

## **PROPOSAL 255**

### **5 AAC 35.408. Registration Area H Tanner crab harvest strategy; and 5 AAC 35.410. Fishing Seasons for Registration Area H.**

Amend commercial and noncommercial thresholds, and management based on thresholds, for Cook Inlet Area Tanner crab fisheries, as follows:

5 AAC 35.408. is amended to read:

(a) The provisions of this section establish[ES THE] abundance thresholds for the Tanner crab fisheries in the Southern, Kamishak, and Barren Island Districts of Cook Inlet.

(b) In the Southern District, the minimum stock threshold for the commercial fishery is **1,000,000** [500,000] legal male Tanner crab. **If the commercial fishery has been closed for three or more consecutive years, then the estimated abundance of legal male Tanner crab from the Kachemak Bay trawl survey must be greater than or equal to 1,000,000 crab for two or more years before the commercial fishery may open.** The commercial Tanner crab fishery will open only under the following conditions:

(1) if the estimated abundance level of legal male Tanner crab is [AT LEAST 1,000,000] **2,000,000** crab **or greater**, the commercial fishery will open to harvest Tanner crab at a rate, in combination with the noncommercial fisheries, not to exceed 25 percent of the estimated abundance level of legal male Tanner crab;

(2) if the estimated abundance level of legal male Tanner crab is at least [500,000] **1,000,000**, but less than [1,000,000] **2,000,000** crab, the commercial Tanner crab fishery will open to harvest Tanner crab at a rate, in combination with the noncommercial fisheries, not to exceed 15 percent of the estimated abundance level of legal male Tanner crab;

(3) the commercial fishery may not open if

(A) the estimated abundance level of legal male Tanner crab is below **1,000,000** [500,000] crab;

(B) attainment of the guideline harvest level would cause legal male Tanner crab abundance to fall below **1,000,000** [500,000] crab; or

(C) the estimated harvest capacity, calculated by the number of registered vessels multiplied by the legal pot limit, and the estimated catch rate exceeds the guideline harvest level during a commercial fishery of a minimum 12-hour duration;

(c) In the Kamishak and Barren Islands Districts, combined, the minimum stock threshold for the commercial fishery is **4,000,000**[700,000] legal male Tanner crab. **If the commercial fishery has been closed for three or more consecutive years, then the estimated abundance of legal male Tanner crab from the Kamishak Bay trawl survey must be greater than or equal to 1,000,000 crab for two or more years before the commercial fishery may reopen.** The commercial fishery will open only under the following conditions:

(1) if the estimated abundance level of legal male Tanner crab is **8,000,000**[1,400,000] crab or greater, Tanner crab may be harvested at a rate, in combination with the noncommercial fisheries, not to exceed 25 percent of the estimated abundance level of legal male Tanner crab;

(2) if the abundance level of legal male Tanner crab is **at least 4,000,000** [less than 1,400,000], but **less than 8,000,000** [GREATER THAN 700,000] crab, Tanner crab may be harvested at a rate, in combination with the noncommercial fisheries, not to exceed 15 percent of the estimated abundance level of legal male Tanner crab;

- (3) the commercial fishery may not open if
- (A) the estimated abundance level of legal male Tanner crab is below **4,000,000**[700,000] crab;
  - (B) the attainment of the guideline harvest level would cause the abundance of legal male Tanner crab to fall below **4,000,000** [700,000] crab; or
  - (C) the estimated harvest capacity, calculated as the number of registered vessels multiplied by the legal pot limit and estimated catch rates, exceeds the guideline harvest level for a fishery of a minimum 24-hour duration.

(d) The noncommercial Tanner crab fisheries **in the Cook Inlet Area will be managed as provided in 5 AAC 58.022(11)(A) and 5 AAC 02.325(a)** [GUIDELINE HARVEST LEVEL MAY NOT EXCEED 10 PERCENT OF] when the **most** recent **consecutive** three-year average of legal male stock abundance **estimated from the Kachemak Bay trawl survey is greater than or equal to 200,000 crab and the annual estimate for the most recent year is at least 100,000 crab. The harvest rate is not expected to exceed approximately 10% of legal male Tanner crab abundance under these regulations.** [WHEN LEGAL MALE STOCK ABUNDANCE IS BELOW THE MINIMUM STOCK THRESHOLD FOR A COMMERCIAL FISHERY. THE NONCOMMERCIAL TANNER CRAB FISHERIES WILL BE MANAGED AS PROVIDED IN 5 AAC 58.022(11)(B) AND 5 AAC 02.325(B) IN THE ABSENCE OF A TRAWL SURVEY OR IF

(1) IN THAT PORTION OF THE SOUTHERN DISTRICT EAST OF A LINE FROM POINT POGIBSHI TO ANCHOR POINT, IF THE

- (A) RECENT THREE-YEAR AVERAGE STOCK ABUNDANCE OF LEGAL MALE TANNER CRAB ESTIMATED FROM THE KACHEMAK BAY TRAWL SURVEY IS LESS THAN 100,000 TANNER CRAB; OR
- (B) ESTIMATED STOCK ABUNDANCE LEVEL OF LEGAL MALE TANNER CRAB IS LESS THAN 50,000 TANNER CRAB IN ANY GIVEN YEAR; ]

[(2) IN THE SOUTHERN DISTRICT WEST OF A LINE FROM POINT POGIBSHI TO ANCHOR POINT AND THE KAMISHAK AND BARREN ISLANDS DISTRICTS, IF THE

- (A) RECENT THREE-YEAR AVERAGE STOCK ABUNDANCE OF LEGAL MALE TANNER CRAB ESTIMATED FROM THE KAMISHAK BAY TRAWL SURVEY IS LESS THAN 50,000 TANNER CRAB; OR
- (B) ESTIMATED STOCK ABUNDANCE LEVEL OF LEGAL MALE TANNER CRAB FROM THE KAMISHAK BAY TRAWL SURVEY IS LESS THAN 40,000 IN ANY GIVEN YEAR.]

**(e) The noncommercial Tanner crab fisheries in the Cook Inlet Area will be managed as provided in 5 AAC 58.022(11)(B) and 5 AAC 02.325(b) in the absence of a trawl survey or if the most recent consecutive three-year average of legal male stock abundance estimated from the Kachemak Bay trawl survey is less than 200,000 crab or the annual estimate for the most recent year is below 100,000 crab. The harvest rate is not expected to exceed approximately 10% of legal male Tanner crab abundance under these regulations.**

5 AAC 35.410. is amended to read:

(c) Notwithstanding (b) of this section, the commercial harvest of Tanner crab in the Outer, Eastern, and Central Districts is closed until the Tanner crab stocks have recovered and a harvest

strategy **for those districts** is developed by the department and adopted in a regulation by the Board of Fisheries. [WHEN THE NONCOMMERCIAL FISHERIES IN THE KAMISHAK OR BARREN ISLAND DISTRICTS ARE CLOSED TO THE TAKING OF TANNER CRAB, THE NONCOMMERCIAL FISHERIES IN THE EASTERN, OUTER, AND CENTRAL DISTRICTS SHALL ALSO REMAIN CLOSED.]

**What is the issue you would like the board to address and why?** In 2017, the board reduced the legal size for Tanner crab in the Cook Inlet Area from 5.5 inches to 4.5 inches. The board also adopted regulations for reductions in season, gear, and bag limits for the noncommercial (sport and subsistence) fisheries in the absence of surveys or if noncommercial stock thresholds were not met. However, the abundance thresholds for commercial and noncommercial fisheries were not updated to reflect the new reduced legal size. These proposed thresholds were recalculated from historical abundances using the new legal size of Tanner crab. Currently in regulation there are different abundance thresholds associated with the different districts; the thresholds are estimates derived from the Kachemak Bay and Kamishak Bay trawl surveys.

In addition, for the noncommercial fisheries, the department proposes grouping all regulatory provisions together for the Cook Inlet Area, and not separating them by district; they would all be tied to the Kachemak Bay trawl survey results. There is low fishing effort outside of Kachemak Bay, and management of the entire Cook Inlet Area would not pose an unacceptable risk of overharvest to areas outside of Kachemak Bay. Regulatory provisions that tie Southern, Kamishak, and Barren Islands districts to results of the Kamishak Bay trawl survey are not needed; this survey is no longer being conducted because of very low levels of legal crab encountered in 2012, and funding constraints.

The new proposed Kamishak Bay commercial thresholds are much higher than currently in regulation. These elevated thresholds were derived from department survey information that showed a high ratio of pre-recruit crab (legal with the new size) to recruit-sized crab; these high levels produced high thresholds.

Changes to the harvest strategy and associated regulations are needed to reflect the changes in management and assessment. These changes will provide consistency, clarify conditions for differential management, and simplify regulations, thereby reducing confusion for the public and aiding enforcement.

**PROPOSED BY:** Alaska Department of Fish and Game (HQ-F19-165)  
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