## Submitted by the Alaska Department of Fish and Game at the request of Board Member Payton.

## **December 3, 2016**

Szarzi, N. J., C. M. Kerkvliet, B. J. Failor and M. D. Booz. 2010. Recreational fisheries in the Lower Cook Inlet Management Area, 2008-2010, with updates for 2007. Alaska Department of Fish and Game, Fishery Management Report No. 10-38 Anchorage.

## Page 10:

Winter stocks are thought to be largely nonlocal because only one coded wire tagged Cook Inlet fish has been recovered from the fishery from any source during August through March (R. Begich, ADF&G Sport Fish, Soldotna, personal communication). However, relatively few Chinook salmon stocks of Cook Inlet origin have been tagged and relatively few individual Cook Inlet fish received tags compared to the diversity of stocks outside of Cook Inlet that are the focus of extensive tagging programs.

Coded wire tags recovered from sport harvest during the summer indicate a mixture of stocks are harvested, including hatchery stocks returning to the local stocking projects, as well as wild and hatchery stocks returning to Cook Inlet tributaries further north, and a number of stocks of non- Cook Inlet origin. Tagged fish of non-Cook Inlet origin recovered in LCI and Kachemak Bay have been mainly from hatcheries in British Columbia, Washington, and Oregon, with some from Southeast Alaska. Sexually immature fish are more predominant in the summer harvest in LCI and Kachemak Bay than in CCI.

## **Historical Harvest**

The Chinook salmon fishery is difficult to characterize because anglers reporting their harvest in the SWHS often generalize their fishing location and because the survey does not estimate effort by species. Participation and harvests in the area generally increased until 2007 (Table 1 and Table 3). The lower harvests in 2007 through 2009 are attributed partly to poor survival of stocked fish from loss of heated water at SF hatcheries and additionally, in 2008 and 2009, to ocean conditions that resulted in poor runs to many Cook Inlet tributaries.

The SWHS questionnaire was modified to provide estimates of winter harvest beginning in 2002. Estimates of winter harvest have been below the harvest guideline of 3,000 Chinook salmon, although the 2005 estimate of 2,958 was close (Table 11). Most of the off-season harvest takes place near or south of Bluff Point.

Nonlocal feeding Chinook salmon from many stocks dominate both the summer and winter harvests south of Bluff Point; therefore, the fishery does not pose a threat to conservation of Cook Inlet stocks or visiting nonlocal stocks. The potential harvest of stocks that fall under the strictures of the Endangered Species Act is possible, but the likelihood of impacting those stocks is remote.