

## Trends in Harvest and Escapement for Southeast Alaska Pink and Chum Salmon Stocks

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Annual commercial harvests of pink and chum salmon in Southeast Alaska increased dramatically in the 1980s and reached their highest levels in the 1990s. Pink salmon harvests averaged 49 million, and chum salmon harvests averaged 11 million, including peak harvests of 78 million pink salmon in 1999 and 16 million chum salmon in 1996. Nearly all of the pink salmon harvested in Southeast Alaska are of wild origin: hatchery-produced pink salmon contributed an average of only 3% of the annual harvest since the late 1970s. In contrast, the harvest of chum salmon has been comprised primarily of hatchery fish (average 73% over the last 10 years). Estimated harvests of wild chum salmon did not rebound to the same degree as pink salmon and have recently declined to levels similar to those of the 1970s. Annual pink salmon harvests have also declined over the most recent 10 years from an average of 49 million in the 1990s to an average of 40 million fish since 2001, but remain at historically high levels. The decline in overall pink salmon harvest during the past decade was due primarily to very poor even-year runs in 2006 and 2008 and a below average run in 2010. The Alaska Department of Fish and Game maintains escapement indices for aggregates of pink and chum salmon runs in three broad sub-regions in Southeast Alaska: Southern Southeast, Northern Southeast Inside, and Northern Southeast Outside. Escapement indices are based on peak aerial survey estimates and do not provide estimates of total escapement, but rather provide an index of abundance useful for assessing trends. Escapement indices for chum salmon increased in the late 1980s and 1990s and remained stable through the mid-2000s, but recently dropped to low levels similar to those of the 1970s. Pink salmon escapements in all three sub-regions increased dramatically from low levels in the 1960s and 1970s and have generally remained high since the mid-to-late 1980s. The notable exception was a very poor escapement to the Northern Southeast Inside subregion in 2008.