

NOAAFISHERIES

Alaska Fisheries Science Center Auke Bay Laboratories



Alaska
Department of
Fish and Game

2024 Southeast Alaska Pink Salmon Harvest Forecast

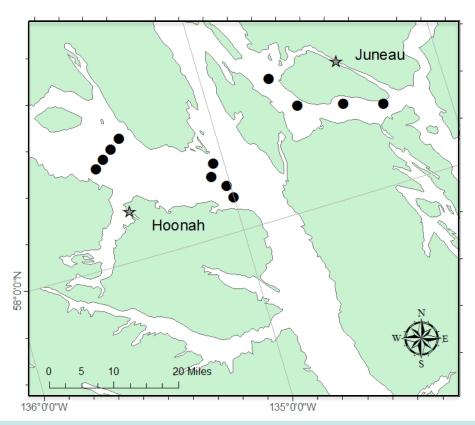
NOAA: Wesley Strasburger, Jim Murphy, Emily Fergusson, Andrew Gray

> ADF&G: Teresa Fish, Andy Piston, and Sara Miller

> > 2023 Purse Seine Task Force Meeting
> > December 1, 2023

Southeast Alaska Coastal Monitoring (SECM) Research

- Surveys initiated by NOAA in 1997
- Collaboration between NOAA and ADF&G since 2018





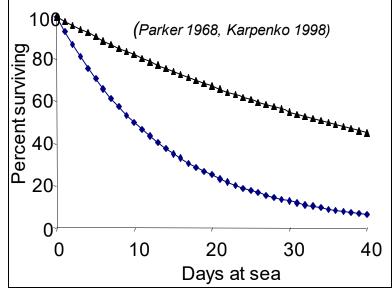




Southeast Alaska Coastal Monitoring (SECM) Research







Pink Salmon Harvest Forecast Model Structure

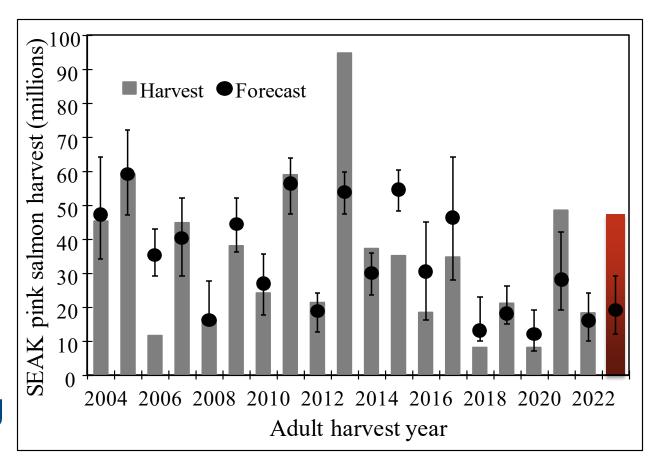
- Peak surface trawl catch rates (CPUE) in June or July.
- Temperature Variable (Icy Strait Temperature Index (ISTI))
 or a variety of potential satellite sea surface temperature
 (SST) indices.



Previous Forecast Performance & Additional Variables

- Parent year SEAK pink salmon escapement index
- Juvenile pink salmon condition & energy density
- Zooplankton composition& densities
- North Pacific
 Index (NPI)

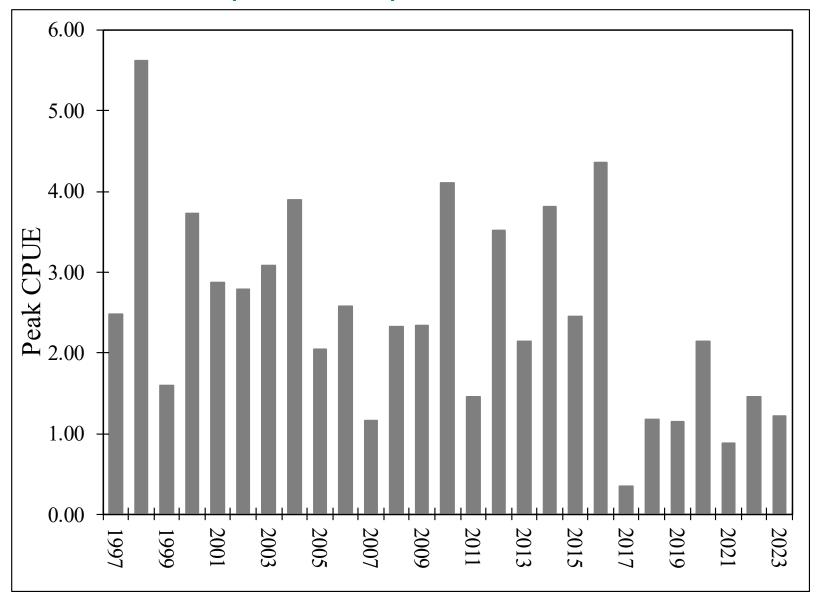
- Tidal data
- Survey timing







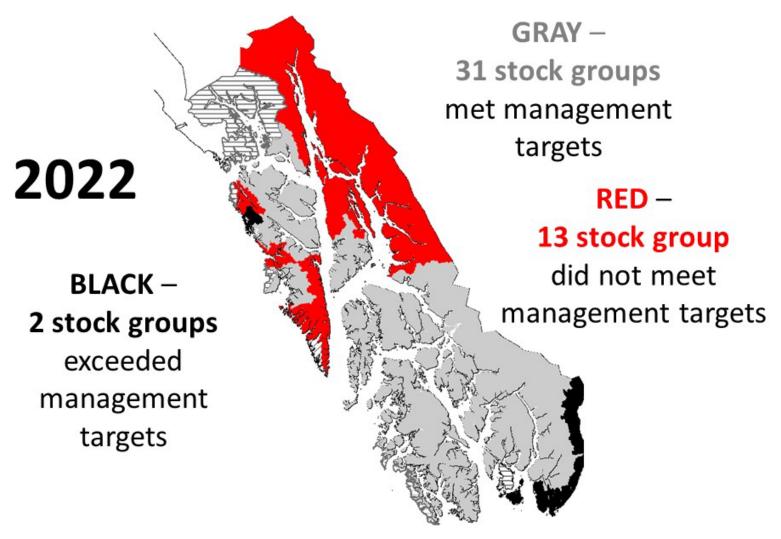
Peak CPUE (calibrated) of Juvenile Pink Salmon





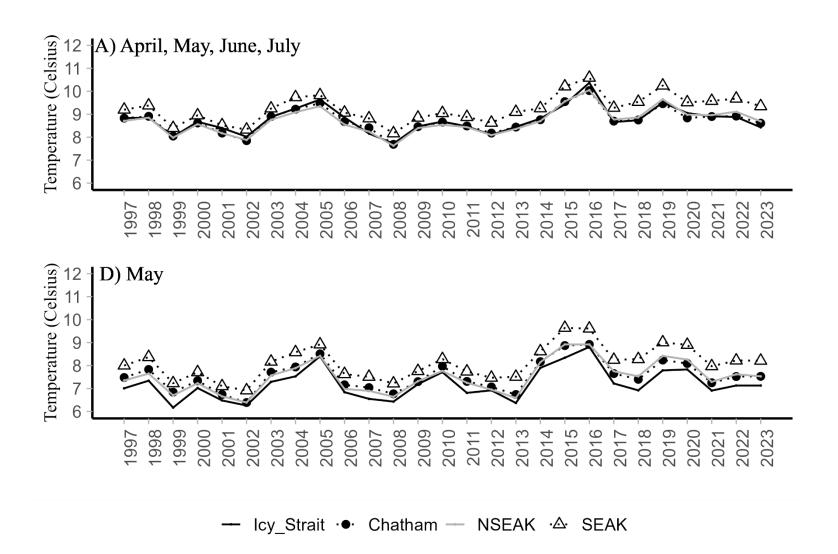


Parent Year Pink Salmon Escapement Performance by Stock Group





Satellite Sea Surface Temperatures

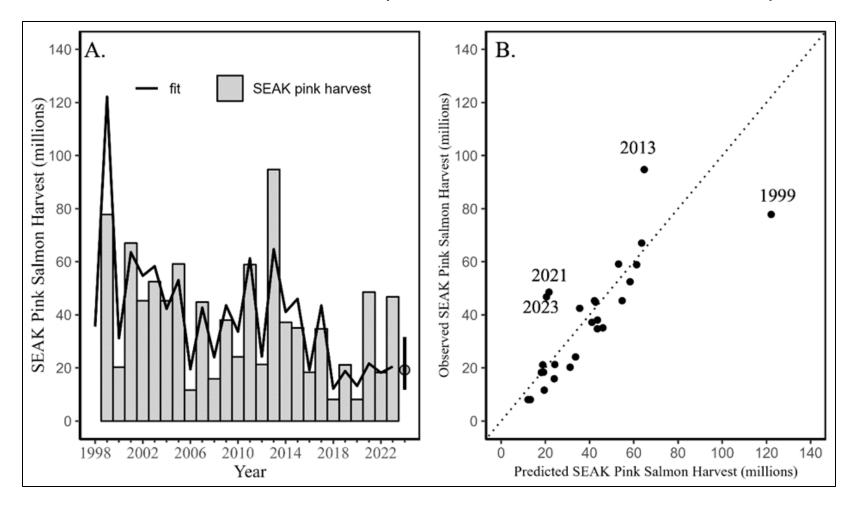






Southeast Alaska Pink Salmon Harvest Forecast Model (Calibrated CPUE + NSE Inside Satellite Sea Surface Temperature)

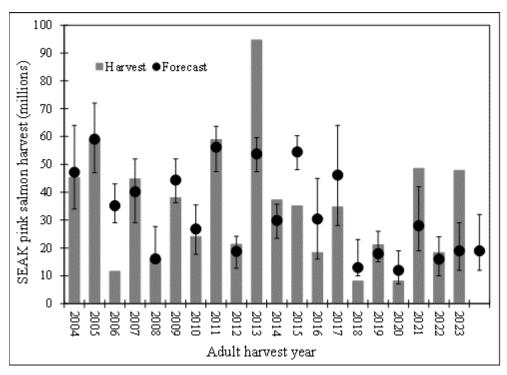
2024 Forecast = 19 million (12-32 million 80% Prediction Interval)







2024 SECM Pink Salmon Harvest Forecast



19 million (80% PI = 12 - 32 million)

