

Board of Fisheries: Soldotna Work Session  
Record Copy

**Proposal EF-F16-037: Shell Lake AS A Conservation Concern**

Record Copy submitted by Terry Nininger in support of this proposal

In the interest of rehabilitating the Shell Lake sockeye adult escapement and smolt emigration, Shell Lake should be classified as a stock of *conservation concern*, (Sustainable Salmon Fisheries Policy, (SSFP), 5 AAC 39.222 (f) (6), "conservation concern"). In recent history there has never been a greater need to restore a salmon population than what currently exists at Shell Lake.

*Adult escapement into Shell Lake has dropped from 69,800 in 2006 to 215 fish in 2016:*

**Historical Data-Shell Lake Sockeye Escapement**

- 1968-1982: estimated escapement of Susitna River ranged from 41,346 to 338,542; average return of 135,242. Based on euphotic volume, estimated adult sockeye production for Shell Lake is 10.3% of entire Susitna River drainage.
- 2006-2011 Shell Lake sockeye averaged 17,900, 7% of ADFG in-river abundance estimates.
- Shell Lake Returning Adults:
  - 2006: 69,800
  - 2007: 26,863
  - 2008: 2,620
  - 2009: 4,968
  - 2010: 2,223
  - 2011: 937
  - 2013: 133
  - 2014: 6
  - 2015: 3
  - 2016: 215

*Out migrating smolt has dropped from 80,600 in 2007 to 12 fish in 2016.*

**Historical Data-Shell Lake Smolt Migration**

- Annual Sockeye Smolt-Shell Lake:
  - 1987: 83,273
  - 2007: 80,600
  - 2008: 3,200
  - 2009: 68,651
  - 2010: 2,733
  - 2011: 17
  - 2012: 23
  - 2013: 5
  - 2014: 21,345 (In 2012 CIAA collected 91,300 eggs/resulting progeny raised at Trail Lakes Hatchery and stocked in Shell Lake in 2014: of 80,000 smolt released only 21,345 were counted leaving Shell Lake).
  - 2015: 59
  - 2016: 12 (and 4 Coho)

The sockeye problem at Shell Lake is complex: (please refer to my letter in the Public Comments, PC 25). The collapse of the Shell Lake sockeye population could be far reaching. Given the recent decision by 9<sup>th</sup> Circuit Court of Appeals in favor of UCIDA's lawsuit and remanding it back to the district court and requiring federal regulators work with the state on a new management plan, ***this could find Shell Lake sockeye entangled in the Endangered Species Act, listing them as a threatened species.***

The Alaska Board of Fisheries needs to take a bold and unprecedented position to declare the Shell Lake sockeye a stock of conservation concern. In the short term this may compromise the interests of sports and personal use fishermen and commercial fishermen, but in the long run it is the only action that will return this fishery to its original and natural state.