

# Status of pinto abalone in Washington State



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# Outline

1. Historical overview
2. Population status
3. Recovery program
4. Status review process







# -- THE PINTO ABALONE --

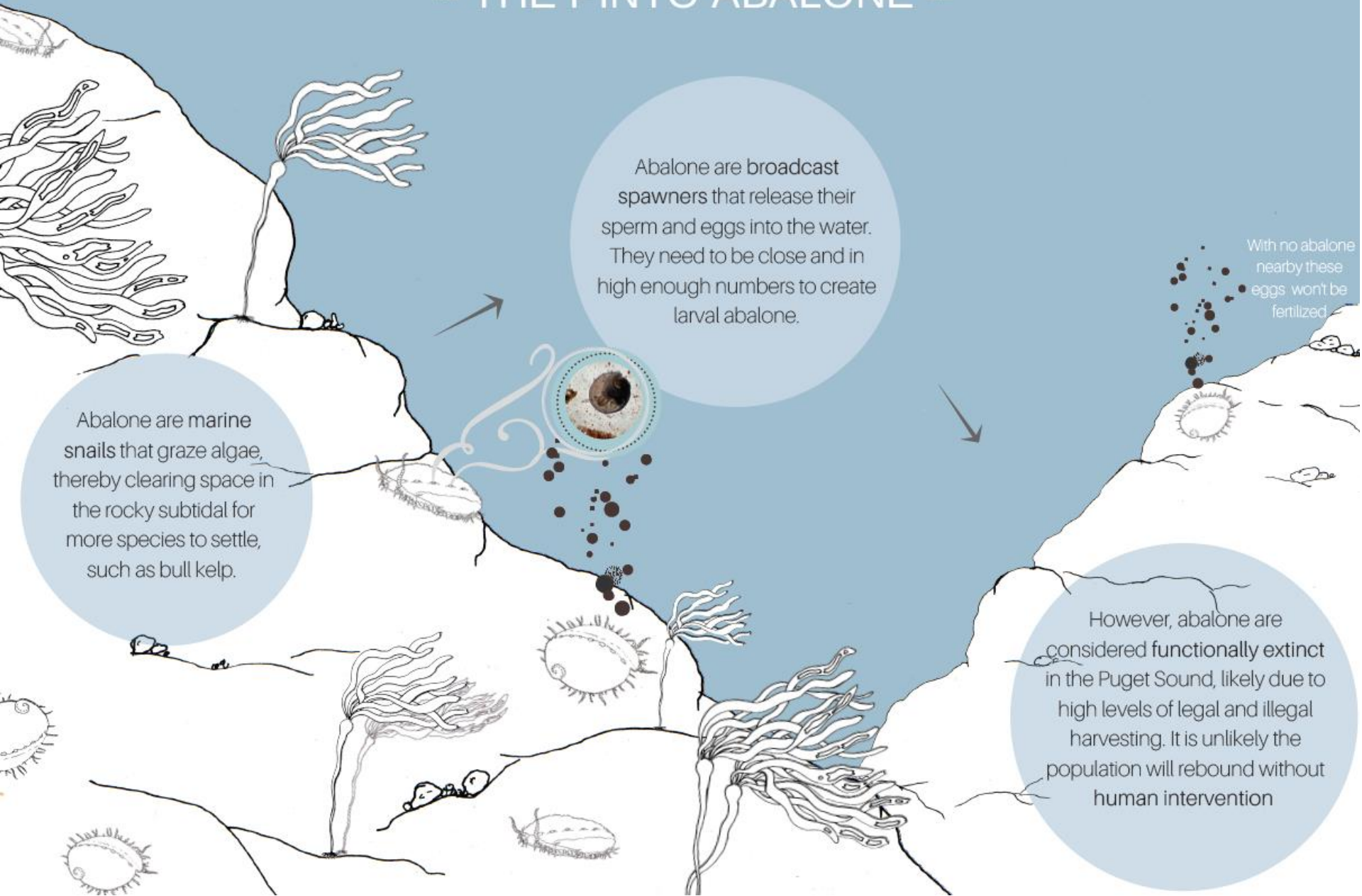
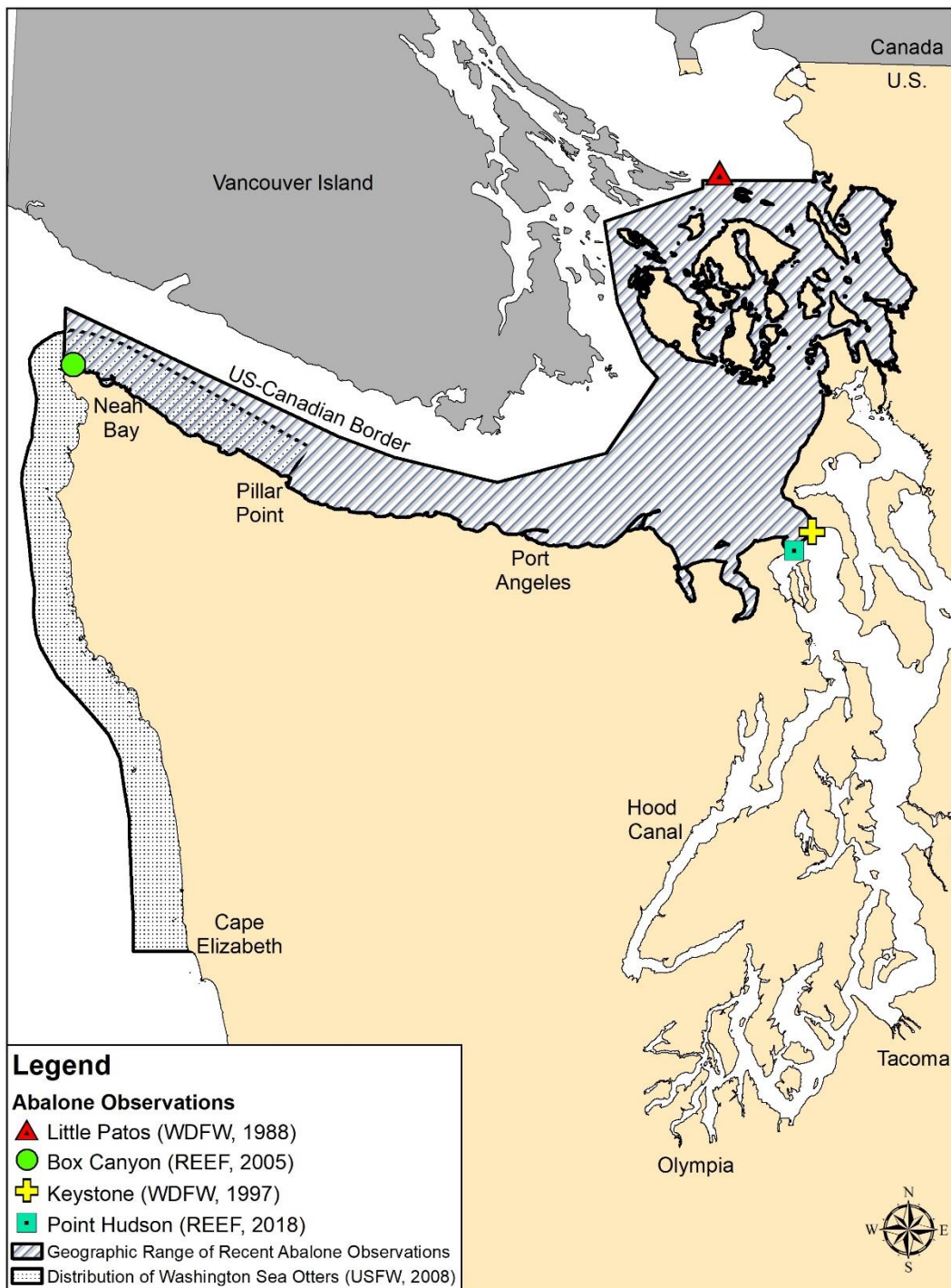


Diagram by Caitlin O'Brien, PSRF





# 1. The Rise of the Pinto Abalone Fishery

**1959**

A recreational fishery in Washington is authorized.

**1979-80**

WDFW collects the first formal data on abalone abundance.

**Mid 1980s**

WDFW data estimates recreational harvest of abalone in the San Juans is ~40,000 individuals each year.

**Late 1980s early 1990s**

- Peak years for sea urchin and sea cucumber dive fisheries (~200 vessels).
- Abalone overlap with sea urchins and sea cucumbers at shallow depths; vulnerable to illegal harvest



# 1. The Decline of Pinto Abalone



## 1990

Declining abalone stocks force closure of British Columbia commercial and sport pinto abalone fisheries.

## 1991 - 1992

WDFW survey data shows a ~50% decline from 1981 data. Fixed index stations established to assess future changes in abundance.

## 1994

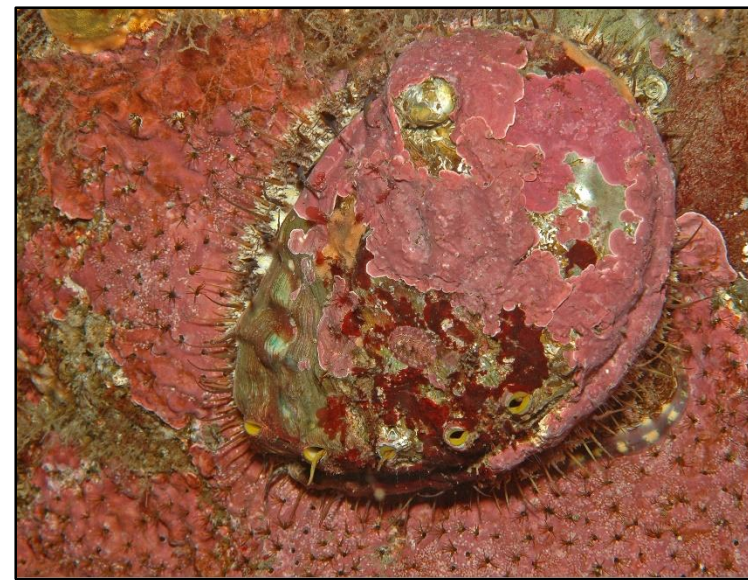
Data from index stations shows continued decline in abalone stocks, along with evidence of poaching, supports the closure of Washington pinto abalone recreational fishery.







# 1. The Decline of Pinto Abalone (continued)



**1996**

Alaska closes the commercial pinto abalone fishery.

**1998**

WDFW designates pinto abalone as a “State Candidate Species” based on continued declines shown in survey data.

**1999**

Canadian Government lists pinto abalone as a “Threatened Species.”

**2004**

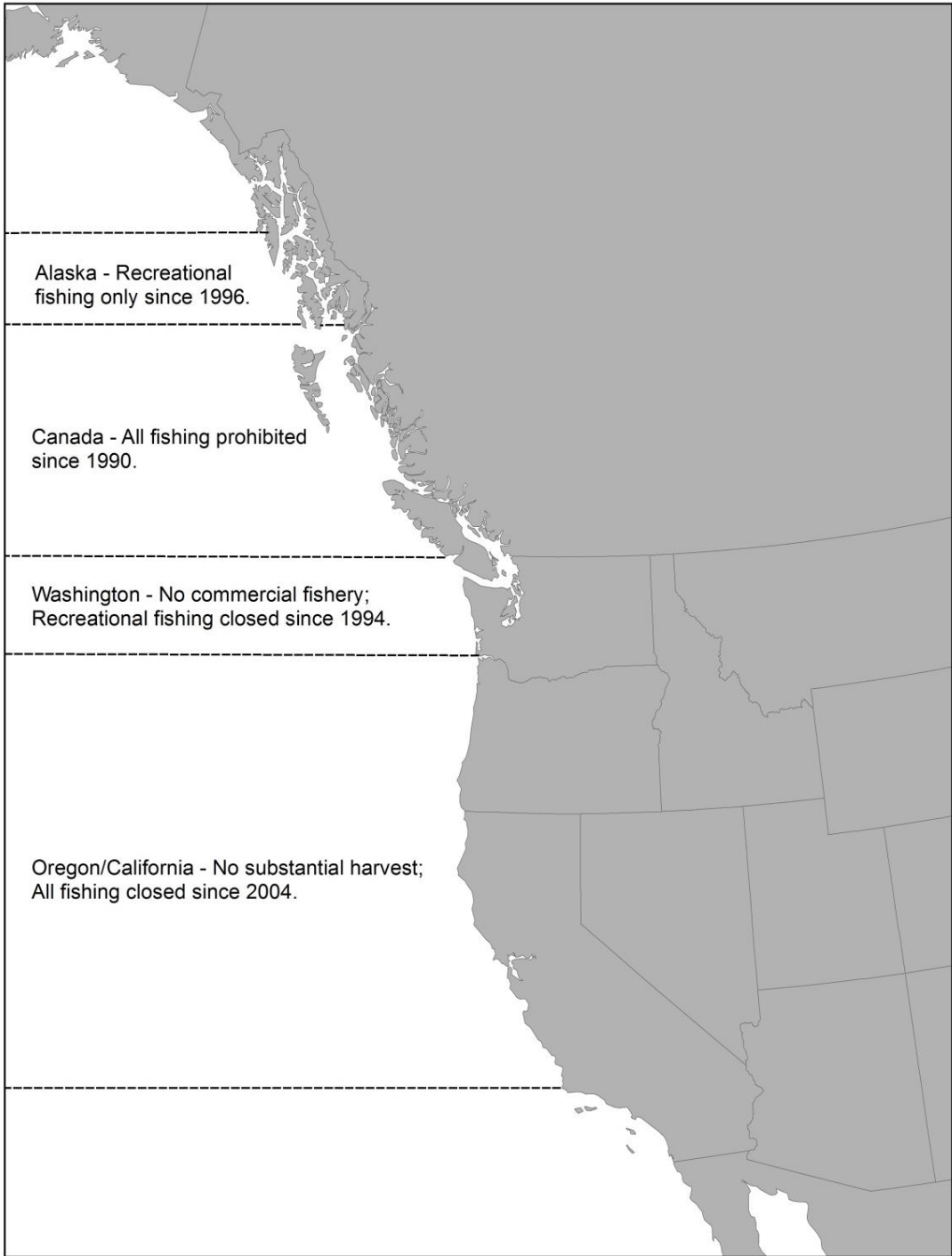
NOAA Fisheries Federally lists pinto abalone as a “Species of Concern.”

**2009**

Canadian Government list pinto abalone as an “Endangered Species.”

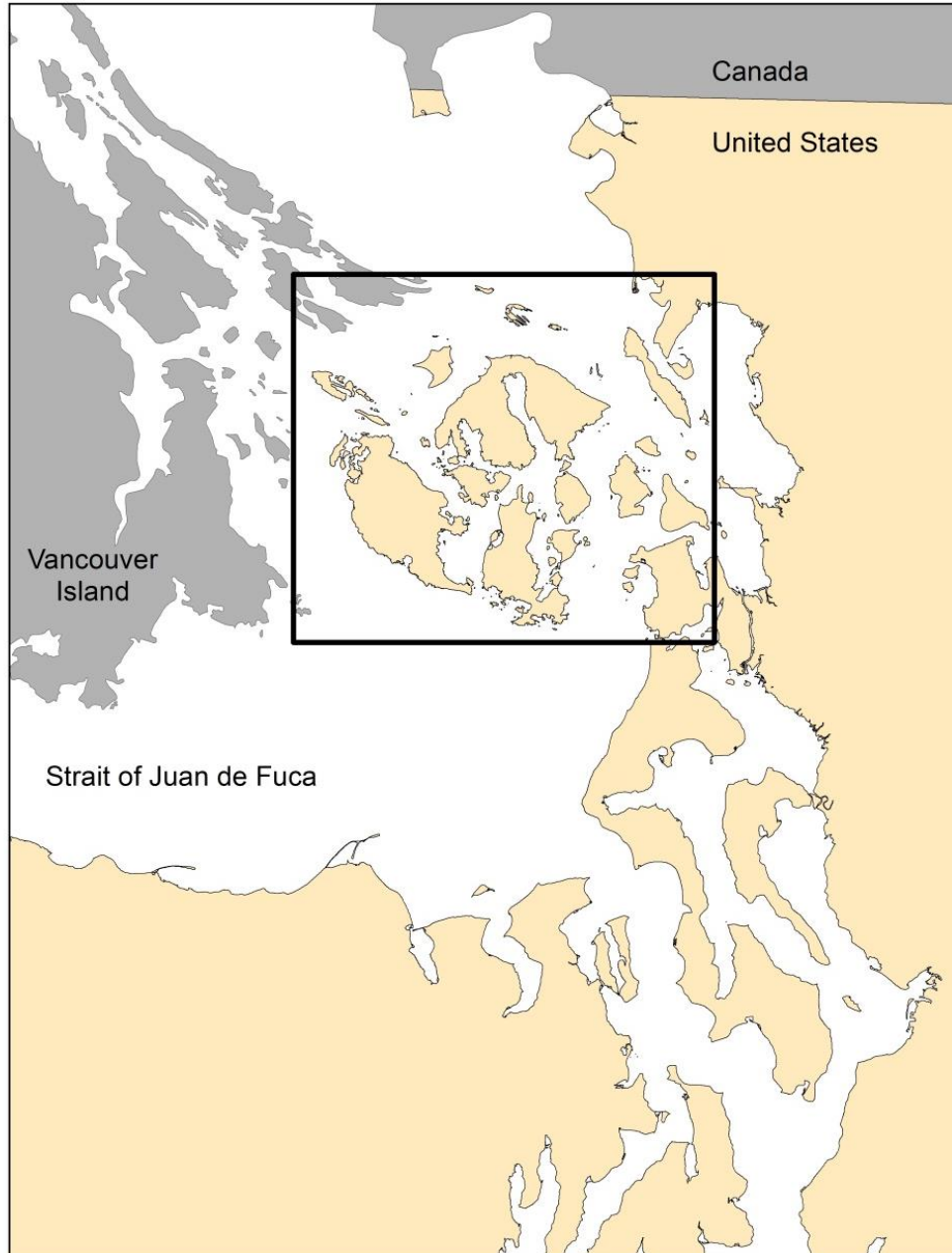
**2013-14**

NOAA receives two petitions to list and conducts a status review for the Endangered Species Act. NOAA does not list the species.

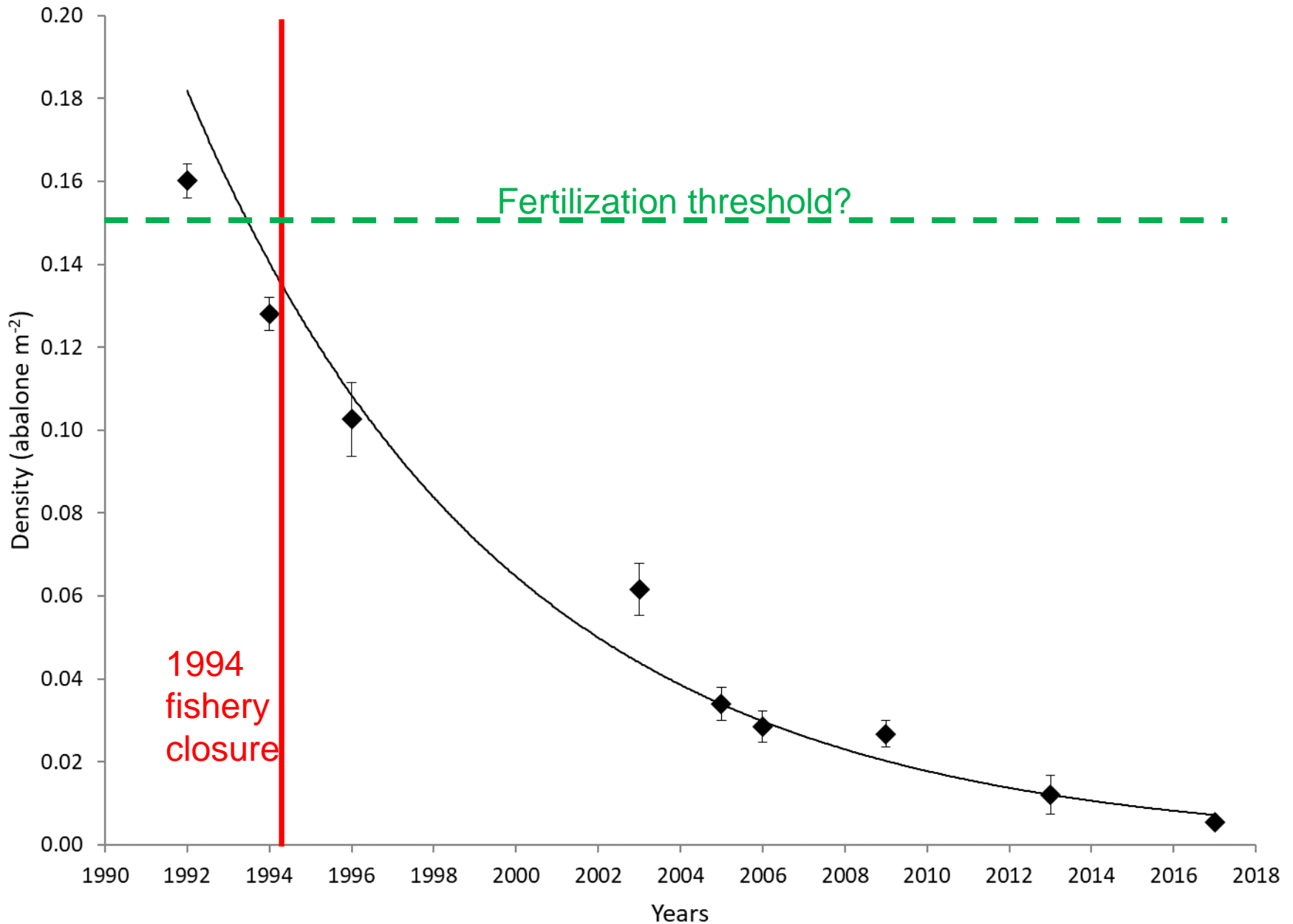




# 2. Population Status



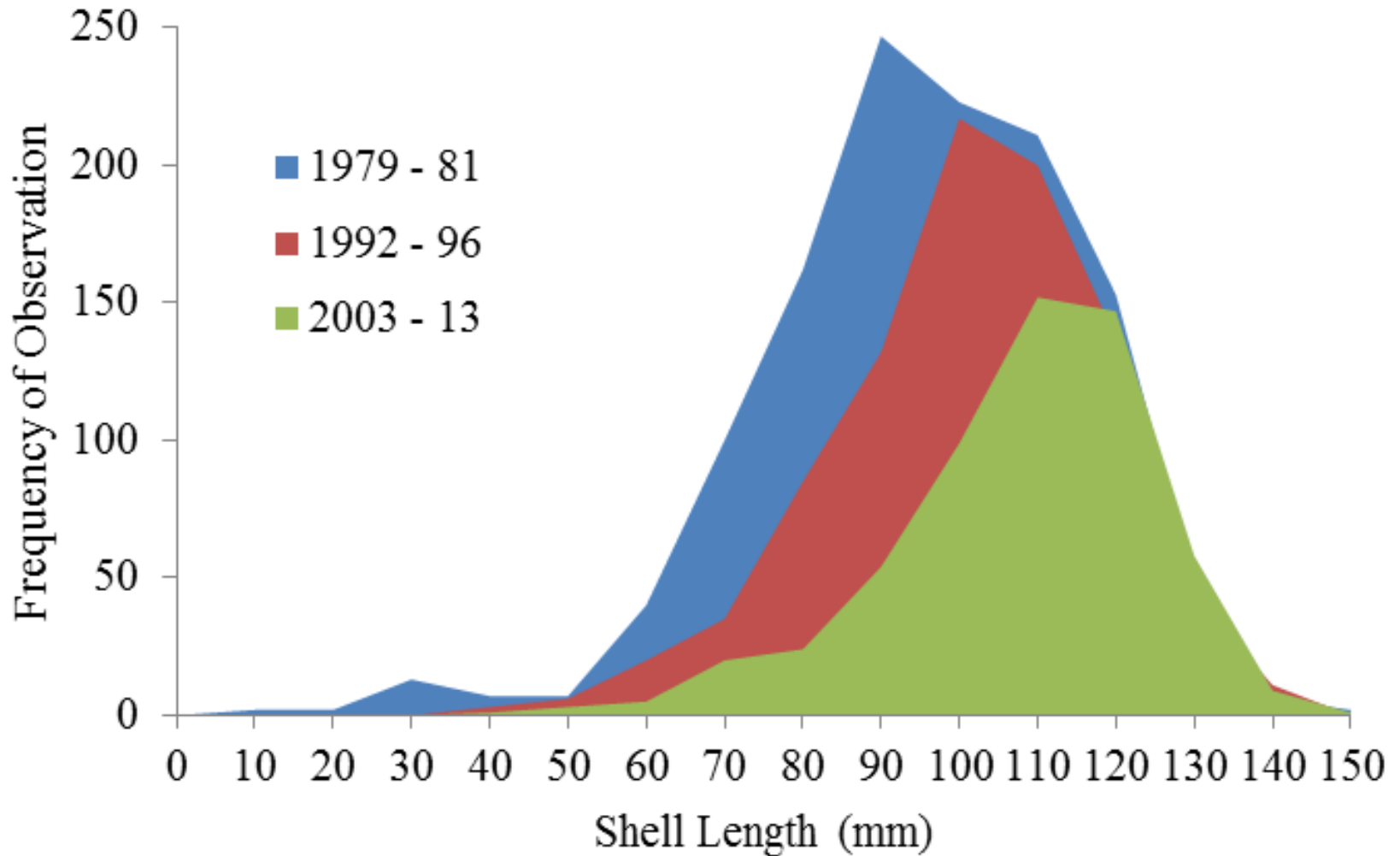
# 2. Population Status





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Aging population with lack of reproduction



# 2. Population Status Summary

- Earliest “density” information comes from 1979 surveys – from which we estimate a 96% decline compared to similar surveys today.
- This agrees with fixed index station data from 1992 – 2017, which shows a 97% decline in density.
- The population is aging, and no juveniles have been observed for a decade.
- Although disease, climate change or other factors cannot be completely ruled out, reproductive collapse due to low adult densities is the most likely explanation.
- Populations are unlikely to recovery without intervention.

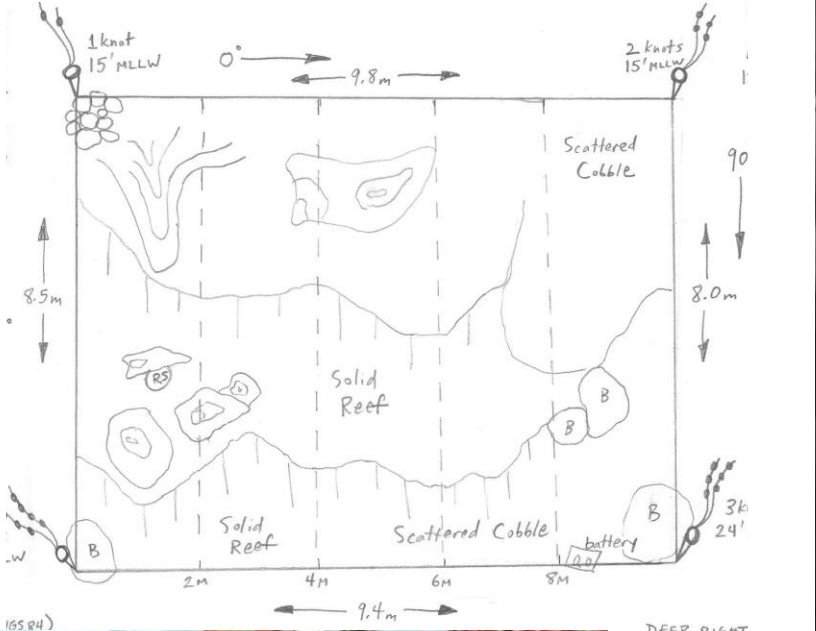


# 3. Recovery Program

NOAA Manchester Research Station  
Kenneth Chew Center for Shellfish Research & Restoration







# 3. Recovery Summary

- Singleton broodstock collected from the San Juan Islands, only first-generation juveniles outplanted.
- Over 15,000 disease-free juveniles from 96 hatchery families have been placed on 12 sites in the San Juan Islands (2009 – 2018).
- (Observed) survival one year after outplant averages 10.2%.
- (Observed) survival to reproductive size averages 3.4%.
- 8 of 12 sites have maintained reproductive densities throughout the program.
- Populations are unlikely to recover without intervention. A significant scale-up of current effort would be necessary to impact the overall population.
- Experiments are underway to optimize production by outplanting younger juveniles or even larval stages.

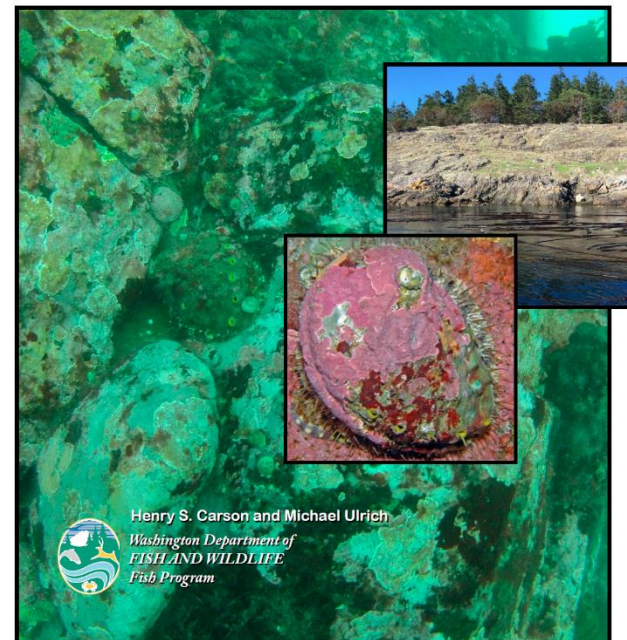


# 4. Status review process

- Present preliminary status review and recommendation to list as Endangered.
- Public comment period started in late October 2018, will extend through March 2019. All comments received so far have supported listing.
- Outreach to treaty tribes, recreational dive community, dive shops, conservation groups, commercial dive fisheries, academia, boating organizations, ports, aquaria and science centers.
- Two public meetings in Anacortes and Port Townsend.
- Final public hearing at April 2019 commission meeting.
- Presentation of final status review and recommendation, incorporating all public comment, after April 2019 meeting.

STATE OF WASHINGTON December 2018

## Preliminary Status Report for the Pinto Abalone in Washington



# Implications of Endangered Listing

- Listing would clearly communicate the status of the species to public, funding agencies, private donors, gathering support for full recovery.
- Protect the agency investment in pinto abalone restoration:
  - current illegal harvest is “fishing in a closed season” = misdemeanor.
  - if Endangered, infractions would increase to gross misdemeanor, second offense a felony.
- Minimal regulatory burden on coastal communities
  - critical habitat overlap with federally listed species such as orca.
  - shoreline master plans already consider abalone as a “species of concern” and/or restrict development in areas of bull kelp beds.
- Pinto abalone would have to be removed from the list of classified food fish and shellfish (WAC 220-320-020) in order to be “wildlife” eligible for listing.
- Agency develops a recovery plan within one year of listing, status reviews every five years.



# Questions and Discussion

## Thank you:

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Diver/biologists and student researchers from WDFW, Puget Sound Restoration Fund, Jamestown S’Klallam, Shannon Point Marine Center

