#### **PROPOSAL 75**

# 5 AAC 35.308 Registration Area E Tanner crab harvest strategy.

Adopt a new a Prince William Sound Area (PWS; Area E) Tanner crab harvest strategy to align with new proposed districts, as follows:

## 5 AAC 35.308 is repealed and readopted to read:

- [(A) IF ADEQUATE DATA ARE AVAILABLE, THE DEPARTMENT SHALL ESTIMATE THE ABUNDANCE OF MALE TANNER CRAB IN THE PRINCE WILLIAM SOUND AREA, AND SHALL ESTABLISH A GUIDELINE HARVEST LEVEL FOR LEGAL MALE TANNER CRAB IF THE CURRENT ESTIMATED ABUNDANCE OF  $T_{\underline{H}}$  IS ABOVE THE MINIMUM STOCK THRESHOLD FOR OPENING A FISHERY.
- (B) THE COMMERCIAL FISHERY MAY OPEN ONLY IF THE CURRENT ESTIMATED ABUNDANCE OF  $T_H$  IS GREATER THAN OR EQUAL TO 200,000 CRAB (50 PERCENT OF  $A_H$ ). IF THE COMMERCIAL FISHERY HAS BEEN CLOSED FOR THREE OR MORE CONSECUTIVE YEARS, THEN THE ESTIMATED ABUNDANCE OF  $T_H$  MUST BE GREATER THAN OR EQUAL TO 200,000 CRAB FOR TWO OR MORE YEARS BEFORE THE COMMERCIAL FISHERY MAY OPEN. THE COMMERCIAL GUIDELINE HARVEST LEVEL WILL BE DETERMINED AS FOLLOWS:
- (1) THE GUIDELINE HARVEST LEVEL FOR  $T_L$  MAY NOT EXCEED 15 PERCENT OF  $A_{\underline{C}}(T_{\underline{H}})$  IF  $A_{\underline{C}}(T_{\underline{H}})$  IS GREATER THAN OR EQUAL TO 200,000 CRAB, BUT LESS THAN 300,000 CRAB;
- (2) THE GUIDELINE HARVEST LEVEL FOR  $T_L$  MAY NOT EXCEED 20 PERCENT OF  $A_{\underline{C}}(T_{\underline{H}})$  IF  $A_{\underline{C}}(T_{\underline{H}})$  IS GREATER THAN OR EQUAL TO 300,000 CRAB, BUT LESS THAN 400,000 CRAB;
- (3) THE GUIDELINE HARVEST LEVEL FOR T<sub>L</sub> MAY NOT EXCEED 25 PERCENT OF A<sub>C</sub>(T<sub>H</sub>), IF A<sub>C</sub>(T<sub>H</sub>) IS GREATER THAN OR EQUAL TO 400,000 CRAB; AND
- (4) THE GUIDELINE HARVEST LEVEL FOR LEGAL MALE TANNER CRAB MAY BE REDUCED OR THE COMMERCIAL FISHERY CLOSED, IF THE ESTIMATED COMMERCIAL HARVEST WOULD CAUSE THE ESTIMATED ABUNDANCE OF  $T_{\underline{H}}$  TO FALL BELOW THE MINIMUM STOCK THRESHOLD.
- (C) IN THIS SECTION,
- (1) "T<sub>L</sub>" MEANS MALE TANNER CRAB THAT ARE 127 MM (5.0 INCHES) OR GREATER IN CARAPACE WIDTH, WHICH IS THE LEGAL SIZE OF TANNER CRAB ALLOWED TO BE RETAINED FOR HARVEST;
- (2) " $T_{\underline{H}}$ " MEANS MALE TANNER CRAB THAT ARE 135 MM (5.3 INCHES) OR GREATER IN CARAPACE WIDTH, WHICH WAS THE HISTORICAL LEGAL SIZE OF TANNER CRAB IN THE PRINCE WILLIAM SOUND AREA;
- (3) " $A_{\underline{H}}$ " MEANS THE AVERAGE HISTORICAL ABUNDANCE OF  $T_{\underline{H}}$ ;  $A_{\underline{H}}$  IS AN ESTIMATE OF THE BIOMASS THAT WILL PRODUCE MAXIMUM SUSTAINED YIELD; (4) " $A_{C}(T_{H})$ " MEANS THE CURRENT ESTIMATED ABUNDANCE OF  $T_{H}$ .
- (5) IF THE COMMERCIAL FISHERY OPENS UNDER THIS SECTION, THE SPORT FISHERY WILL OPEN AS PROVIDED IN 5 AAC 55.022(b) (3)]

## (a) Northwestern District

1) the guideline harvest range is 0-XX,XXX lb.

2) <u>if a commercial fishery opens in this district, a sport fishery will open as provided in 5 AAC 55.022(b)(3).</u>

## (b) Northeastern District

- 1) if there are adequate data available, the department shall estimate the abundance of male legal Tanner crab in the Northeastern District and shall establish a guideline harvest level for legal male Tanner crab, if the current estimated abundance of legal male Tanner crab is above the minimum stock threshold for opening a fishery.
- 2) the commercial fishery may open only if the current estimated abundance of legal male Tanner crab is greater than or equal to XXX,XXX crab. The guideline harvest level will be determined as follows:
- (A) the guideline harvest level for legal male Tanner crab may not exceed 15 percent of the estimated abundance of legal male Tanner crab if the legal male Tanner crab abundance is greater than or equal to XXX,XXX but less than XXX,XXX crab;
- (B) the guideline harvest level for legal male Tanner crab may not exceed 20 percent of the estimated abundance of legal male Tanner crab if the legal male Tanner crab abundance is greater than or equal to XXX,XXX but less than XXX,XXX crab;
- (C) the guideline harvest level for legal male Tanner crab may not exceed 25 percent of the estimated abundance of legal male Tanner crab if the legal male Tanner crab abundance is greater than or equal to XXX,XXX but less than XXX,XXX crab;
- (D) the guideline harvest level for legal male Tanner crab may be reduced or the commercial fishery closed, if the estimated commercial harvest would cause the estimated abundance of legal male Tanner crab to fall below the minimum threshold.
- 3) <u>if a commercial fishery opens in this district, a sport fishery will open as provided in 5 AAC 55.022(b)(3).</u>

#### (c) Central District

- 1) if there are adequate data available, the department shall estimate the abundance of male legal Tanner crab in the Central District and shall establish a guideline harvest level for legal male Tanner crab, if the current estimated abundance of legal male Tanner crab is above the minimum stock threshold for opening a fishery.
- 2) the commercial fishery may open only if the current estimated abundance of legal male Tanner crab is greater than or equal to XXX,XXX crab.
  - (A) the guideline harvest level for legal male Tanner crab may not exceed 15 percent of the estimated abundance of legal male Tanner crab if the legal male Tanner crab abundance is greater than or equal to XXX,XXX but less than XXX,XXX crab;
  - (B) the guideline harvest level for legal male Tanner crab may not exceed 20 percent of the estimated abundance of legal male Tanner crab if the legal male Tanner crab abundance is greater than or equal to XXX,XXX but less than XXX,XXX crab;
  - (C) the guideline harvest level for legal male Tanner crab may not exceed 25 percent of the estimated abundance of legal male Tanner crab if the legal male Tanner crab abundance is greater than or equal to XXX,XXX but less than XXX,XXX crab;
  - (D) the guideline harvest level for legal male Tanner crab may be reduced or the commercial fishery closed, if the estimated commercial harvest would cause the estimated abundance of legal male Tanner crab to fall below the minimum threshold.
- 3) <u>if a commercial fishery opens in this district, a sport fishery will open as provided in 5 AAC 55.022(b)(3).</u>

## (d) Southeastern District

- 1) the guideline harvest range is 0-XX,XXX lb.
- 2) <u>if a commercial fishery opens in this district, a sport fishery will open as provided in 5 AAC 55.022(b)(3).</u>

## (e) Southwestern District

- 1) if there are adequate data available, the department shall estimate the abundance of male legal Tanner crab in the Southwestern District and shall establish a guideline harvest level for legal male Tanner crab, if the current estimated abundance of legal male Tanner crab is above the minimum stock threshold for opening a fishery.
- 2) the commercial fishery may open only if the current estimated abundance of legal male Tanner crab is greater than or equal to XXX,XXX crab. The guideline harvest level will be determined as follows:
- (A) the guideline harvest level for legal male Tanner crab may not exceed 15 percent of the estimated abundance of legal male Tanner crab if the legal male Tanner crab abundance is greater than or equal to XXX,XXX but less than XXX,XXX crab;
- (B) the guideline harvest level for legal male Tanner crab may not exceed 20 percent of the estimated abundance of legal male Tanner crab if the legal male Tanner crab abundance is greater than or equal to XXX,XXX but less than XXX,XXX crab;
- (C) the guideline harvest level for legal male Tanner crab may not exceed 25 percent of the estimated abundance of legal male Tanner crab if the legal male Tanner crab abundance is greater than or equal to XXX,XXX but less than XXX,XXX crab;
- (D)the guideline harvest level for legal male Tanner crab may be reduced or the commercial fishery closed, if the estimated commercial harvest would cause the estimated abundance of legal male Tanner crab to fall below the minimum stock threshold.
- 3) If a commercial fishery opens in this district, a sport fishery will open as provided in 5 AAC 55.022(b)(3).

What is the issue you would like the board to address and why? The current harvest strategy, adopted by the board in 2014, does not function as intended due to a mismatch between the area used to develop abundance thresholds and the area where the trawl survey stock assessment is conducted. New Tanner crab districts have also been proposed to operate in tandem with this proposal; this harvest strategy uses these new districts. This harvest strategy includes district-specific abundance thresholds that can be assessed with the current department trawl survey. The result is 3 districts in PWS that will each have abundance thresholds assessed with a trawl survey and 2 districts assessed and managed using other tools, because these areas are untrawlable. The department will identify when a harvestable surplus is present in the areas that are currently closed to commercial fishing. Abundance thresholds will be developed in the next months and submitted during the December 2020 PWS Finfish and Tanner crab meeting in Cordova.