ADF&G STAFF PRESENTATION King and Tanner Task Force



Golden King Crab Commercial Fisheries

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Summary – Recent History

- GHLs were adjusted as part of a triennial review prior to the 2012/2013 season.
- Poor fishery performance in the 2012/2013 season led to an interim review prior to the 2013/2014 season in which GHLs were cut in two fishery areas, for a regionwide GHL reduction of 16%.
- Poor fishery performance was again documented in the 2013/2014 season, eventually resulting in the closure of three fishery areas short of their respective GHLs.
- These rapidly declining trends in fishery performance led the department to inform the King and Tanner Task Force (KTTF) during the March 19, 2014 meeting that the department would evaluate GKC GHLs annually.

Recent History (cont.)

- An annual evaluation of GHLs was conducted prior to the 2014/2015 season, for a regionwide GHL reduction of 32%.
- Poor fishery performance was again documented in the 2014/2015 season, eventually resulting in the closure of five fishery areas short of their respective GHLs.
- An annual evaluation of GHLs was conducted prior to the current season (2015/2016 season – currently ongoing), for a regionwide GHL reduction of 54%.
- This season, the department has closed four fishery areas short of their respective GHLs, while three fishery areas currently remain open.

Summary – GHL Review

- GHL recommendations are made annually employing a precautionary approach to minimize the risk of recruitment failure.
- Three reasons for this approach:
 - Recent fishery performance has been poor.
 - 2) Data poor fishery with no fishery independent stock assessment program.
 - 3) Golden king crabs are a long-lived deep water species, on a 20-24 month reproductive cycle.

Data Sources and Limitations

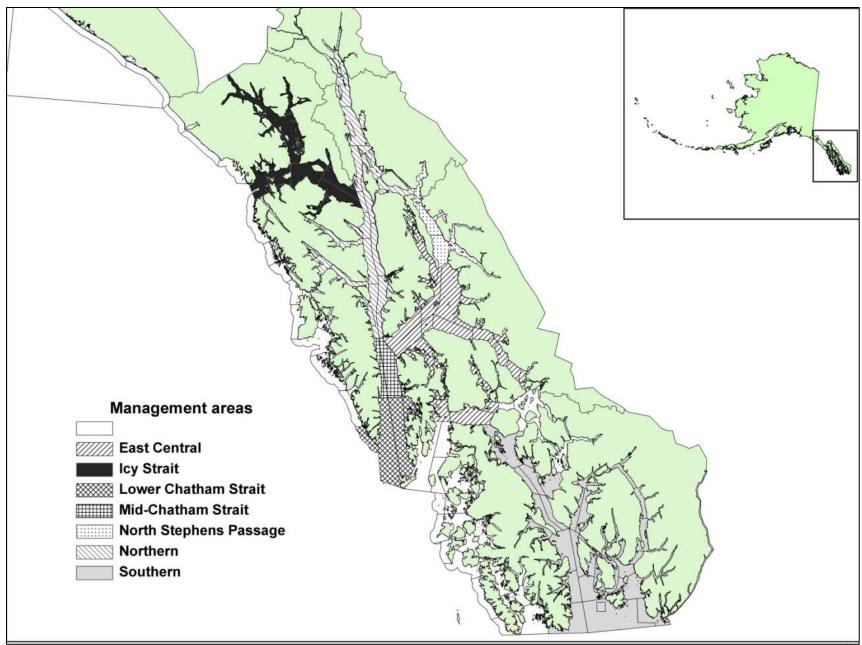
- All data currently available to assess GKC in Southeast Alaska are fishery dependent:
 - Commercial CPUE.
 - Dockside sampling percentage of recruit and post-recruit class crab.
 - 3) Onboard observer data.
- Each data type has specific limitations.
- At this meeting the department will present logbook and port sampling data.

Commercial catch per unit effort (CPUE) from logbooks

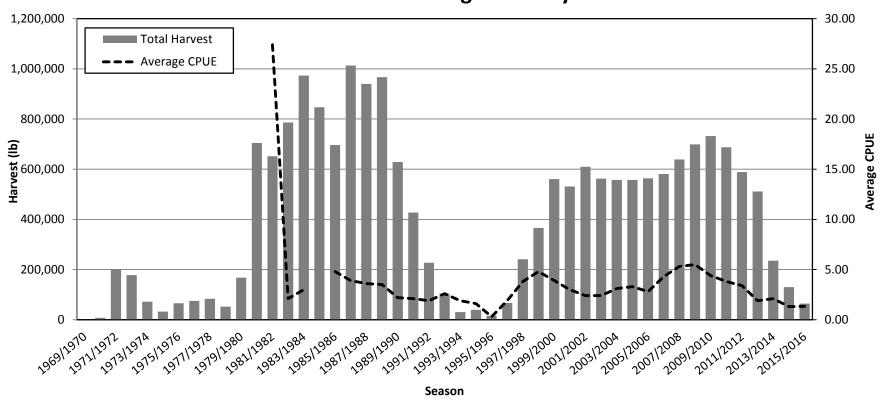
- Commercial CPUE from logbooks provides a much broader view of fishery performance, but has limitations:
 - 1) Potential reporting errors (numbers of crab, pots lifted, etc.).
 - Neither fish ticket nor logbook databases account for soak times, so soak times cannot be factored into catch/pot or catch/pot/day calculations.

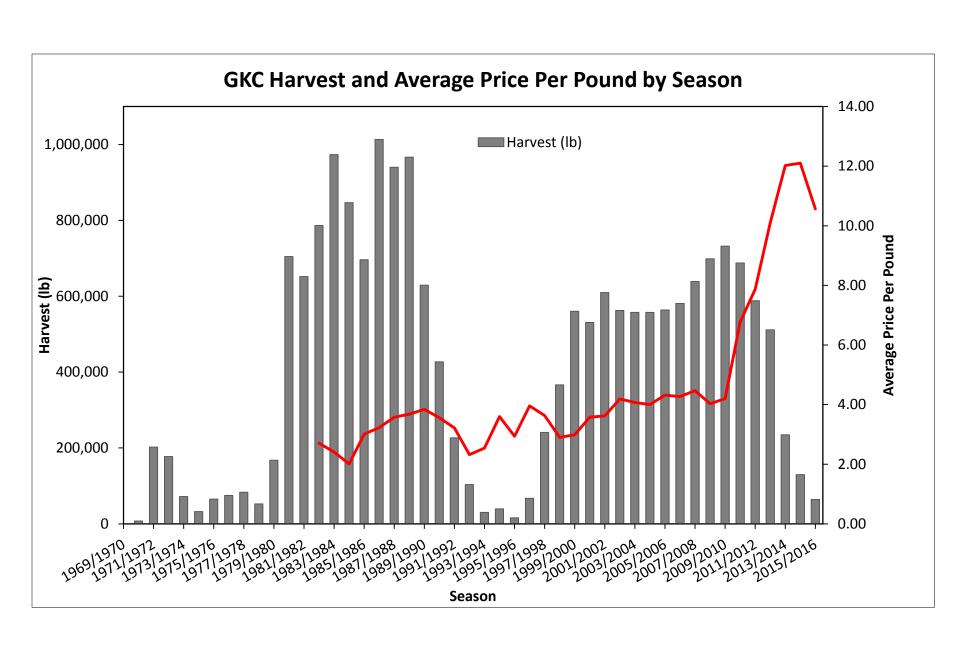
Port sampling

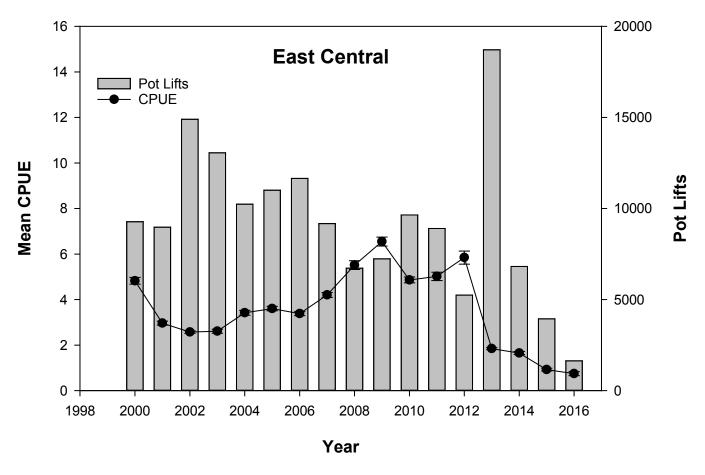
- Dockside sampling provides a wider look at the fishing grounds than observer data but depends to a great degree on a large number of trips being sampled each year.
- Dockside information on changes in the proportion of recruit to post-recruit crabs is difficult to interpret.
- Although significant carry-over of post-recruits is desirable, pulsed recruitment and changes in population abundance confounds the interpretation of changes in proportions.



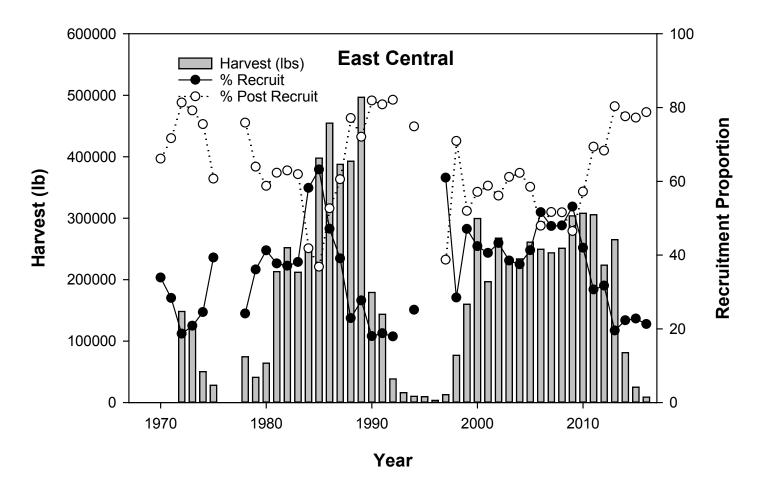
GKC Harvest and Average CPUE by Season







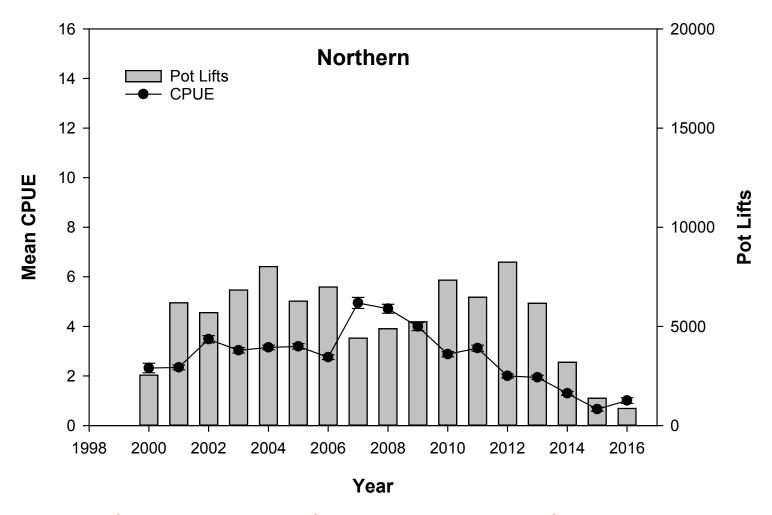
The average CPUE this season was 0.7 crab per pot.



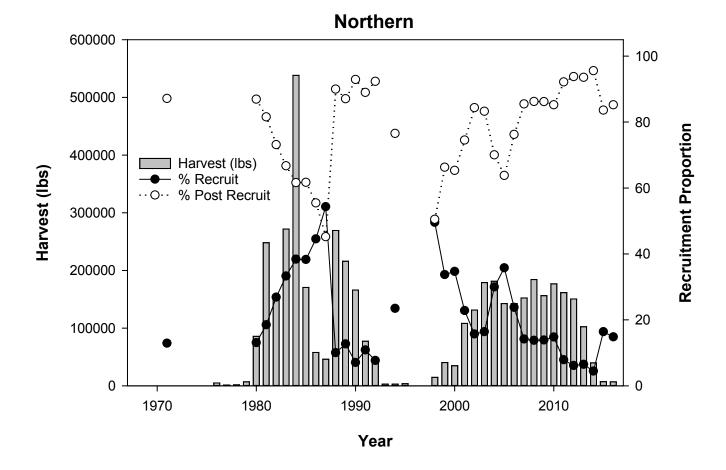
Harvest this season was 9052 lb.

East Central

- The East Central management area was closed by emergency order (EO) on March 21, 2016 for the following reasons:
 - 1) The average catch per unit effort (CPUE) this season of 0.7 crab per pot was only 19% of the average for the past 16 seasons and the lowest on record.
 - 2) Port sampling data show the percentage of recruit crab to the harvest in East Central declined to 23%, below the 1970-2015 average of 36%.
 - 3) The amount of golden king crab landed per boat/per day was approximately 33 pounds per boat/per day which is the lowest on record since logbooks have been used and well below the 2000-2015 average of 594 pounds per boat/per day.



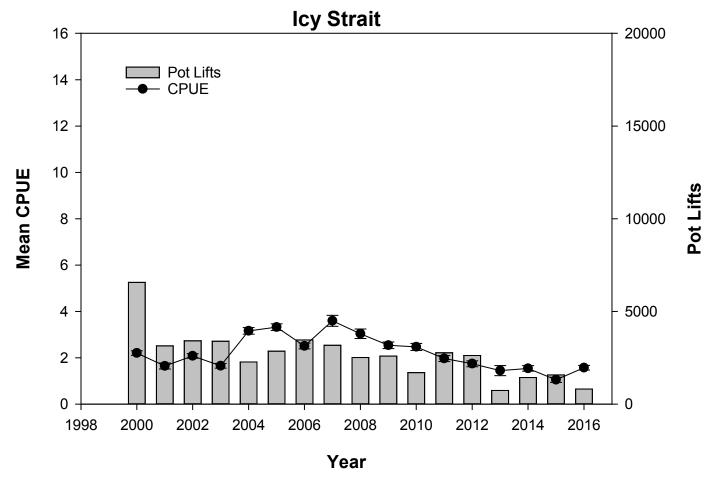
The average CPUE this season was 1.1 crab per pot.



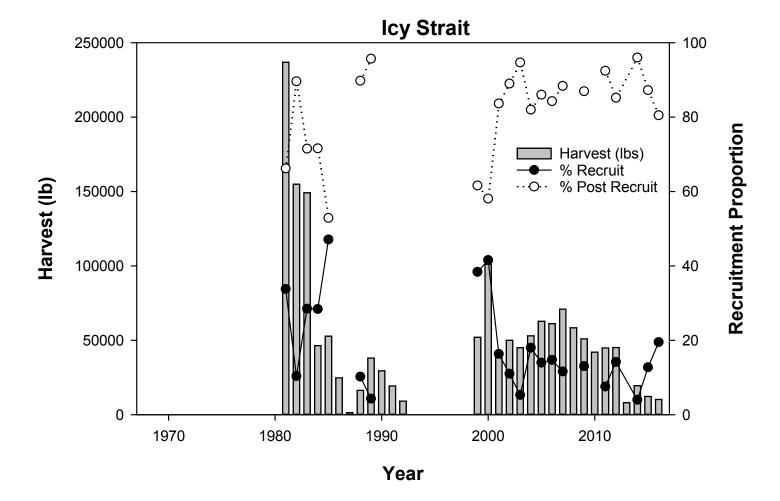
Harvest this season was 6939 lb.

Northern

- The Northern management area was closed by emergency order (EO) on March 21, 2016 for the following reasons:
 - 1) The average CPUE this season of 1.1 crab per pot was 38% of the average for the past 16 seasons and second lowest on record since the inception of logbooks.
 - 2) Port sampling data show the percentage of recruit crab to the harvest in Northern was 10%, below the 1971-2015 average of 20%.
 - 3) The amount of golden king crab landed per boat/per day was approximately 33 pounds per boat/per day, second only to the 2014/2015 season as the lowest on record since logbooks were implemented, and well below the 2000-2015 average of 230 pounds per boat/per day.



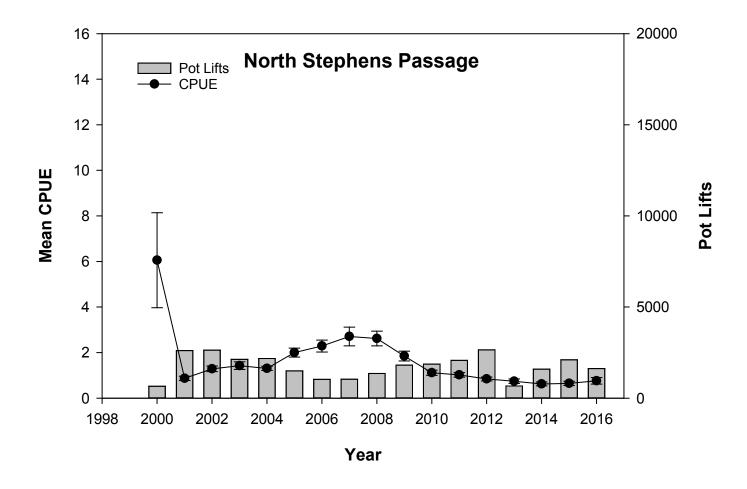
The average CPUE this season was 1.6 crab per pot.



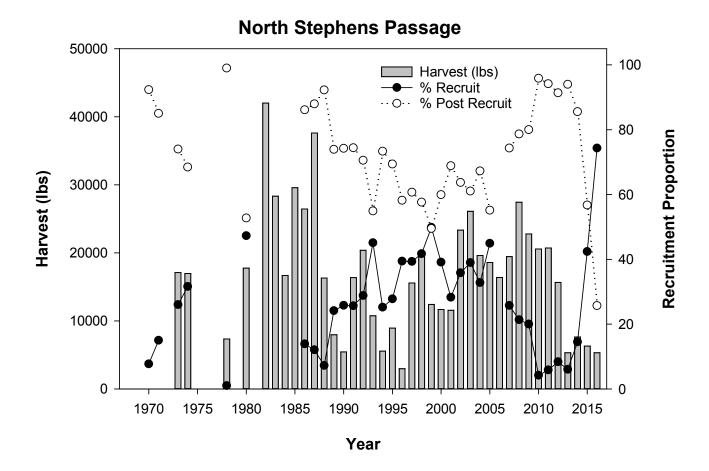
Harvest this season was 10,255 lb.

Icy Strait

- The Icy Strait management area was closed by emergency order (EO) on April 21, 2016 for the following reasons:
 - 1) The average CPUE this season of 1.6 crab per pot was 70% of the average for the past 16 seasons.
 - 2) Catch rates for golden king crab landed (43 pounds per boat/per day), were the sixth lowest on record for the past 16 seasons and below the 2000-2015 average of 143 pounds per boat/per day.



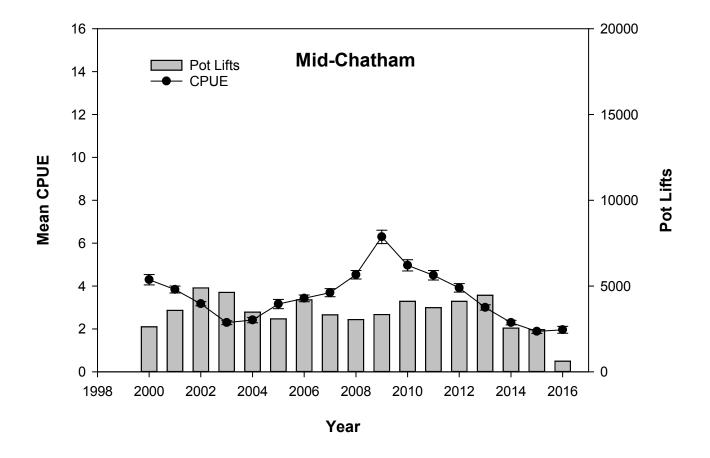
The average CPUE this season was 0.8 crab per pot.



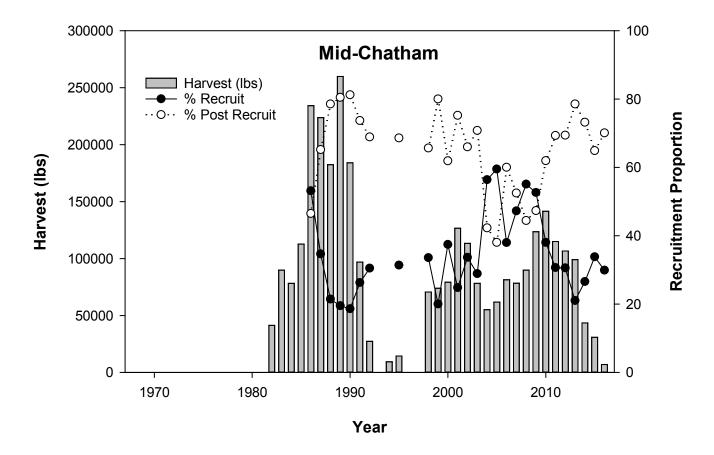
Harvest this season was 5,321 lb.

North Stephens Passage

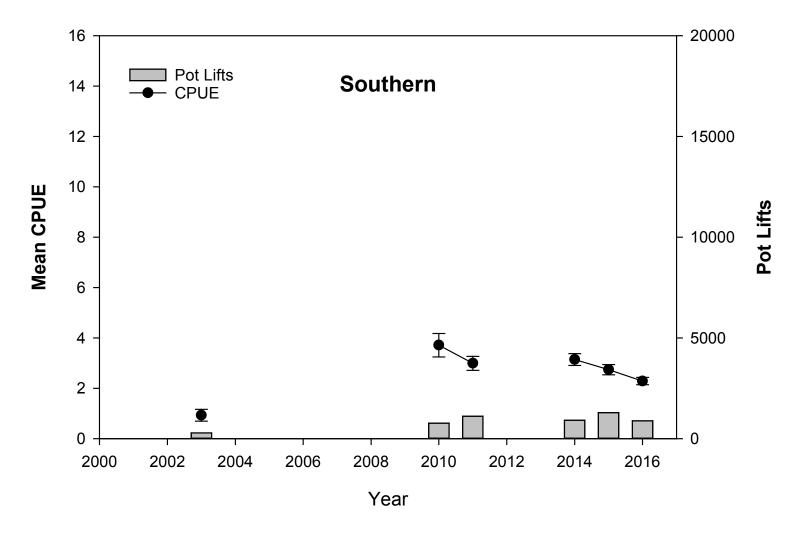
- The North Stephens Passage management area was closed by emergency order (EO) on April 21, 2016 for the following reasons:
 - 1) The average CPUE this season of 0.8 crab was only 47% of the average and the fourth lowest CPUE in the past 16 seasons.
 - 2) Catch rates of golden king crab landed (10 pounds per boat/per day), were the third lowest on record for the past 16 seasons and below the 2000–2015 average of 36 pounds per boat/per day.



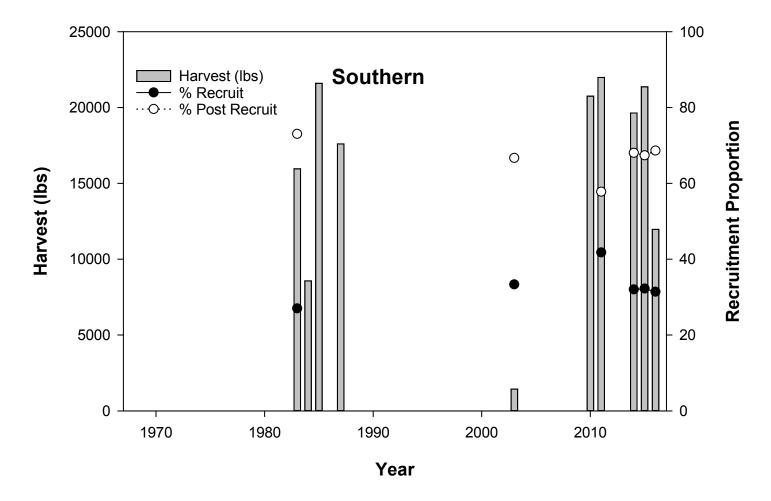
The average CPUE this season is currently 2.0 crab per pot.



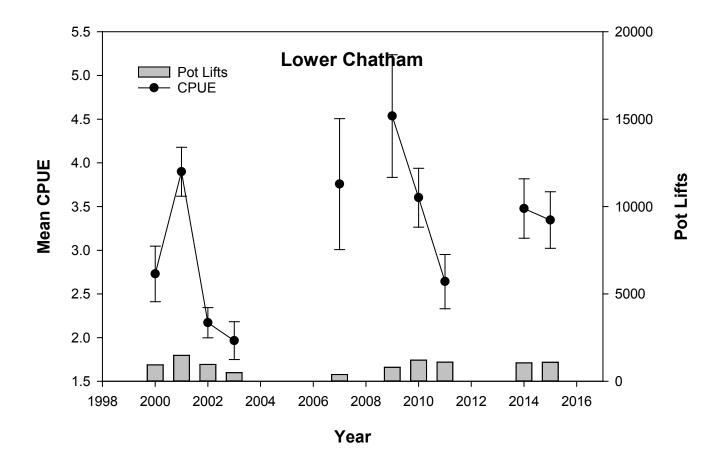
Harvest this season is currently 7,515 lb.



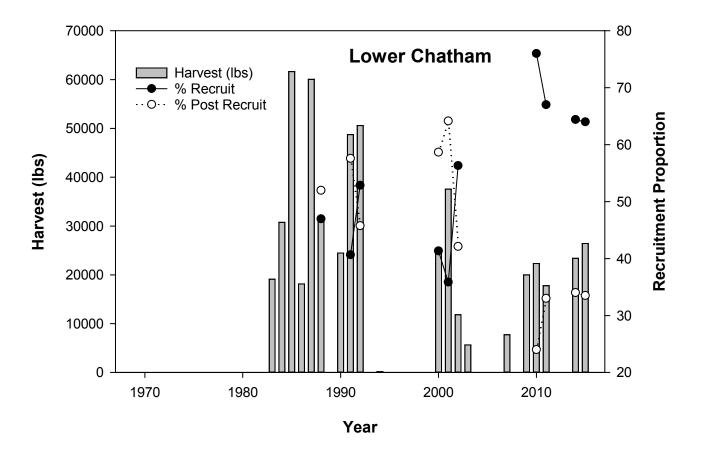
The average CPUE this season is currently 2.3 crab per pot.



Harvest this season is currently 13,448 lb.



Fewer than three permits fished this season, so CPUE data are confidential.



Fewer than three permits fished this season, so harvest data are confidential.

In Conclusion

- This season four (East Central, Northern, Icy Strait, and North Stephens Passage) of the seven fishery areas were closed by EO short of their respective GHLs.
- For the three remaining open fishing areas (Mid-Chatham Strait, Southern, and Lower Chatham Strait) the department plans to evaluate the need for inseason closures based on an analysis of logbook and dockside sampling data on or about June 1, 2016.
- The department plans to analyze logbook, dockside sampling, and observer data post-season prior to meeting with the KTTF in this winter and finalizing GHLs for next season (2016/2017).



QUESTIONS?