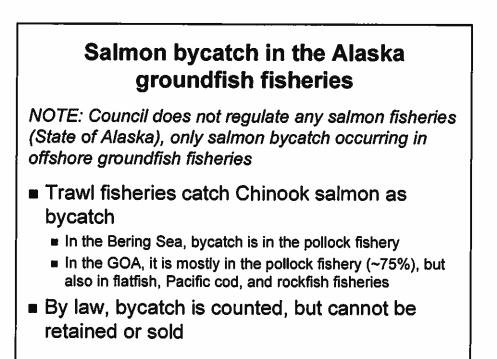
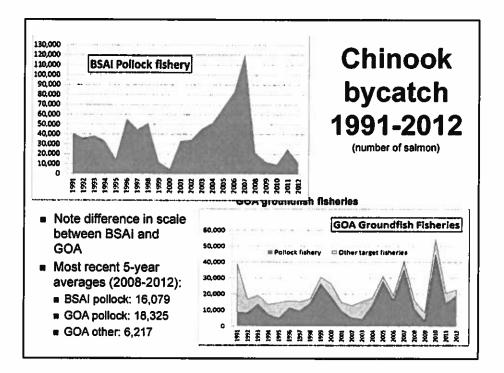


North Pacific Fishery Management Council

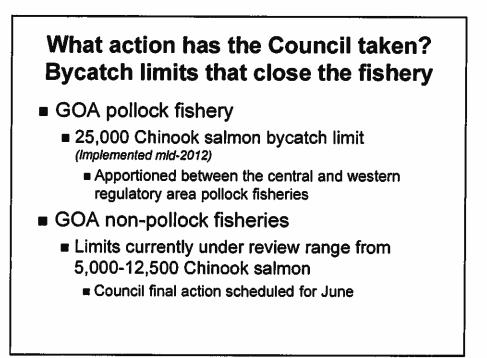
- manages offshore Federal fisheries off Alaska (3-200 miles) with NMFS
- Management governed by the Magnuson-Stevens Act (U.S. Federal law). Balance of 10 National Standards, including:
 - Minimize (salmon) bycatch to extent practicable
 - Prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery (e.g., the Alaska groundfish fisheries)
 - Provide for the sustained participation of and minimize adverse impacts on fishing communities





What action has the Council taken? Bycatch limits that close the fishery

- Bering Sea pollock fishery
 - 60,000 Chinook salmon bycatch limit, with incentive plans to remain below 47,951 salmon (implemented 2011)
 - Apportioned by sector (catcher vessel, catcher processor, mothership, CDQ) and inshore cooperative
 - If sector exceeds its apportionment of 47,591
 Chinook salmon 3 times in 7 year period, sector's limit will permanently reduce to lower cap
 - Council receives annual report on incentive programs



What action has the Council taken? Stock of origin research

- Purpose:
 - to understand relationship between Chinook salmon bycatch in the groundfish fisheries and the status of individual Chinook stocks

What action has the Council taken? Stock of origin research

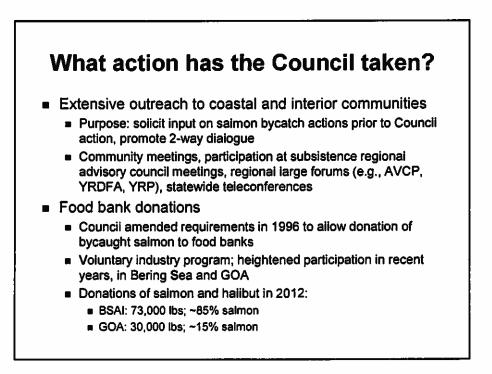
Bering Sea

- Basis of Council action in 2009 (PSC limit)
 - bycatch and genetics information from 2005-2007
 - AEQ model provided information on proportional stock of origin of bycatch, broken out to regional and western Alaska river systems
 - Coastal western Alaska is largest component of bycatch
- Since 2011: systematic sampling procedure for Chinook
 - including full census and increased observer coverage (min. 100%)
- genetic breakdown of samples presented each April
 - April 2013 is first time will receive complete annual report based on full census and systematic sampling protocol (for 2011)
- Best information on impact rate to western Alaska
 - bycatch was between 0.7% 2.4% of combined run sizes in 2011
 - See Stram and Ianelli paper from AYKSSI, December 2012

What action has the Council taken? Stock of origin research

GOA

- Very limited information to date
 - Insufficient samples for stock composition analysis
 - Indication of presence of stocks from limited samples (primarily from pollock Jishery) and coded wire tags
- Systematic sampling procedure now underway in pollock fishery (result of Council action)
 - Census from observed and unobserved pollock deliveries, but lower observer coverage than Bering Sea
- Genetic breakdown of available samples each April
 - awaiting 2011 results; 2010: stocks present predominantly Pacific Northwest, British Columbia, and coastal southeastern AK
- Full retention under review in non-pollock fisheries
 - Census sampling will likely not be possible, but other sampling methodology may be used.



What action is the Council taking? Chinook salmon bycatch reduction in other management actions

- Bering Sea chum salmon bycatch reduction
 - Measures to reduce chum salmon bycatch in pollock fishery need to be tempered by concurrent objective to not increase Chinook salmon bycatch
 - To date, measures under consideration have been shown to exacerbate Chinook bycatch reduction. Council is developing more adaptive approaches.
- Development of bycatch management tools for GOA underway
 - Council considering cooperative management and bycatch avoidance incentives for trawl fisheries
 - Necessary in context of Chinook salmon PSC limits as well as recent halibut and crab protections

