Submitted by the Alaska Department of Fish and Game Month day, year

## <u>PROPOSAL 78</u> -5 AAC 06.358. WOOD RIVER SOCKEYE SALMON SPECIAL HARVEST AREA MANAGEMENT PLAN.

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

- (c) The commissioner may open, by emergency order, the Wood River Special Harvest Area when
- (1) the department projects that the sockeye salmon escapement into the Wood River will exceed 700,000 fish and as follows;
- (A) if the preseason forecast for the Nushagak River sockeye salmon run is at least 1,000,000 fish, the department shall manage the Nushagak District to exceed a minimum escapement goal of [340,000] 400,000 sockeye salmon to the Nushagak River, and the commissioner may open the Wood River Special Harvest Area only when department projections indicate the Nushagak River sockeye salmon escapement will not exceed [340,000] 400,000 fish;
- (B) if the preseason forecast for the Nushagak River sockeye salmon run is less than 1,000,000 fish and the ratio of Wood River to Nushagak River sockeye salmon is projected to be greater than three to one, the department shall manage the Nushagak District for an optimal escapement goal of at least [235,000] **275,000** sockeye salmon to the Nushagak River, and the commissioner may open the Wood River Special Harvest Area only when department projections indicate the Nushagak River sockeye salmon escapement will be less than [235,000] **275,000** fish;
- (C) if the inseason forecast prepared by the department during the first week of July for the Nushagak River sockeye salmon run is at least 1,000,000 fish, the department shall manage the Nushagak District to exceed a minimum biological escapement goal of [340,000] 400,000 sockeye salmon to the Nushagak River, and the commissioner may open the Wood River Special Harvest Area only when department projections indicate the Nushagak River sockeye salmon escapement will be less than [340,000] 400,000 fish;
- (D) if the inseason forecast prepared by the department during the first week of July for the Nushagak River sockeye salmon run is less than 1,000,000 fish, the department shall manage the Nushagak District for an optimal escapement goal of at least [235,000] **275,000** sockeye salmon to the Nushagak River, and the commissioner may open the Wood River Special Harvest Area only when department projections indicate the Nushagak River sockeye salmon escapement will be less than [235,000] **275,000** fish;.....

**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. It has also been assumed that the sonar project has counted a consistent proportion of sockeye 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 sockeye salmon migrating up the Nushagak River than was previously possible with Bendix sonar. The sockeye 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 sockeye salmon being counted.

WHAT WILL HAPPEN IF NOTHING IS DONE? The department will manage for sockeye 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.