

Upper End of the Estimated Range of 2021 Impacts of Shumagin Island Fishery on Early Run (Black Lake) Stock

Data source: WASSIP 2006 Shumagin Island fishery by week, Stock Composition from Black Lake harvest and escapement. Appendix B. 2021 South Unimak and Shumagin Islands June Fisheries. Appendix D. 2021 South Alaska Peninsula Post-June Fisheries.

- 1) Assume 2006 catch composition by week is similar to 2021 using medium of Harvest from WASSIP Tables: C49, C50, C51, C84, C85, C86 Special Publication No. 12-24
- 2) Applied 2006 catch composition to 2021 (Appendix Table B13) harvest to approximate Black Lake component of the 2021 catch by week.
- 3) Applied 2006 Post-June stock composition to 2021 South Pen Harvest Appendix D7.
- 4) Assume only harvest from Shumagin in June and Shumagin & Dolgoi in July (Harvest closed in SEDM, Igvak & Chignik).

Black Lake Harvest approximated from 2006 Stock Composition:

Week	total Harvest by week	Stock Composition	Estimated Black Lake Harvest	
June 7-13	238,139	X	7%	16,670
June 14-20	524,062	X	30%	157,219
June 21-29	405,935	X	9%	36,534
July 6-21	284,231	X	8%	22,738
July 22-31	441,120	X	8%	<u>35,290</u>
2021 Harvest of Early Run Chignik Stock				268,451

2021 Estimated Black Lake Harvest		Projected Escapement Resulting from Reduced Fishing under 282	
June 7-13	16,670		0
June 14-20	157,219		78,610
June 21-29	36,534		18,267
July 6-21	22,738		11,369
July 22-31	35,290		<u>17,645</u>
		Projected Additional Escapement	125,891
		Actual 2021 Escapement	<u>244,384</u>
Projected Total Early Run Escapement with 282 Restrictions			370,275

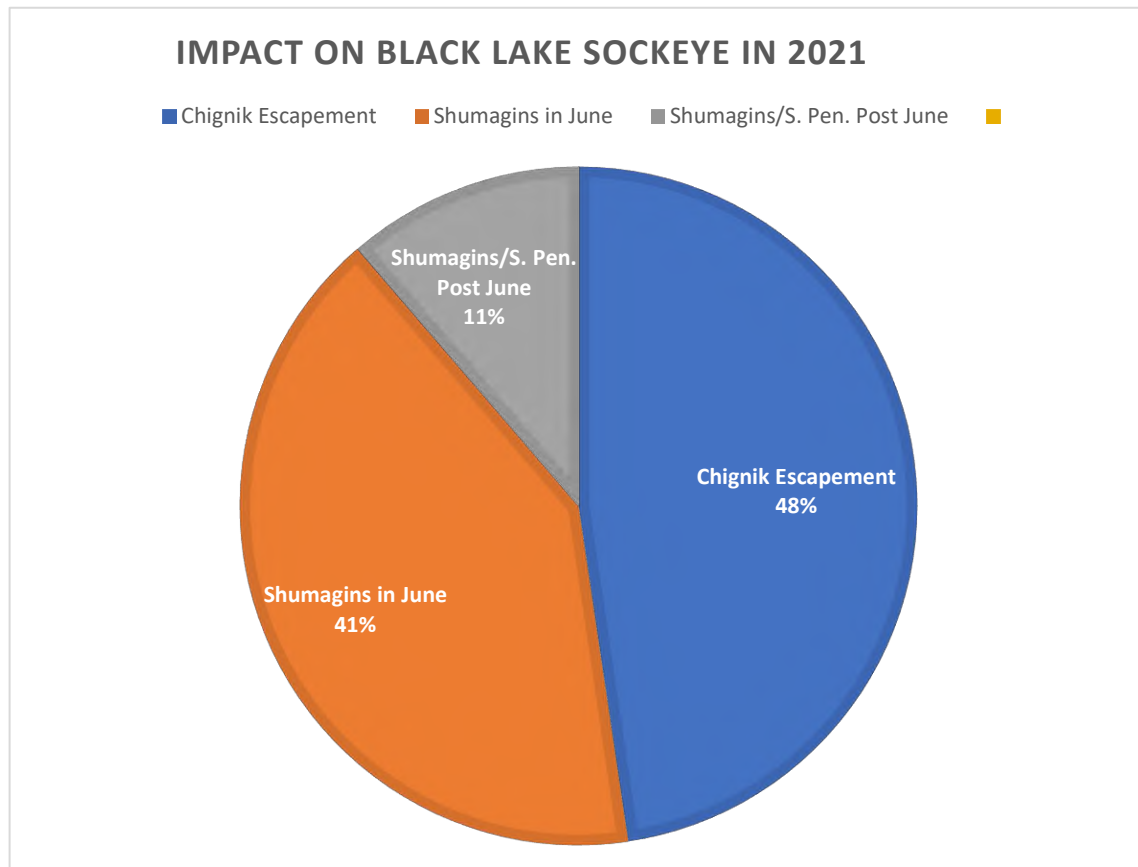
Projected Harvest Rate in 2021 on the Black Lake Stock

WEEK	Weekly Harvest Rate	Monthly Harvest Rate
June 7-13	3.3	
June 14-20	30.7	41.1
June 21-29	7.1	
July 6-21	4.4	
July 22-31	6.9	11.3

2021 Escapement (244.384) + Estimated Total Harvest June/July (268,451) = Total Run 512,835

High End of the Range of Estimated 2021 Impact of Shumagin Island Fishery on Early Run (Black Lake) Stock

2021	
Chignik Escapement	244,384
Shumagins in June	210,423
Shumagins/S. Pen. Post Jun	58,028



Submitted by Earl Krygier