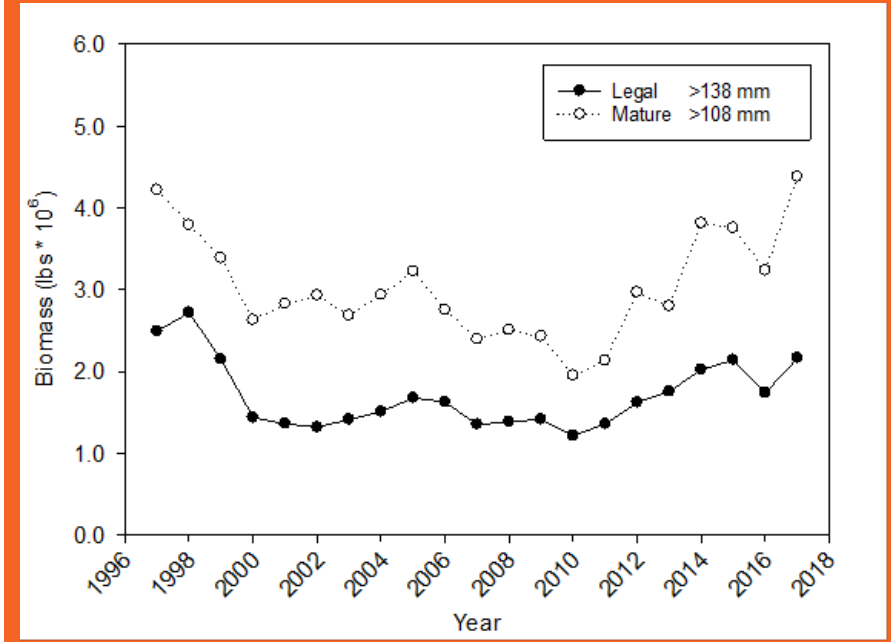
2017 Preliminary Tanner Crab Survey Results

King and Tanner Task Force Meeting
2017/2018• 12.07.2017

Trends in Male Tanner crab: Mature and Legal Biomass Estimates



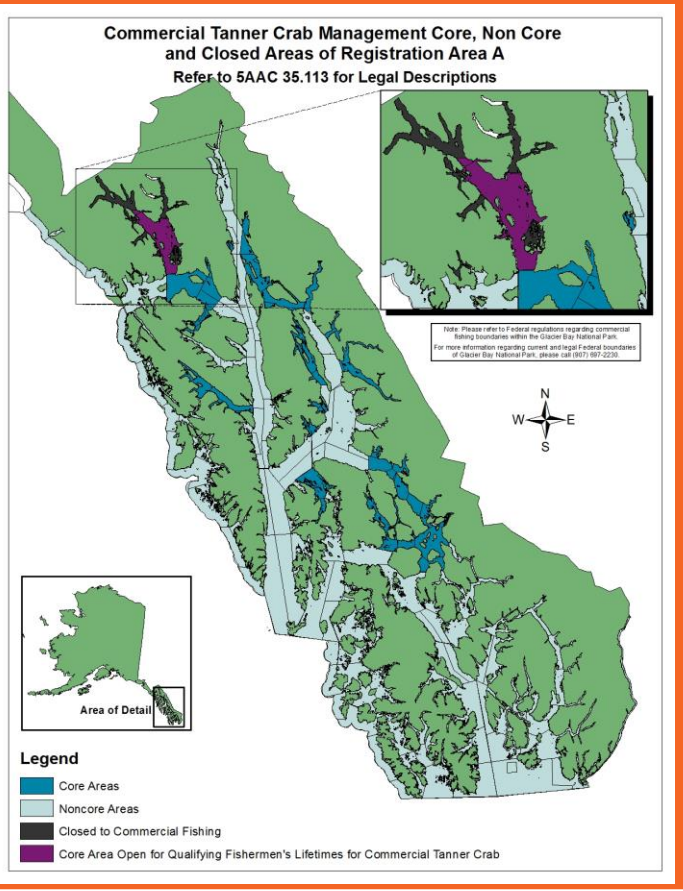
Estimated SEAK Mature Tanner Crab Biomass:

2016/2017
Estimate: 4.91 million pounds

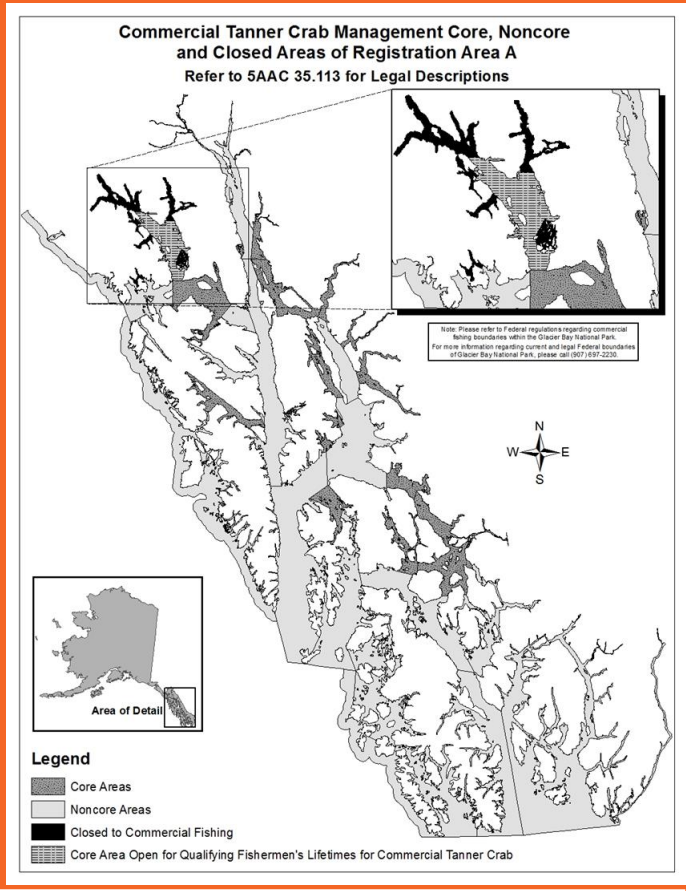
This current 2017/2018 season:
Estimate: 6.64 million pounds

Tanner Crab Harvest Strategy
5 AAC 35.113

Pots Registered	Additional Fishing Days	Additional Fishing Days
	Mature Biomass is Between 2,300,000 and 5,500,000 lb	*Mature Biomass is Greater than 5,500,000 lb*
1,600 – 2,399	4 Additional Days	5 Additional Days
2,400 – 3,199	3 Additional Days	4 Additional Days
3,200 – 3,999	2 Additional Days	3 Additional Days
4,000 – 5,599	1 Additional Days	2 Additional Days
5,600 – 7,000	0 Additional Days	1 Additional Days



Core and Non-Core Survey Areas



Catch Survey Analysis (CSA) - Overview

CSA
2015 Changes to the Survey

- Port Camden and Port Frederick were removed from survey.

- Stephens Passage was removed from Tanner crab survey, but is still part of red king crab survey.

Highlights →

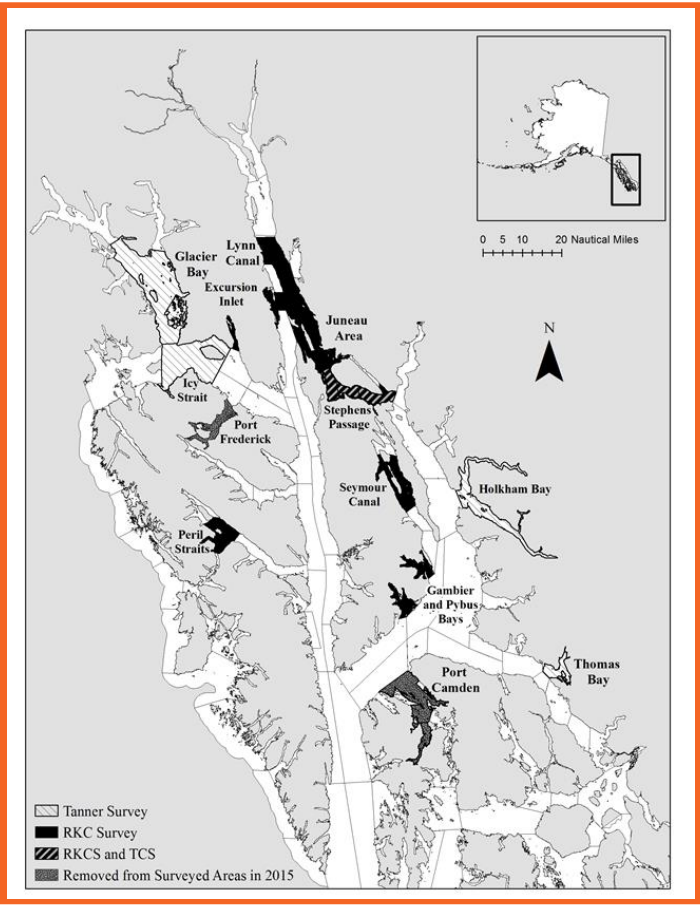
- **6.64 million pounds of mature male crab (>108 mm carapace width).**
- **3.28 million pounds of legal male crab (>137 mm carapace width).**
- **Increase of 0.64 million pounds of legal male Tanner crab (~24%) from the 2016 estimate.**

Stock Health:

- Moderate in FOUR areas.
- Above Average in SIX areas.
- Healthy in TWO areas.

Survey Areas

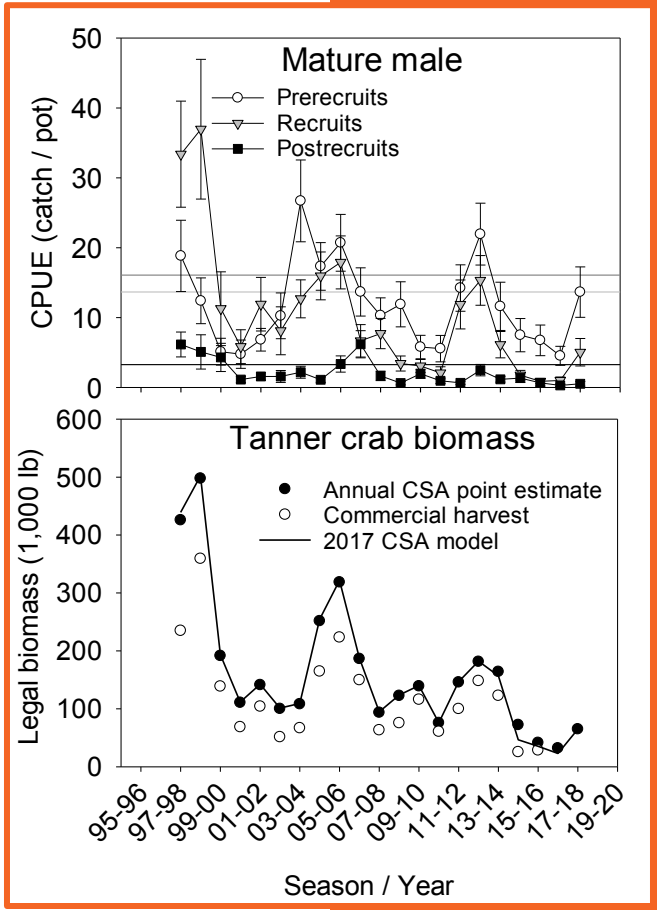
- **Tanner Crab Survey Areas:**
  - Icy Strait
  - Glacier Bay
  - Thomas Bay
  - Holkham Bay
- **Red King Crab Survey Areas:**
  - Stephens Passage
  - Seymour Canal
  - North Juneau
  - Excursion Inlet
  - Pybus Bay
  - Gambier Bay
  - Peril Strait
  - Lynn Sisters

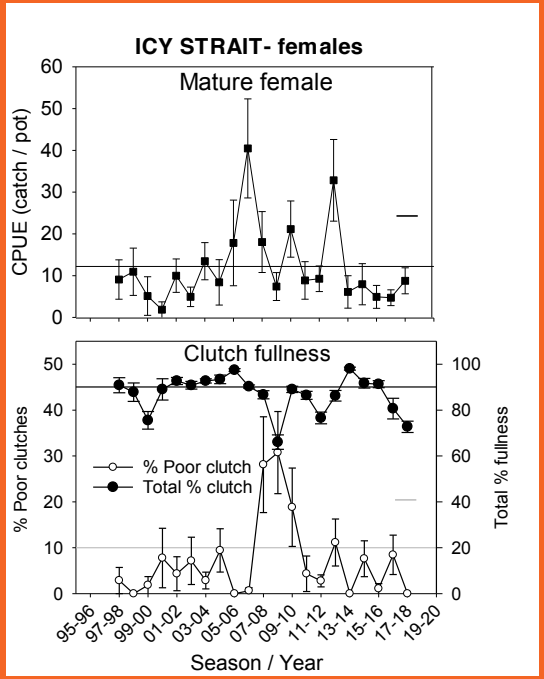


Bay by Bay Review…

ICY STRAIT

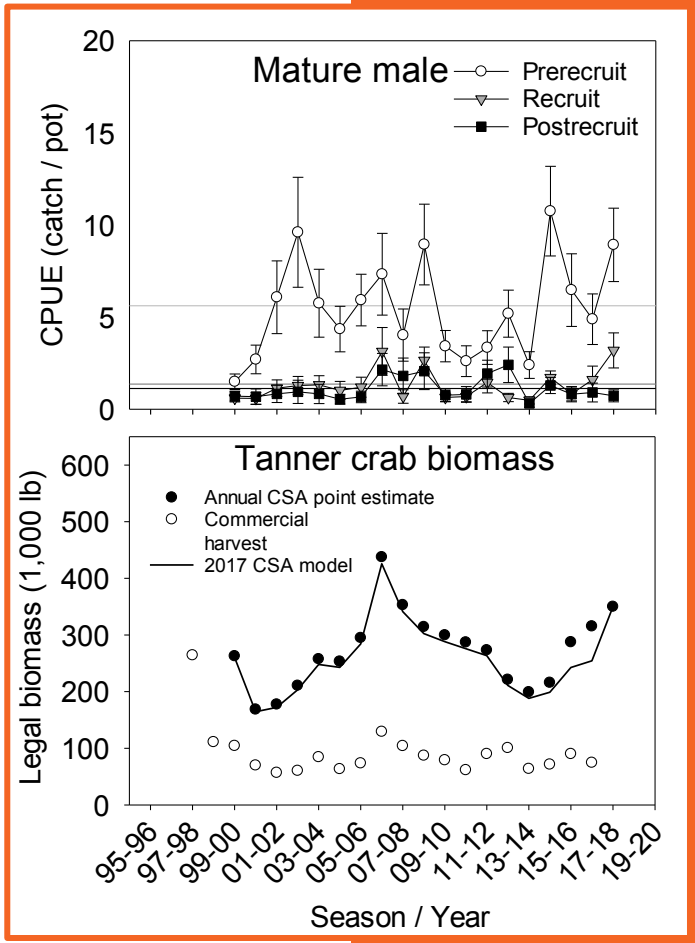
- Stock Health Status: ***Moderate***
- Increase in mature females and prerecruit males, and their CPUEs are at their long term averages.
- Recruit and postrecruit CPUEs are below long term averages.
- Post recruit CPUEs have short term decreasing trend.
- Estimate of legal biomass for this area (2017) is at lowest since survey began.
- Clutch fullness has continued to decline.

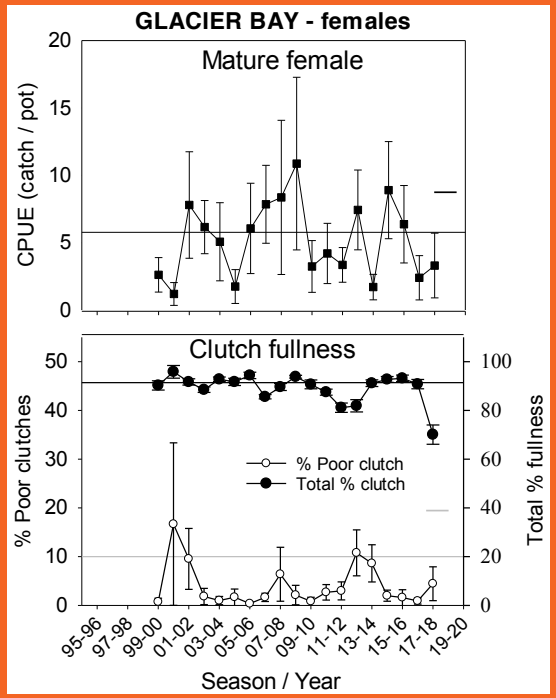




GLACIER BAY

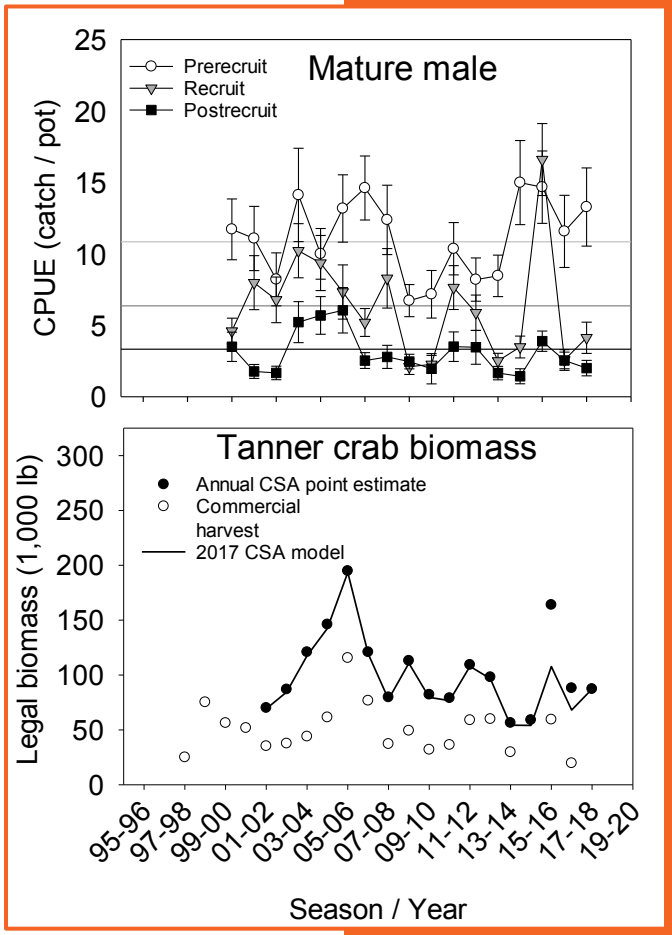
- Stock Health Status: ***Moderate***
- All recruit class CPUEs are at their long-term averages, including mature females.
- Recruit CPUE had a short term increasing trend.
- Population still similar to baseline levels.
- Legal biomass has increased in this area.
- Reduced clutch fullness.

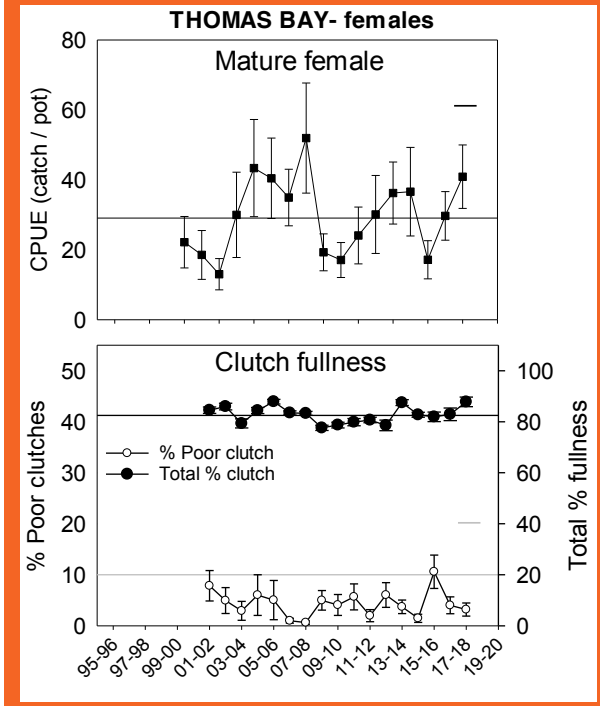




THOMAS BAY

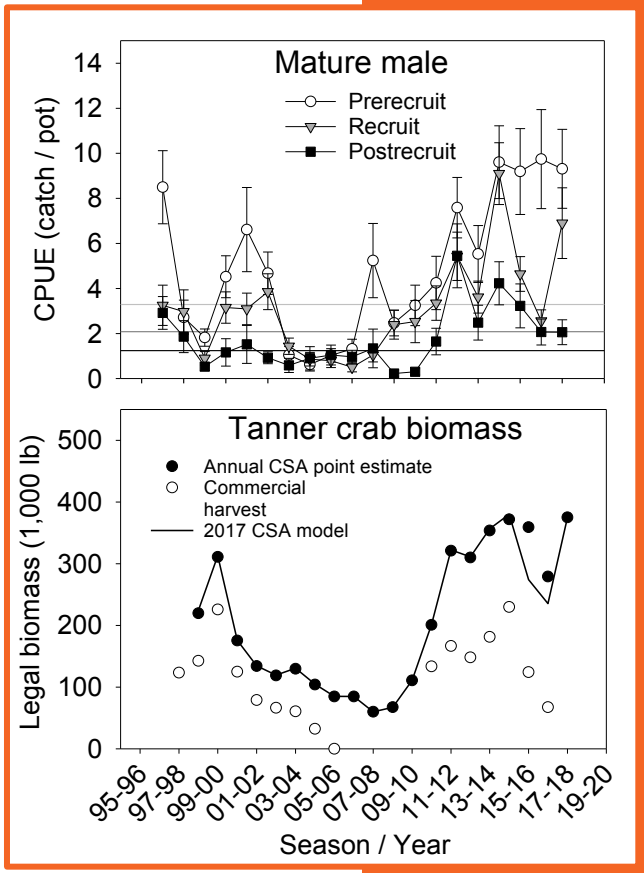
- Stock Health Status: ***Moderate***
- Recruit and post-recruit CPUEs fell <u>below</u> long term average.
- Pre-recruit males <u>remained at</u> long term averages.
- There were <u>no</u> significant short term trends.

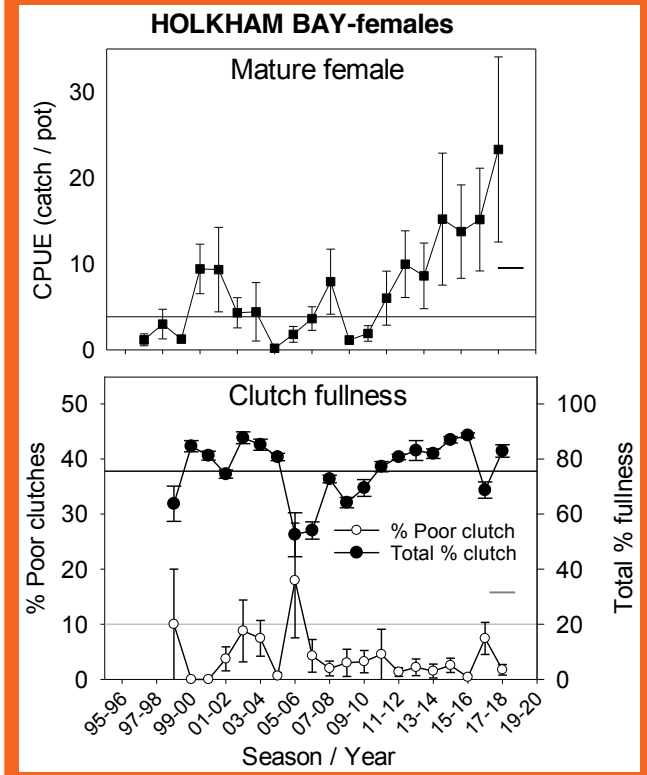




HOLKHAM BAY

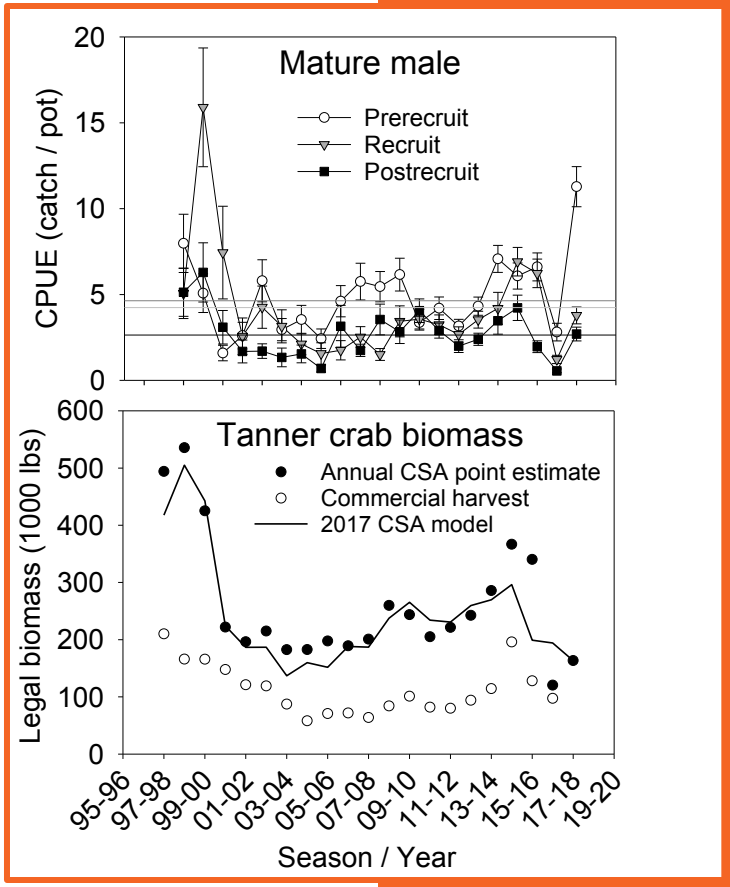
- Stock Health Status: ***Above Average***
- All recruit class CPUEs are at or above their long term averages.
- Pre-recruit and recruit CPUEs are significantly above their long term averages.
- Post-recruit CPUEs are at their long term average, but have a short term decreasing trend.

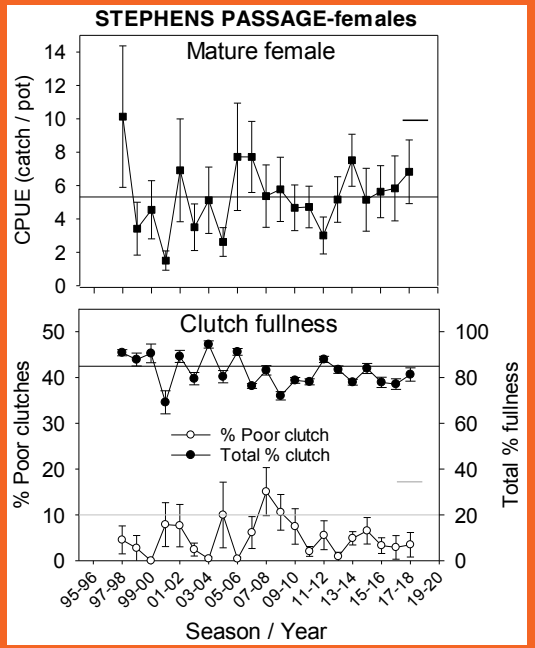




STEPHENS PASSAGE

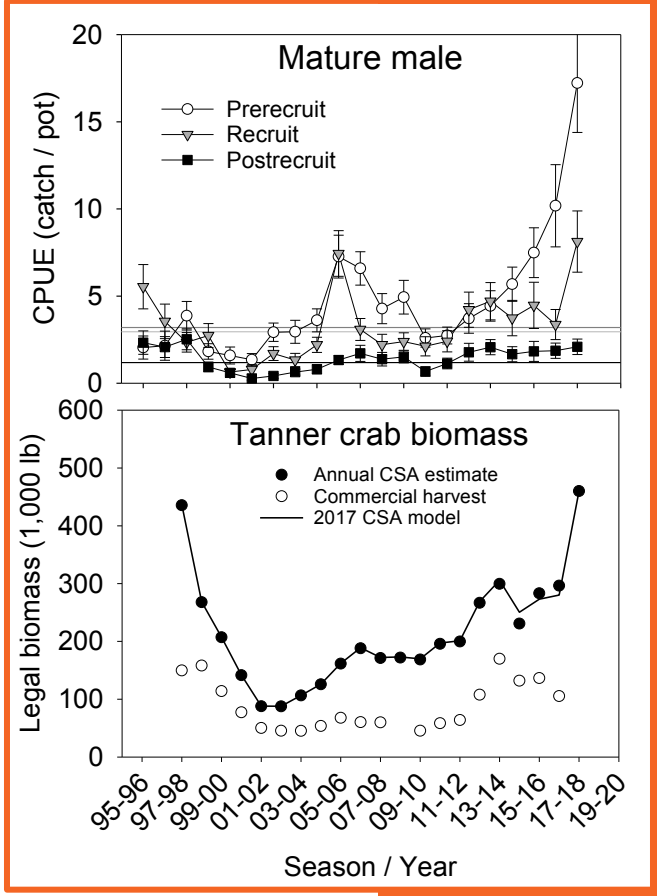
- Stock Health Status: ***Above Average***
- All recruit class CPUEs are at or above long term averages.
- Pre-recruit CPUEs were historically high this year.
- Recruit and post-recruit CPUEs have short term decreasing trends.

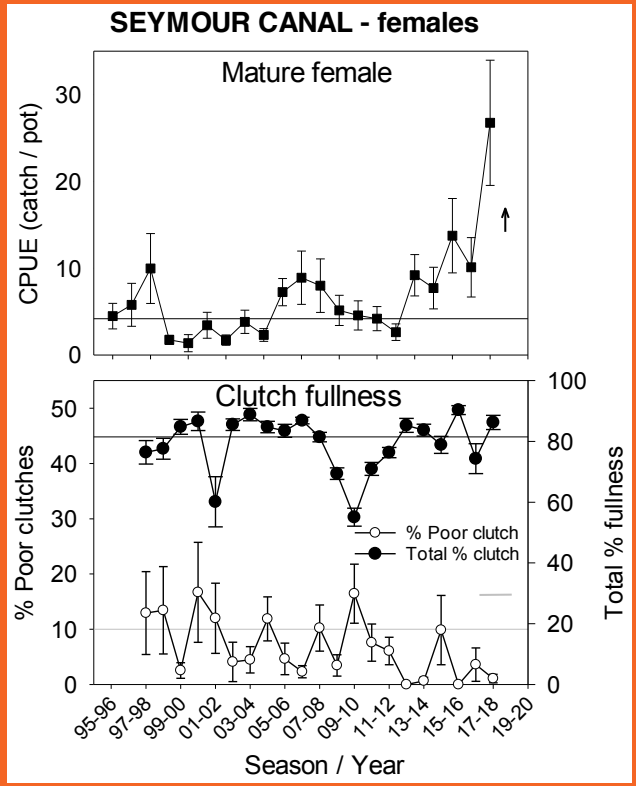




SEYMOUR CANAL

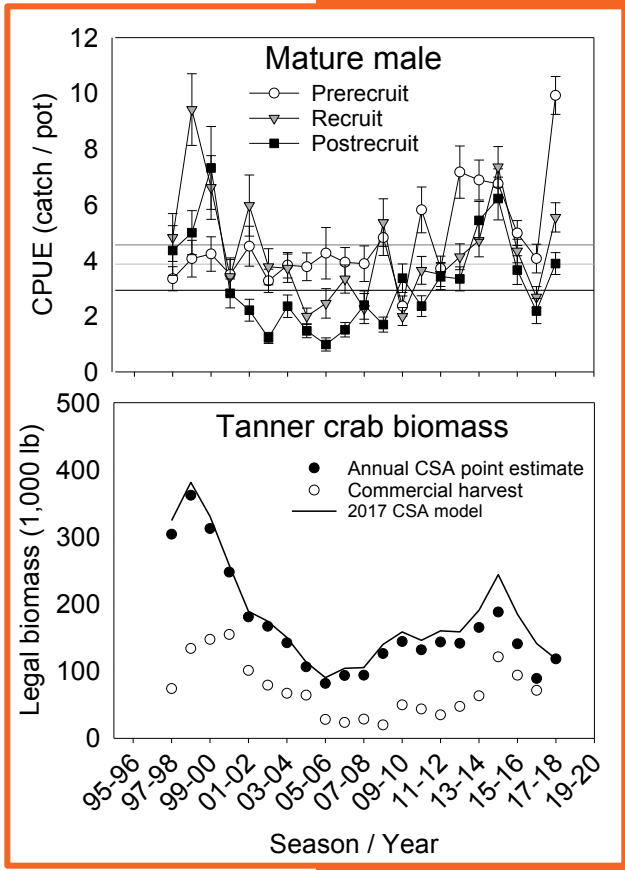
- Stock Health Status: ***Healthy***
- All recruit class CPUEs are above or at their long term averages.
- Mature female, pre-recruit male, recruit male CPUEs have increasing short term trends.

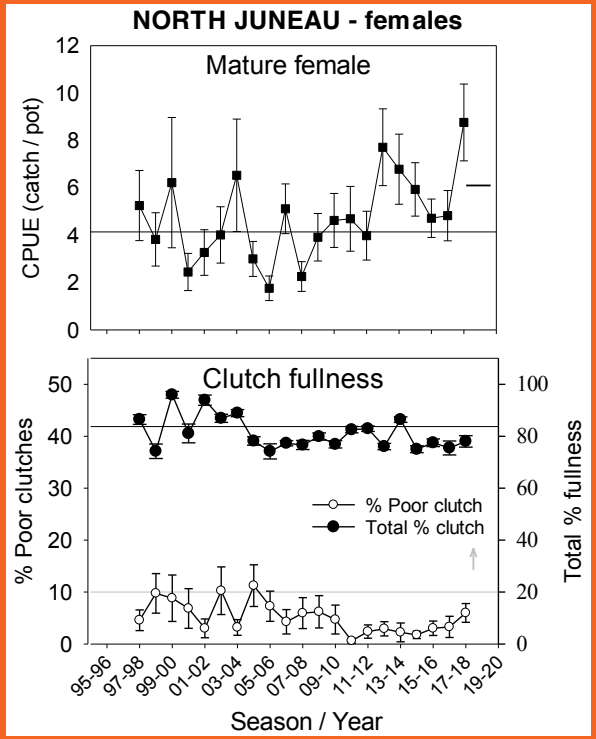




NORTH JUNEAU

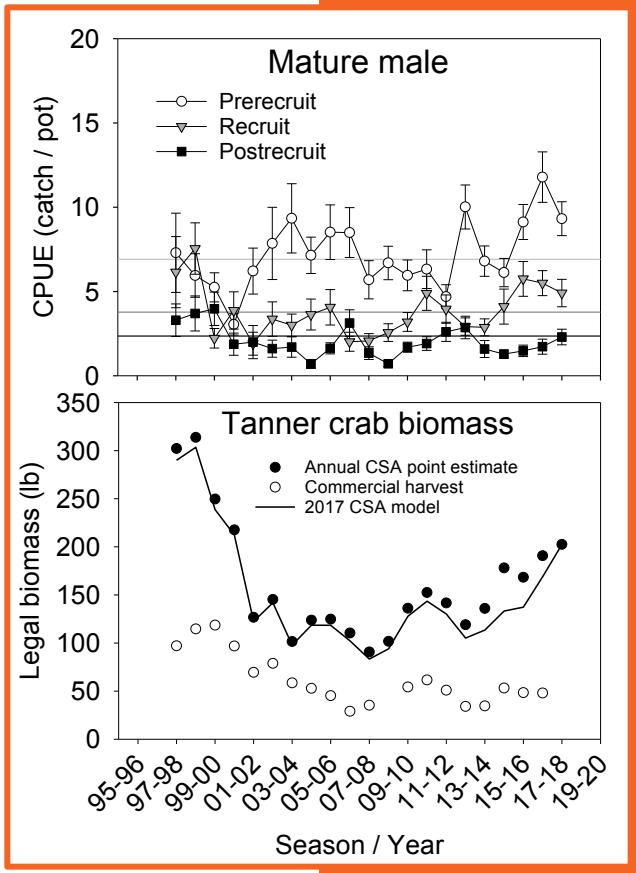
- Stock Health Status: ***Healthy***
- Increases in mature male CPUEs.
- All CPUEs at or above long term averages.
- Both recruit and post-recruit CPUEs have significant short term decreasing trends.
- Females have increased in the population.

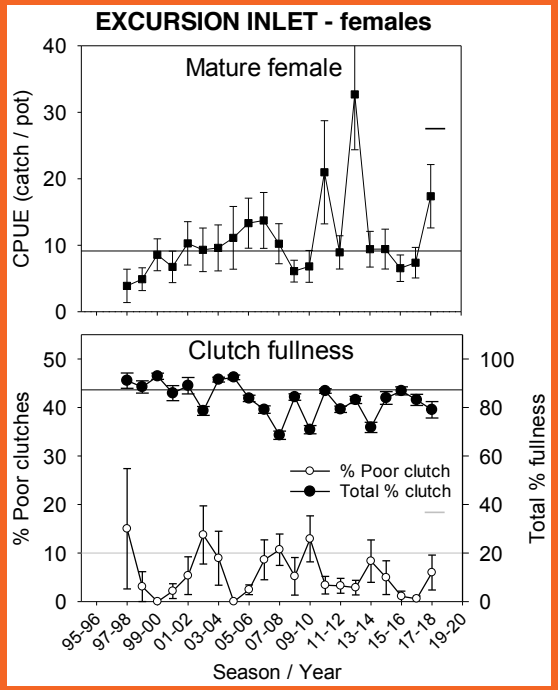




EXCURSION INLET

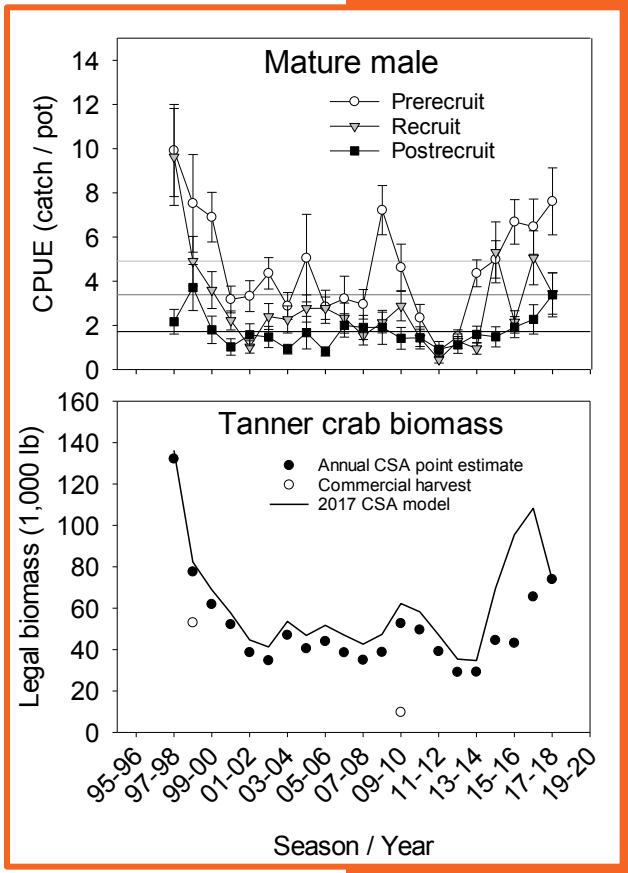
- Stock Health Status: ***Above Average***
- Recruit and post-recruit CPUEs fell to their long term averages.
- All recruit class CPUEs are <u>at or above</u> their long term averages.

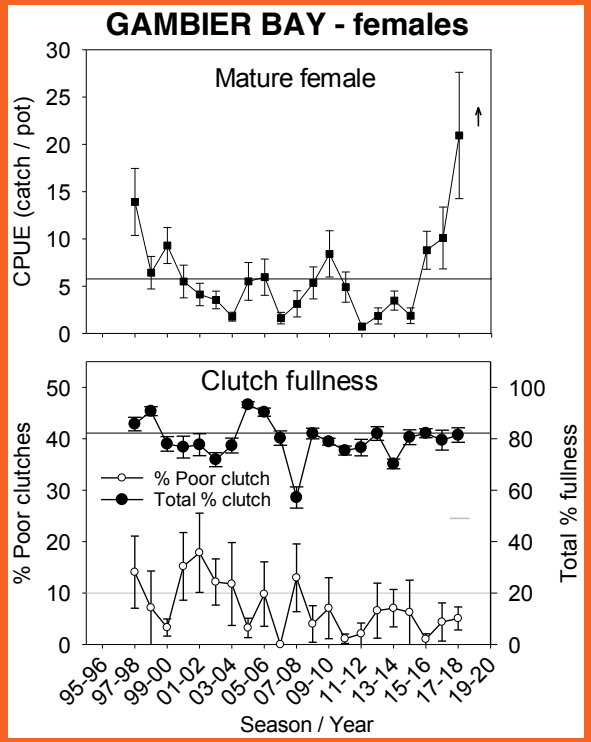




GAMBIER BAY

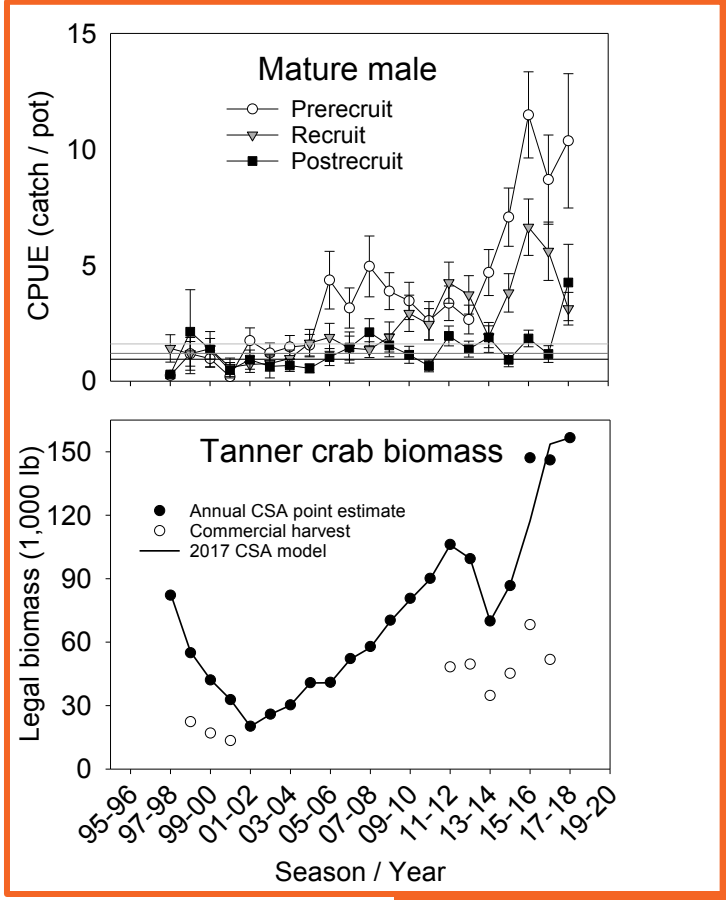
- Stock Health Status: ***Above Average***
- Pre-recruit and post-recruit CPUEs have increased.
- All recruit CPUEs are at or above long term averages.
- Short term increasing trends in mature female and post-recruit CPUEs.

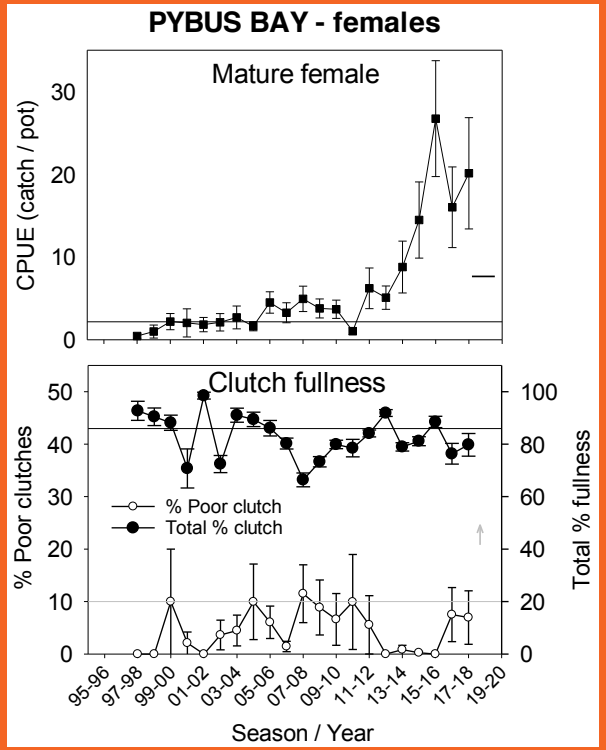




PYBUS BAY

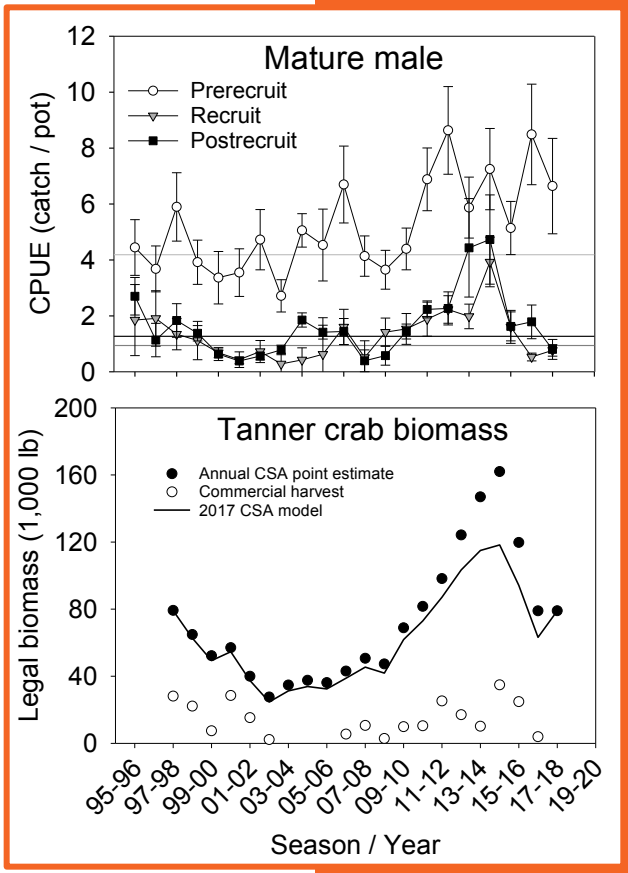
- Stock Health Status: ***Above Average***
- Recruit CPUEs have decreased.
- Females with poor clutches have increased.
- All recruit class CPUEs are above or at their long term averages.
- Short term increasing trends in post-recruit males.

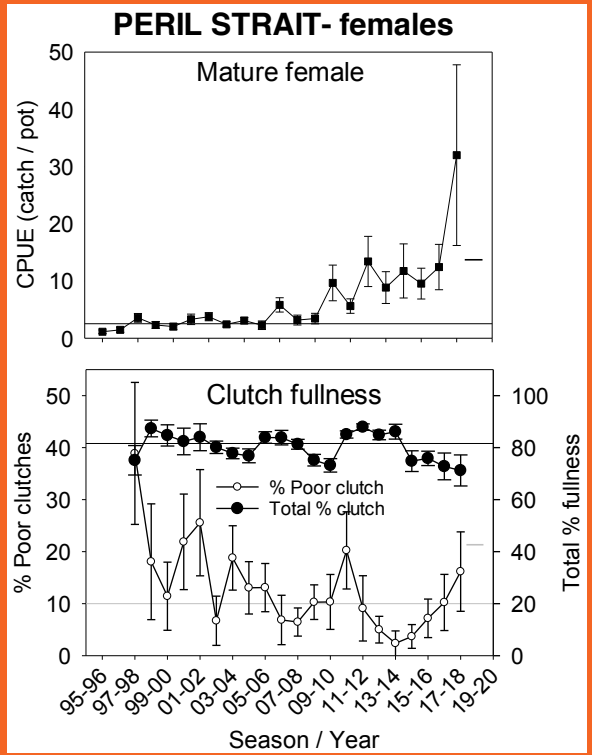




PERIL STRAIT

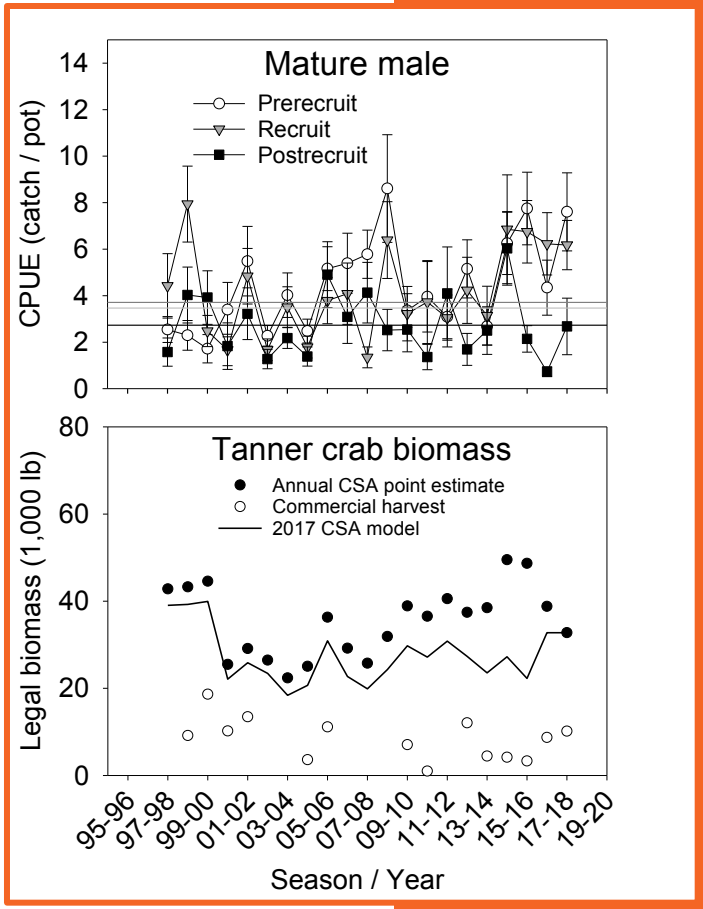
- Stock Health Status: ***Moderate***
- All recruit class CPUEs are at their long term averages.
- Recruit and post-recruit CPUEs have short term decreasing trends.
- Decreases over short term for recruit and PR males may indicate a decreasing population trend.
- Decreasing % clutch fullness.

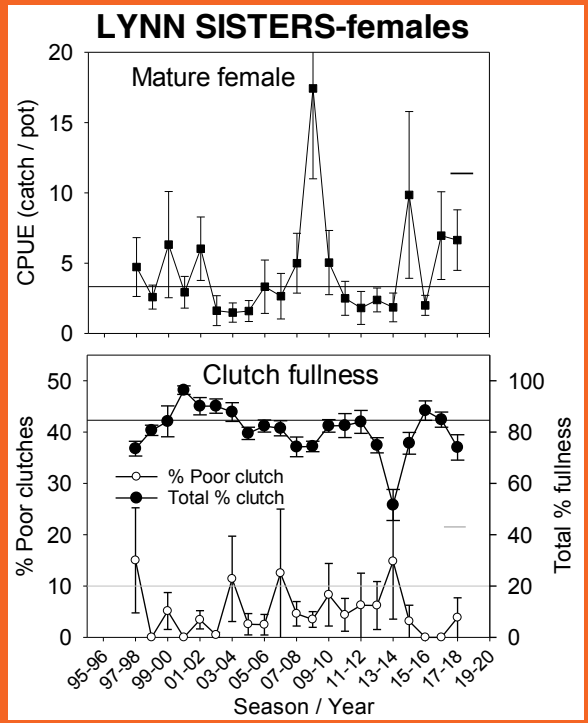




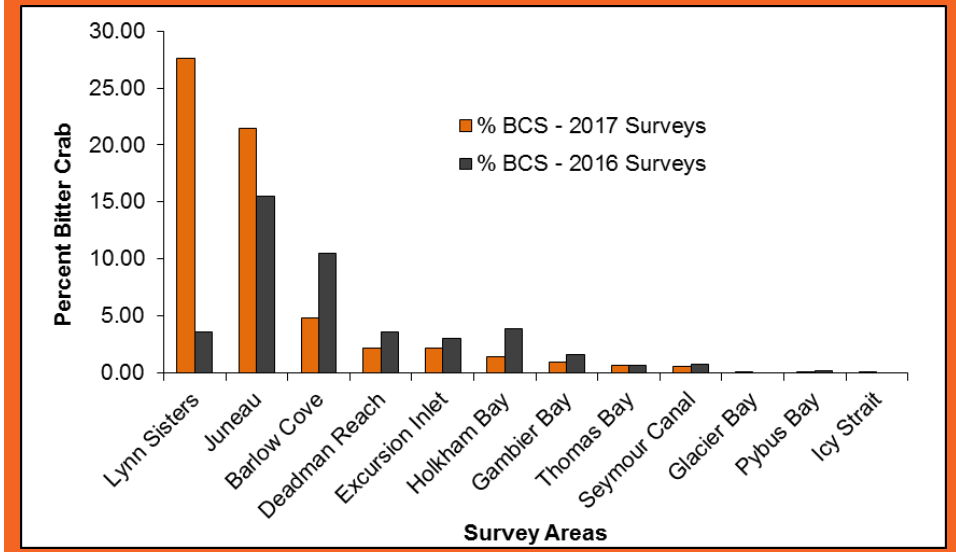
LYNN SISTERS

- Stock Health Status: ***Above Average***
- All recruit classes are at or above long term averages.
- Post-recruit CPUE has a significant short term decreasing trend.
- Healthy female population.





Thanks!

Percent Bitter Crab
-
2016 & 2017
Crab Surveys

Survey Area	% Bitter Crab 2017	% Bitter Crab 2016
Lynn Sisters	27.64	3.64
Juneau	21.45	15.53
Barlow Cove	4.87	10.53
Deadman Reach	2.24	3.59
Excursion Inlet	2.19	3.06
Holkham Bay	1.45	3.90
Gambier Bay	1.00	1.59
Thomas Bay	0.73	0.71
Seymour Canal	0.60	0.82
Glacier Bay	0.10	0.00
Pybus Bay	0.06	0.20
Icy Strait	0.02	0.00