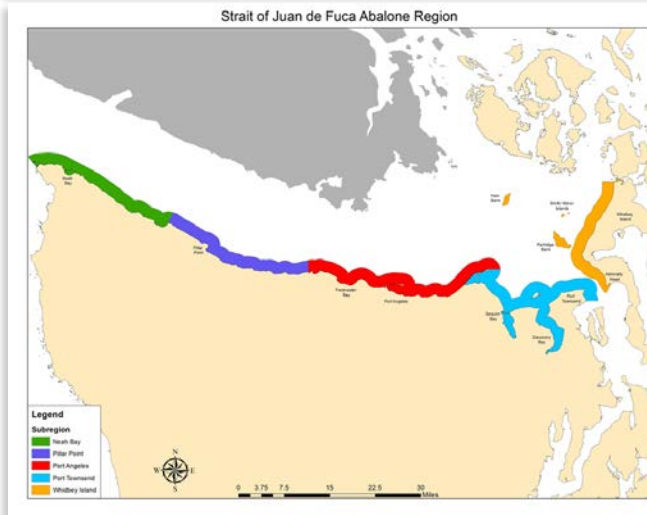
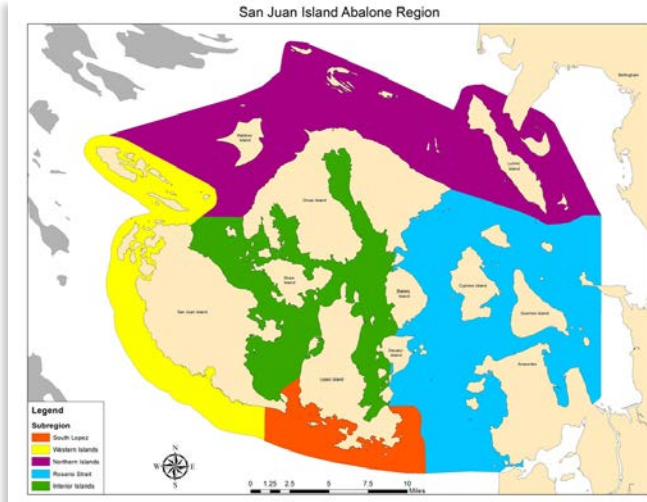
VI: Implementation Plan

Downlisting Criteria

1) A minimum number of spawning aggregations spread across the state

2) A certain percentage of the population in different size categories

3) A stable or increasing population trend



Recovery Strategy

- 1) Captive Breeding
- 2) Expand outplanting program
- 3) Monitor wild aggregations
- 4) Build partnerships
- 5) Close knowledge gaps
- 6) Protect Habitat



Public Comment Received

Sent for peer review July 2021, tribal review Aug. 2021, and public comment Oct. 2021 – Jan. 2022

Received 20 comments via online comment portal or email. Also received annotated drafts of the plan from four reviewers.

All comments were supportive of the plan and pinto abalone recovery. Suggested edits were largely additive rather than suggested deletions.

Commenting organizations:

- Department of Natural Resources
- Dept. of Fisheries and Oceans, Canada
- Marine Network
- San Juan County MRC
- Island County MRC
- Skagit County MRC
- SeaDoc Society
- REEF
- Friends of the San Juans
- Olympic Peninsula Surfrider Foundation



Changes based on comments

Changed delisting criteria significantly

- modifying size distribution criterion
- adding a new criterion for trend in density

Added new recovery tasks

- modeling exercise for recovery planning
- more complete discussion of habitat protections
- more discussion of citizen science contributions
- novel detection methods (eDNA, drop-camera)



Funding Recovery

2002 – 2019 department funding +
PSRF donors + several small external
grants

2019 – 2023 Pinto Abalone Legislative
Provisos

2023 going forward – seeking ongoing
funding through legislative request,
continuing to pursue outside grants



Questions and Discussion



Criterion	Status		
	<i>Endangered</i>	<i>Threatened</i>	<i>Sensitive</i>
Number of documented spawning aggregations in each of the two regions	< 15	15 - 30	> 30
Number of subregions (out of five) that have at least three spawning aggregations in each of the two regions	0 - 2	3	4 - 5
Percent of wild individuals with a shell length less than 90 mm in each of the two regions	< 20%	20 – 30%	> 30%
Percent of wild individuals with shell length greater than 110 mm in each of the two regions	< 20%	> 20%	> 20%
Trend in density at index sites in each of the two regions	declining	stable or increasing	increasing

