



## Information on 2012 Low Returns of Chinook Salmon in Alaska

### **How have low Chinook salmon returns affected Alaskans?**

This year, many Alaskans in the Yukon, Kuskokwim and Cook Inlet regions are suffering from the effects of low returns of Chinook salmon. Fishery closures and restrictions necessary for conservation resulted in a great burden on Alaskans who rely on Chinook salmon for food and income. The State of Alaska recognizes the hardships that management restrictions have caused subsistence, sport, and commercial fishermen, as well as guides, local fish processors, and other local and regional businesses.

### **What areas of Alaska were affected by low Chinook returns?**

Chinook salmon runs in a number of areas of the state fell well below expected levels. Strict fishery management actions were necessary in the efforts to meet escapement objectives and ensure sustained yield. Chinook salmon fisheries were curtailed and fisheries for other more abundant salmon species were limited in areas where their harvest could affect weakened Chinook runs.

Weak returns of Chinook salmon to the Yukon and Kuskokwim River resulted in extensive restrictive management actions in the subsistence and commercial fisheries. The commercial Chinook salmon fishery on the Yukon was closed and the subsistence fishery significantly restricted. On the Kuskokwim River, conservation of Chinook salmon required substantial restriction of commercial and subsistence fisheries for Chinook and other salmon species.

Emergency orders were issued restricting sport fisheries for Chinook salmon in Upper Cook Inlet fresh and salt waters. Commercial set gillnetting was closed for much of the season in the Kenai, Kasilof, and East Foreland sections of the Upper Subdistrict. In the Northern District, the commercial setnet fishery was restricted and in-river sport fisheries were tightly constrained to conserve Chinook salmon.

### **What are the economic impacts of low Chinook returns?**

Commercial fishing for Chinook salmon on the Yukon and Kuskokwim, which is an important source of income in those regions, was closed. While the Chinook fishery on the Yukon generated an average annual harvest value of \$1.5 million over the preceding ten years, this year the fishery was closed and the revenue from the fishery was \$0. In order to conserve Chinook salmon, commercial harvest of available chum salmon was restricted on the Yukon. On the Kuskokwim, both chum and sockeye salmon harvests were restricted and the overall value generated by the commercial salmon fishery fell to less than 50% of the average seen in the preceding five years. Subsistence fisheries on both the Yukon and the Kuskokwim Rivers were restricted such that the amounts of Chinook necessary for subsistence may not have been met.

Poor returns of Chinook salmon to the Kenai River lead to closures of the Kenai River Chinook salmon sport fishery and the East side and Northern District commercial sockeye salmon fisheries. The \$1.1 million exvessel value of the harvest in the set gillnet fishery was about 10 percent of the recent five-year average. The sport fishery harvest of Chinook salmon was 103 fish which was 99 percent below the recent five-year average. A study commissioned in 2007 by ADF&G showed that sport angler expenditures for sport fishing in Cook Inlet totaled \$732 million.

Northern Cook Inlet area Chinook salmon runs were well below average leading to significant restriction of the Northern District set gillnet fishery and the in-river Chinook sport fisheries. Restriction of the sport and commercial fisheries had significant economic impact on commercial fishers, processors, guides, lodges and other businesses that depend on these fisheries.

### **What is causing low returns of Chinook salmon in Alaska?**

Numerous physical and biological factors can influence production and survival of Chinook salmon in the freshwater and marine phases of their lifecycle. Additional research is needed to gain a better understanding of the primary factors that are affecting Chinook productivity and abundance. Changes in survival during the transition of Chinook salmon smolt from fresh water to salt water can significantly alter run strengths at local, regional, and statewide scales. Chinook salmon run strength can be significantly affected by environmental conditions in the saltwater rearing habitats. Colder ocean temperatures can affect both Chinook food source availability and distribution and the abundance of predators that feed on rearing salmon.

### **What is the Alaska Department of Fish and Game doing in response to low Chinook returns?**

On July 20, Governor Parnell and Commissioner Campbell announced that a team of fisheries scientists will work on a comprehensive research plan to better understand Chinook salmon abundance and productivity and increase understanding behind the unexpected widespread decline. ADF&G members working on the gap analysis and research plan held a Chinook salmon symposium in October.

The October symposium included scientific presentations and panel discussions with experts from private, state, federal, and academic backgrounds on the current status of Chinook salmon stocks in Alaska and what kind of information is needed to better understand and respond to the recent declines. Questions and comments from the public and interest groups collected during and before the symposium were used to facilitate discussions with presenters and panelists to help identify knowledge gaps. An audio recording of the proceedings, copies of the presentations given during the symposium, a summary of the public input, and as well as the 2012 Chinook Gap Analysis and other related documents are available on the ADF&G website at:

[http://www.adfg.alaska.gov/index.cfm?adfg=chinook\\_efforts\\_symposium.information](http://www.adfg.alaska.gov/index.cfm?adfg=chinook_efforts_symposium.information)

Consistent with the state's constitutional and statutory mandate to manage renewable resources to provide sustained yield, ADF&G plans to work closely with the Alaska Board of Fisheries (Board) in the upcoming Board cycle to ensure that Chinook salmon are conserved while providing for opportunities on the more abundant species of salmon where possible. In addition, ADF&G is engaged in efforts in collaboration with constituents to evaluate fishing gear and management strategies that conserve Chinook while allowing selective harvest of more abundant species.

### **What are the State of Alaska and Federal Governments doing to help affected Alaskans?**

Governor Parnell will be requesting state funding in the upcoming budget in support of the multi-year Chinook research plan currently being developed. Research will be focused on improving understanding of Chinook productivity and abundance statewide through coordinated efforts with federal and regional partners that will examine freshwater and marine factors in the lifecycle of Chinook.

Governor Parnell requested fishery federal disaster determinations from the Secretary of Commerce for Chinook fisheries on the Yukon and Kuskokwim Rivers, Cook Inlet, the Kenai River, and streams of Upper Cook Inlet. In September, the Secretary of Commerce, after reviewing information from the State of Alaska, determined that a commercial fishery failure due to a fishery resource disaster exists for three regions of the Alaska Chinook salmon fishery. The determination gives Congress the authority to appropriate funds for fishery disaster relief under the Magnuson-Stevens Fisheries Management and Conservation Act. The areas affected may also qualify for other forms of federal assistance.

The U.S. Small Business Administration recently made an Economic Injury Disaster Loan declaration, qualifying businesses in the affected region without credit available elsewhere for federal loans at a 4 percent interest rate

Governor Parnell's administration is actively working with the Alaska Congressional Delegation toward a Congressional appropriation for relief.