DETERMINATION OF A COMMERCIAL FISHERY FAILURE AFFECTING THE ALASKA YUKON AND KUSKOKWIM RIVER, AND THE NORTON SOUND SALMON FISHERIES

Extremely low returns of salmon have occurred in the Yukon River and Kuskokwim River drainages, and in rivers around the Norton Sound, beginning in 1997 and continuing to the present. On behalf of the Secretary of Commerce, NMFS previously determined two commercial failures of Alaska salmon fisheries due to fishery resource disasters of unknown but probably natural causes that resulted in extremely low returns of salmon to the affected areas. These determinations were made under Section 312(a) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA). The first commercial fishery failure, determined in November 1997, covered the Bristol Bay and Kuskokwim River regions. The second commercial fishery failure, determined in September 1998, covered the Yukon River region as well as the Bristol Bay and Kuskokwim River regions.

Continued low returns in the Yukon River and Kuskokwim River River regions and Norton Sound, as indicated by low harvests, prompted Governor Tony Knowles of Alaska to declare a disaster for western Alaska on July 19, 2000.

Both Section 308(b) of the Interjurisdictional Fisheries Act (IFA) and Section 312(a) of the MSA authorize the Secretary of Commerce to make a determination that a commercial fishery failure occurred as the result of a fishery resource disaster due to natural causes or undetermined causes (both IFA and MSA), or man-made causes beyond the control of fishery managers to mitigate (only MSA).

Determination of a Fishery Resource Disaster

According to data supplied by the Alaska Department of Fish and Game (ADF&G), the commercial catch of chinook salmon in the Yukon River was approximately 8,500 fish, less than one-tenth the historic average and the worst run in recorded history. The fishery for summer chum in the Yukon river was even worse, with a commercial catch of 6,800 fish. This amount was less than one percent of the historic average of over 700,000 fish.

Similar low returns occurred in the Kuskokwim River. Commercial catch of chinook was 22,000 fish, down from the historic average of 58,000 fish. Commercial catch of chum was 28,000 fish, down from the historic average of 447,000 fish. Commercial catch of sockeye was 31,000 fish, down from the historic average of 135,000 fish.
The river systems in and around Norton Sound also experienced significant

declines. Commercial catch of chinook was 721 fish, down from the historic average of 8,000. Commercial catch of chum was 3,063 fish, down from the historic average of 105,000. ADF&G indicates concern over whether escapement goals for salmon fisheries in the Yukon, Kuskokwim, and Norton Sound will be met. If escapement goals are not met, future salmon runs may also be impacted by this year's dismal returns.

Based on this information, I find that a fishery resource disaster has occurred that significantly reduced the normal returns of in the Yukon River, the Kuskokwim River, and Norton Sound.

Determination of the Cause of the Fishery Resource Disaster

The exact cause of the apparent collapse of the salmon fisheries in the Yukon River, the Kuskokwim River, and Norton Sound is unknown. The inordinately poor returns do not appear to result from low parent-year escapements or inaccurate forecasts.

A possible contributor is natural causes in the marine environment. Unusual weather and oceanographic patterns during the middle-to-late 1990s are well documented. For example, water temperatures in the Bering Sea during the this period were at record high levels and are considered to be a potential causal factor of weak returns of salmon. Similar observation of weather oscillations occurred on a global basis. Other indicators point to marine stress as a causal factor in reduced salmon survival. Returning salmon appear smaller than usual and arrived late. Migratory pathways were changed from previous years and evidence exists of increased parasitism and predation, both indicators of marine stress. Fish under such stress are less vigorous and more likely to suffer higher natural mortality rates. Taken together, these indicators underscore the likely role that changes in the marine environment may have played in reducing western Alaska salmon runs.

Based on the above information, I find that the cause of the fishery resource disaster is undetermined but probably due to natural causes.

Determination of a Commercial Fishery Failure

A commercial fishery failure has occurred as a result of the inordinately poor return of salmon to the Yukon River and Kuskokwim River and the rivers in and around Norton Sound. As stated above, the Yukon River chinook and chum salmon runs were

considered the worst in recorded history. Although the commercial fisheries in the Yukon River, Kuskokwim River, and in Norton Sound are considered small by

Alaska standards--average earnings by participants during the better years in the 1990s was slightly more than $7,000--the amount of money made by commercial salmon permit holders in this area is vital to their survival. This region has few paying jobs, therefore money earned by fishing is used throughout the year. Few fishermen reached the $1,000 mark this year, with most making much less. Compare this with the $2,800 average earned when a disaster was determined in 1998. Their plight is further exacerbated by low runs the previous two years.

The State of Alaska Department of Labor (DOL) estimates almost 4,200 direct resident commercial fishing jobs in the Yukon- Kuskokwim region, including fishermen and crew. Village residents depend on the commercial fishing season to pay for such basics as electricity and water/sewer. The commercial and subsistence economies are so intertwined in the Yukon-Kuskokwim region that if the commercial fishery collapses, so does the subsistence economy and with it the support of many public and private institutions.

The Yukon River, the Kuskokwim River, and the Norton Sound regional economies are also affected by the poor salmon returns. The State Fisheries Business Tax, paid by the processing industry for salmon is 3 percent of the ex-vessel value of the fish. One half of the revenues from this tax is paid back to the local governments in whose boundaries the processing occurred. In addition, many local governments assess a local tax on the sale of fish to processors. These local taxes range from 1-3 percent.

Another concern is that the subsistence needs for salmon in the Yukon River, Kuskokwim River, and Norton Sound regions are not being met. This coupled with the low earnings in the commercial fisheries means that many residents in Western Alaska will be impacted twice by the low salmon runs.

Based on the above information and the earlier determinations under Section 312(a), I find that the continued extremely low returns of salmon to Norton Sound and the Yukon and Kuskokwim Rivers have resulted in a commercial fishery failure due to a

fishery resource disaster, beginning in 1997 and continuing to the present, as provided under Section 312(a) of the MSA and Section 308(b) of the IFA.

Norman Y. Mineta
Secretary of Commerce

Date