

Submitted by the Alaska Department of Fish and Game

Month day, year

PROPOSAL 74 - 5 AAC 06.361. Nushagak-Mulchatna King Salmon Management Plan.

Change the king salmon escapement reference points in this plan. An adjustment factor will be presented when the Bendix sonar to DIDSON sonar analysis is complete.

(b) The department shall manage the commercial and sport fisheries in the Nushagak District as follows:

(1) to achieve an inriver goal of 95,000 [75,000] king salmon present in the Nushagak River upstream from the department sonar counter; the inriver goal provides for

(A) a biological escapement requirement of 55,000-120,000 [65,000] fish;

(c) If the total inriver king salmon return in the Nushagak River is projected to exceed 95,000 [75,000] fish, the guideline harvest level described in (b)(1)(C) of this section does not apply.

(d) If the spawning escapement of king salmon in the Nushagak River is projected to be more than 55,000 [40,000] fish and the projected inriver return is less than 95,000 [75,000] fish, the commissioner

(1) shall close, by emergency order, the directed king salmon commercial fishery in the Nushagak District; during a closure under this paragraph, the use of a commercial gillnet with webbing larger than five and one-half inches in another commercial salmon fishery is prohibited;

(2) if the projected inriver return of king salmon in the Nushagak River is at least 70,000 [55,000], but less than 95,000 [75,000] fish, and to ensure that sport fishery guideline harvest established in (b)(2)(C) of this section is not exceeded, shall establish, by emergency order, a daily bag limit of one fish per day, one in possession for king salmon 20 inches or greater in length;

(3) if the projected inriver return of king salmon in the Nushagak River is less than 70,000 [55,000] fish, and to ensure that the projected spawning escapement does not fall below 55,000 [40,000] fish, shall establish, by emergency order, fishing periods to restrict the king salmon sport fishery in the Nushagak River during which any, or a combination of the following restrictions may be applied at the discretion of the commissioner:

(e) If the spawning escapement of king salmon in the Nushagak River is projected to be less than 55,000 [40,000] fish, the commissioner.....

ISSUE: The department operates a sonar counting project on the Nushagak River. Nushagak River is considered too wide for sonar escapement counts across the entire river because of the effective range of the sonar technology and the bottom profile of the river. The sonar project was

originally designed to count sockeye salmon, which migrate close to shore, and is believed to provide fairly good estimates of migrating sockeye salmon. King and chum salmon have also been counted by the sonar in nearshore areas. However king salmon, and to a lesser extent chum salmon, migrate further offshore. Therefore, the escapement estimate of king salmon is considered an index of abundance and not a complete count. It has also been assumed that the sonar project has counted a consistent proportion of king salmon returning each year.

The department has completed the transition from Bendix sonar to DIDSON sonar on the Nushagak River. Due to increased range and resolution, DIDSON sonar is now counting a higher proportion of king salmon migrating up the Nushagak River than was previously possible with Bendix sonar. The king salmon escapement estimates are used to make management decisions for subsistence, sport, and commercial fisheries. In addition, there are escapement reference points in the management plan that need to be changed to account for the higher proportion of king salmon being counted.

WHAT WILL HAPPEN IF NOTHING IS DONE? The department will manage for king salmon action points that do not reflect the current sonar technology.

WILL THE QUALITY OF THE RESOURCE HARVESTED OR THE PRODUCTS PRODUCED BE IMPROVED? N/A.

WHO IS LIKELY TO BENEFIT? All users benefit when the department uses the best available information to make decisions.

WHO IS LIKELY TO SUFFER? No one.

OTHER SOLUTIONS CONSIDERED: None.

PROPOSED BY: Alaska Department of Fish and Game.