Menard, J., C. C. Krueger, and J. R. Hilsinger. 2009. Norton Sound salmon fisheries-history, stock abundance, and management. Pages 621-673 [In] C. C. Krueger and C. E. Zimmerman, editors. Pacific salmon: ecology and management of western Alaska's populations. American Fisheries Society Symposium 70, Bethesda, MD.

Abstract: This paper reviews the history of the subsistence, commercial, and sport fisheries, describes variation in salmon runs and harvest over time, and summarizes past management of salmon in the Norton Sound and Port Clarence Management Districts. The drainages of Norton Sound support important subsistence and commercial fisheries for salmon. Sport fisheries are small in comparison. Archeological evidence dating back 2,000 years indicates fishing has been an important part of life for Norton Sound residents for centuries. Since statehood in 1959, salmon abundance and harvest peaked in the late 1970s and early 1980s. The 1998 and 1999 salmon runs were some of the poorest on record. Since 2003, large increases in spawning escapement have been recorded for chum Oncorhynchus keta, pink O. gorbuscha, coho O. kisutch, and sockeye O. nerka salmon stocks. Chinook O. tshawytscha salmon runs have declined since the late 1990s and not rebounded. Salmon management seeks to allow sufficient escapement to spawning rivers to ensure long-term sustainable yields. Salmon fisheries are managed under three different sets of regulations: subsistence, commercial, and sport. Subsistence harvests are given a priority over commercial and sport harvests. In 1999, due to low salmon returns to spawning streams, the U.S. government declared the Norton Sound region a federal fisheries disaster and the state of Alaska began managing the subsistence fishing in the Nome Subdistrict as a limited entry fishery (Tier II permit). Restoration of salmon is dependent on a wide set of variables including suitable juvenile rearing habitat, favorable ocean conditions for growth and survival, and adequate numbers of returning adults for spawning and producing the next generation of salmon. Regulation of harvest is critical to salmon restoration so that adequate spawning escapements occur and that this critical link within the life cycle of salmon remains unbroken. More restrictive harvest regulations than in the past has allowed more salmon to reach the spawning grounds and helped to restore salmon populations and their fisheries.

Keywords: None.

URL: http://afsbooks.org/54070C

Paper No. NA