

C-3 Groundfish Specifications and  
Plan Team reports (Joint PT, BSAI  
and GOA)

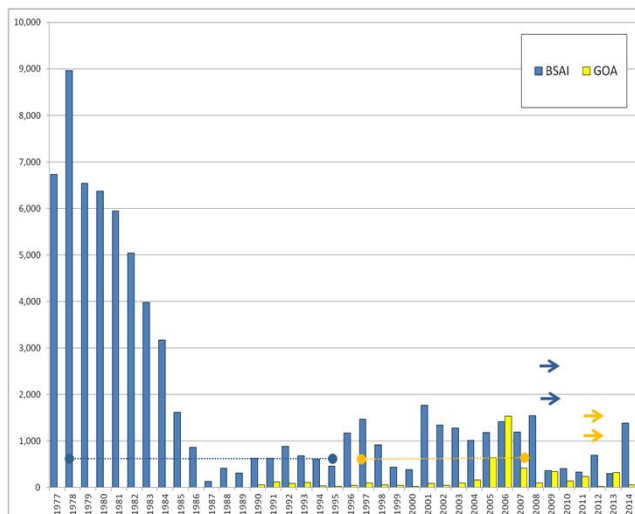
October 2014



**NOAA**  
FISHERIES

Report of the September  
2014 Joint Groundfish  
Plan Team meeting

## Squid harvest specification methods



## Squid harvest specification methods

- CIE review suggested that the management approach for squid should be similar in the GOA and BSAI
- Reviewers were skeptical of basing harvest specifications on catch time series in general, and the time periods used for squid catches in particular
- Three general possibilities for future management: 1) status quo, 2) identical Tier 6 approaches for GOA and BSAI, or 3) develop a new approach

## Squid harvest specification methods

- Tier 6 specifications problematic
  - Catch based
  - Time period
- Options to Tier 6 management
  - Other catch-based approaches
  - Fishing-mortality-times-biomass-based approaches
  - moving squid to the Ecosystem Component
    - would not limit squid catches but could prohibit directed fishing and require catch reporting and monitoring, and periodic review
- Teams recommend that consideration be given to moving squid into the Ecosystem Component category and, in the meantime, the Tier 6 approaches currently used in the BSAI and GOA continue



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## Report of the September 2014 BSAI Groundfish Plan Team meeting

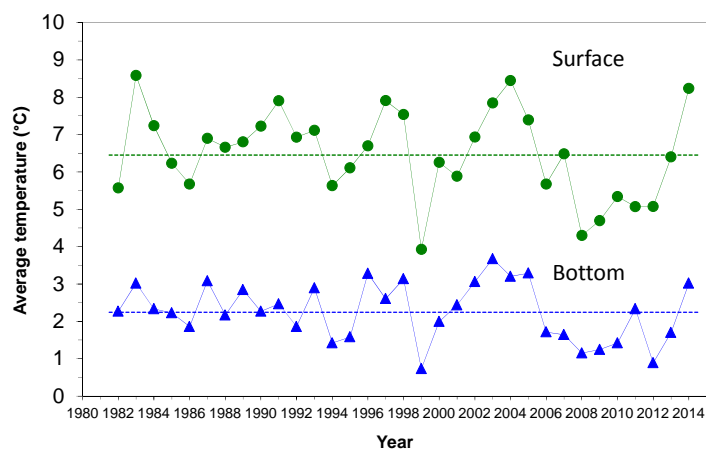
- Grant Thompson
- Alaska Fisheries Science Center

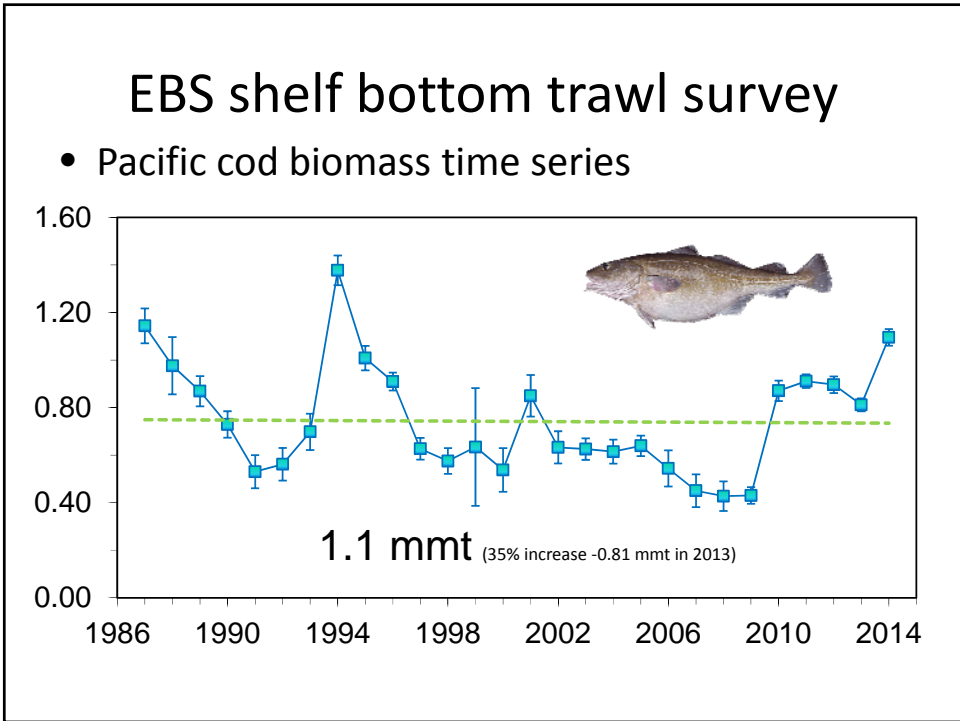
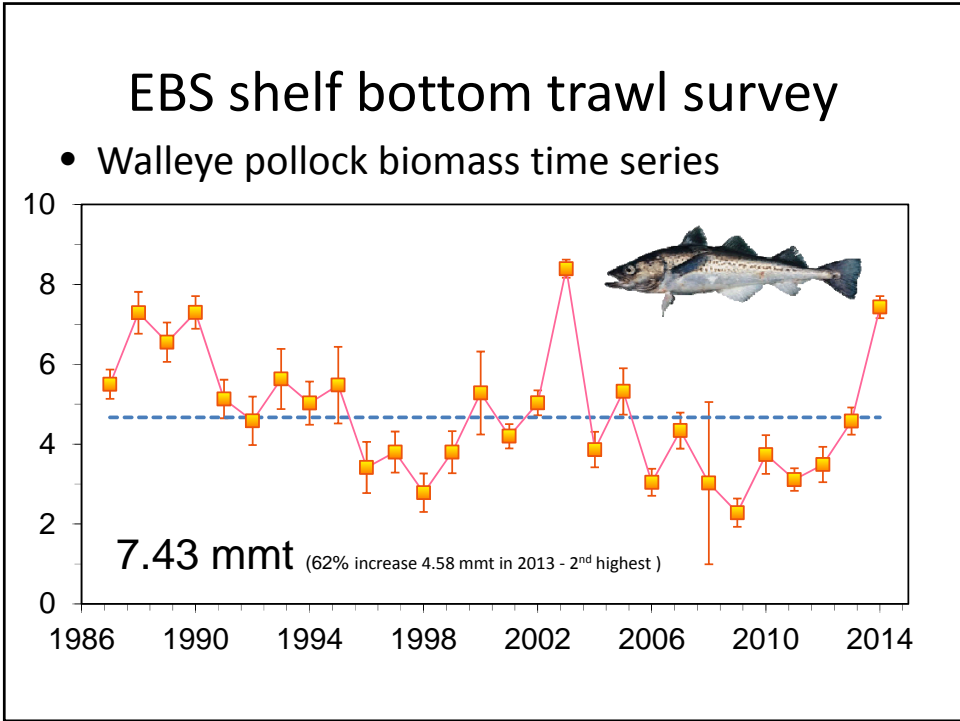
## BSAI Agenda

- Bering Sea Project update
- Bering Sea shelf bottom trawl survey
- Bering Sea acoustic-trawl survey
- Eastern Bering Sea Pacific cod
- Aleutian Islands Pacific cod
- Blackspotted/rougheye rockfish spatial analysis
- Shortraker rockfish biomass estimation
- POP models with spline-based selectivity
- Arrowtooth flounder stock structure
- Flathead sole
- Ecosystem considerations
- "Other rockfish" stock structure
- Alaska skate

## EBS shelf bottom trawl survey

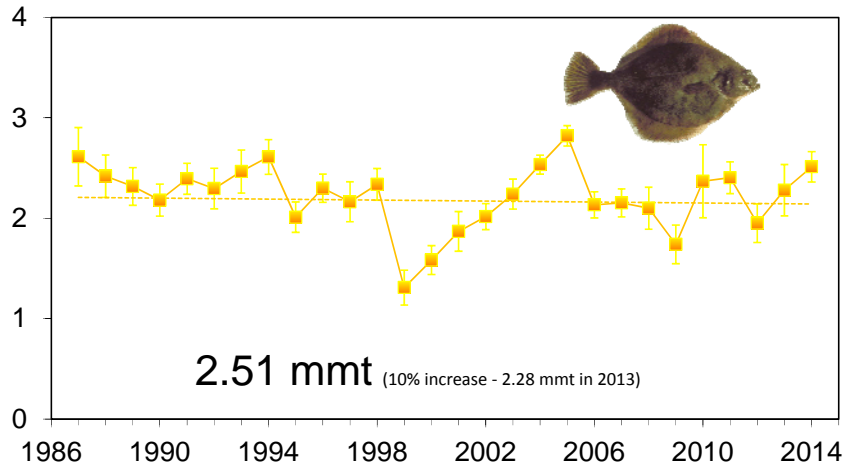
- Average sea surface and bottom temperatures





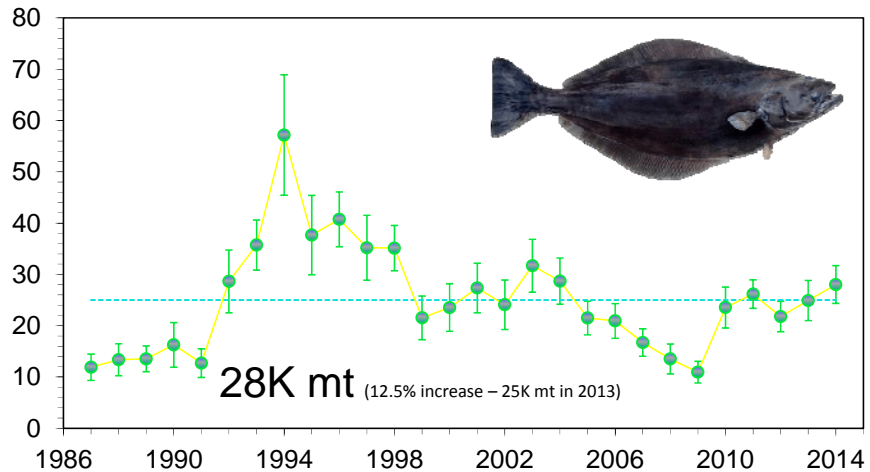
## EBS shelf bottom trawl survey

- Yellowfin sole biomass time series



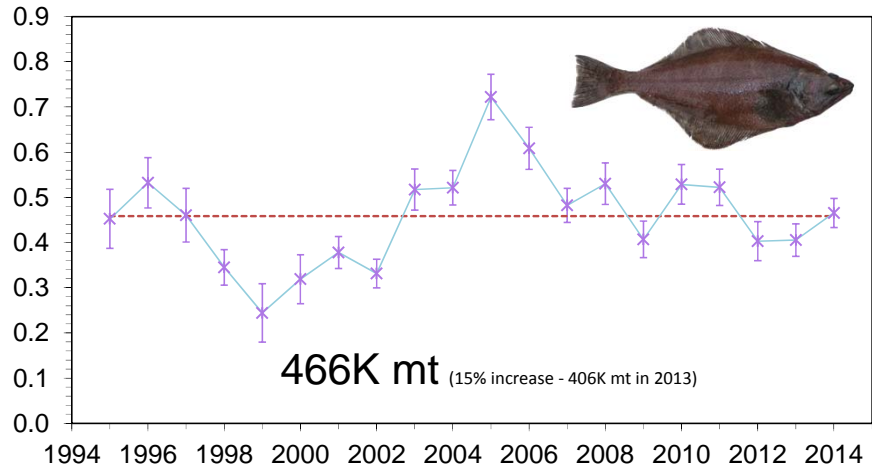
## EBS shelf bottom trawl survey

- Greenland turbot biomass time series



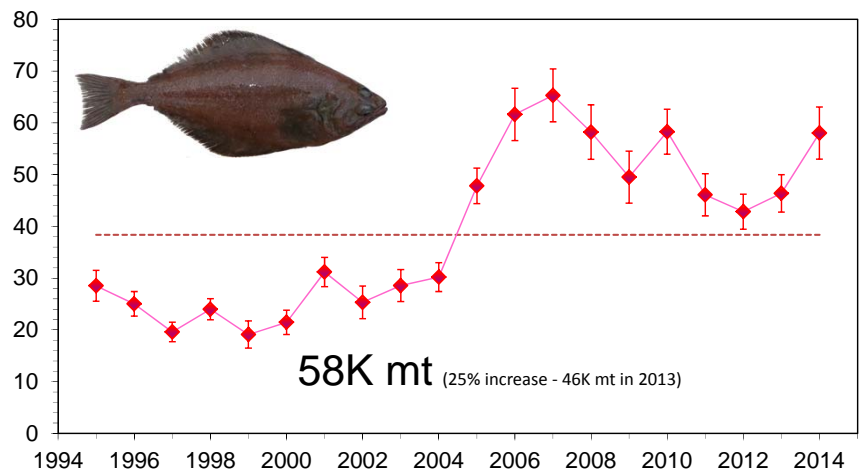
## EBS shelf bottom trawl survey

- Arrowtooth flounder biomass time series



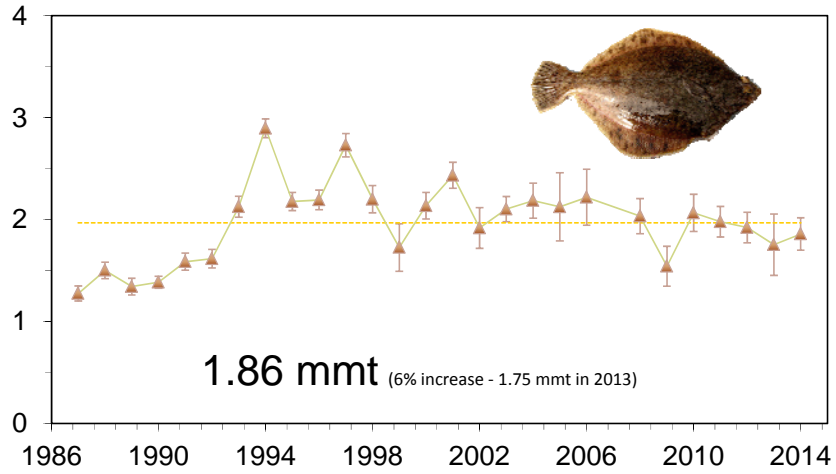
## EBS shelf bottom trawl survey

- Kamchatka flounder biomass time series



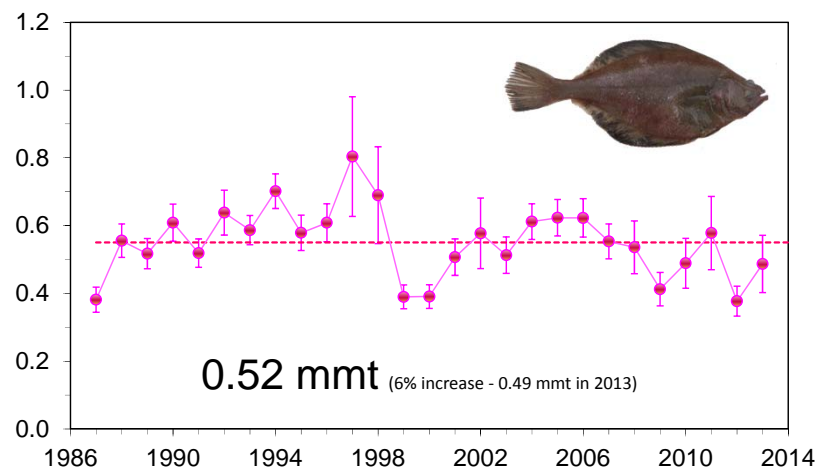
## EBS shelf bottom trawl survey

- Northern rock sole biomass time series



## EBS shelf bottom trawl survey

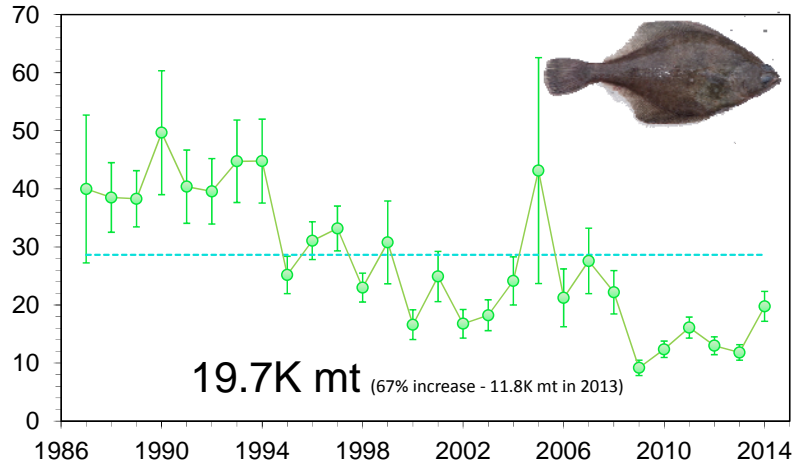
- Flathead sole biomass time series





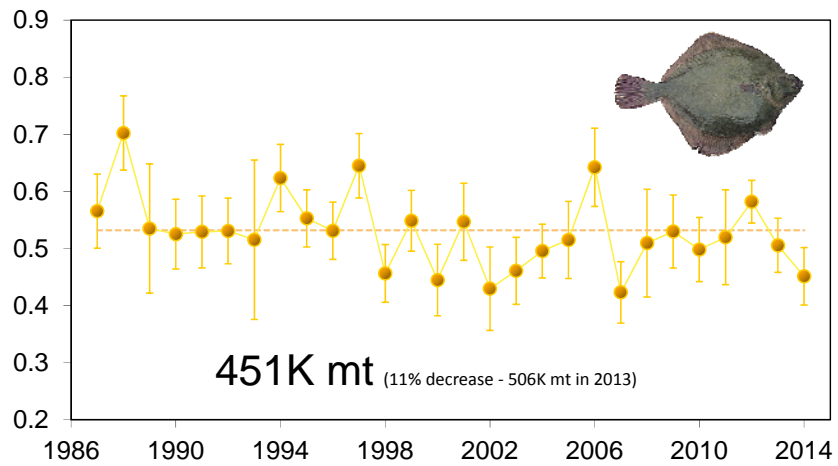
## EBS shelf bottom trawl survey

- Bering flounder biomass time series



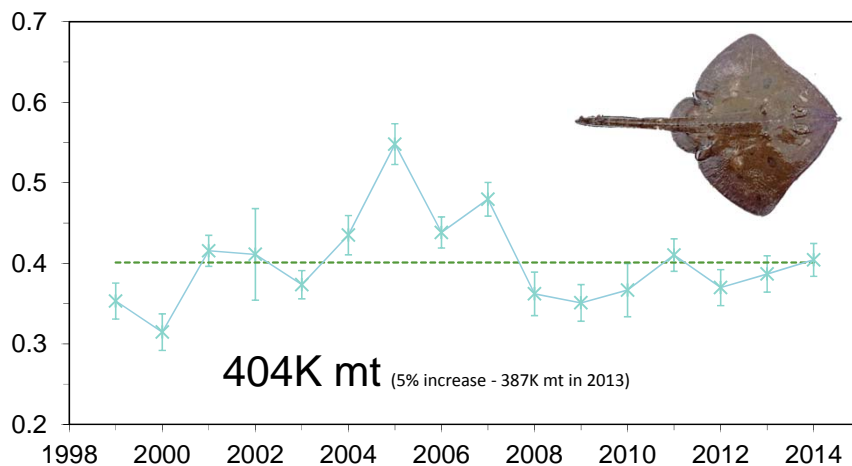
## EBS shelf bottom trawl survey

- Alaska plaice biomass time series



## EBS shelf bottom trawl survey

- Alaska skate biomass time series



## Blackspotted rockfish spatial analysis

- Update based on previous review.
- 2013 catch in WAI => exploitation rate since 2004.
- > genetic samples indicate previous relationship between genetic distance and geographic distance no longer statistically significant
- non*-genetic information continues to include high rates of exploitation of in the Western AI during the 1990s, followed by decreasing abundance and no replenishment from neighboring areas
  - Suggests some population structure on temporal scales relevant to management
- Team recommends continued annual reporting on the status of the population in each AI management area
- The Team continues to express concern regarding this stock complex
- Part of new 2013 Council policy of spatial management

## “Other rockfish” stock structure

- Dusky rockfish make up the majority of non-SST catch
- Dusky and harlequin rockfishes are the species that show the highest exploitation rates (catch divided by survey biomass)
- However, many of the non-SST exploitation rates exceed 1, suggesting that the survey does not sample these non-SST species adequately
  - Corroborated by large survey CVs for several species
  - Additionally, biomass estimates vary widely among the western, central, and eastern Aleutian Islands
- Potential over-exploitation in non-SST portion of the complex was noted in November 2013 (as in previous assessments)
  - Fishing fleet was made aware of the potential issue, and is attempting to reduce the catches of non-SST species

## “Other rockfish” stock structure

- Authors propose splitting complex and moving non-SST species to Tier 6, given their conclusion that these species lack reliable estimates of biomass
- If OFLs based on 1978-1995 average catch had been specified in the past, catch of non-SST species would have exceeded the OFL consistently since the mid-1990s
- Team discussion:
  - Difficult to lump all “other rockfish” species into one complex in light of their extremely different life history and ecology
  - Very high CVs may reflect a lack of vulnerability to the survey
- Team recommends further detailed examination of fishery catch data by subarea and season for the non-SST species
- Team recommends elevating this to “alert” status (on the monitor/alert/concern scale)




## September GOA groundfish plan team report

Report of the  
Gulf of Alaska Groundfish  
Plan Team meeting  
September 2014

**GOA Plan Team Members**

James Ianelli (co-chair)	AFSC
Diana Stram (co-chair)	NPFMC
Kristen Green	ADFG
Mark Stichert	ADFG
Jan Rumble	ADFG
Ian Stewart	IPHC
Leslie Slater	USFWS (joint)
Nancy Friday	NMML
Mike Dalton*	AFSC
Chris Lunsford	AFSC
Jon Heifetz	AFSC
Sandra Lowe	AFSC
Paul Spencer	AFSC
Craig Faunce	AFSC
Obren Davis	AKR

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- **Arrowtooth and Skate stock structure**
- **Sablefish maturity**
- PWS sablefish management issues
- **N/S rocksole assessment**
- **POP assessment**
- **P. cod assessment**
- **Shark assessment**
- **DSR: assessment and ASA model update**
- **RE/BS rockfish assessment**
- Ecosystem overview
- **GOA pollock apportionment**
- GOA pollock winter trawl survey update

## GOA Skate Stock Structure : Big skates and longnose skates

- **Big Skate**
  - ♦  $F > F_{abc}$  in CGOA during 2010-2013.
  - ♦ Spatial distribution of landings is fairly similar to the spatial patterns in survey CPUE.
- **Movement of big skate unknown.**
  - ♦ Tagging in British Columbia suggests big skates make only small, localized movements (~10 km)
  - ♦ Limited data available suggest gulfwide stock structure
    - ontogenetic movement from the east (few mature animals there)
    - Central and western GOA where big skates are mostly mature
    - Area-specific ABCs seems appropriate due to differences in size and perceived movement.

## Longnose skates

- $F/F_{abc}$  exceeded 1.0 in the WGOA in 2009-2010, 2013 and EGOA\_2 (640/650/649/659) in 2013
- **Kodiak center of landings**
  - ♦ Disproportionate to the survey CPUEs
  - ♦ Survey biomass increased in all areas,
- **Potential for separation of stocks in the GOA [research priority]**
  - ♦ The use of area-specific ABCs appears warranted
    - If better evidence of discrete longnose stocks become available it may also be appropriate to define area-specific OFLs.
  - ♦ The problem of unknown stock structure is exacerbated in longnose skates due to the high concentration of fishery removals and their vulnerable life history strategy.



## GOA Skate MRA

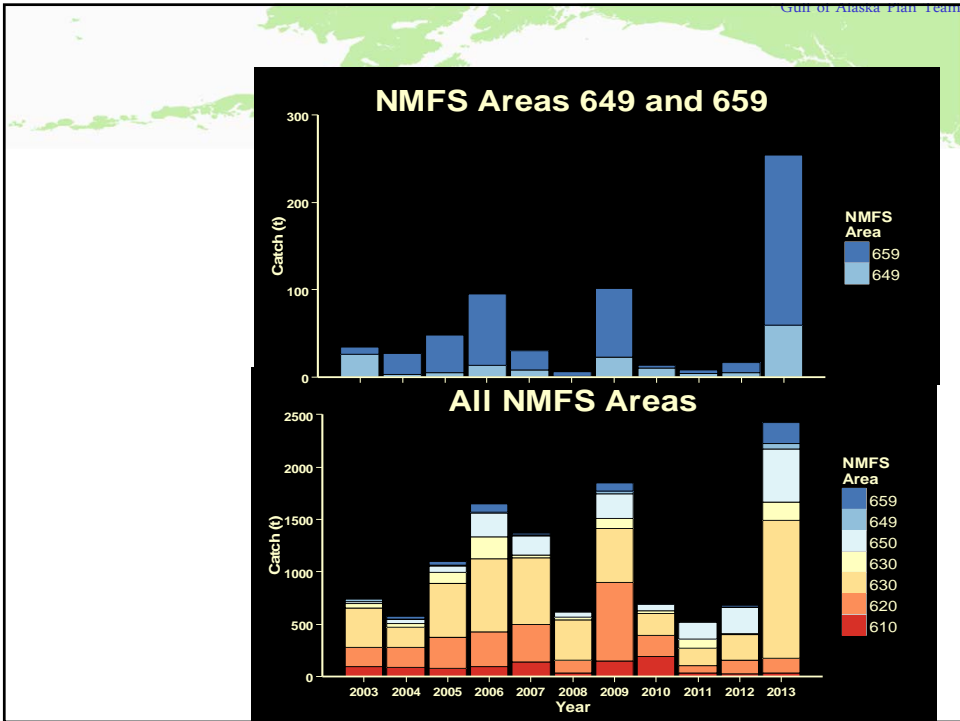
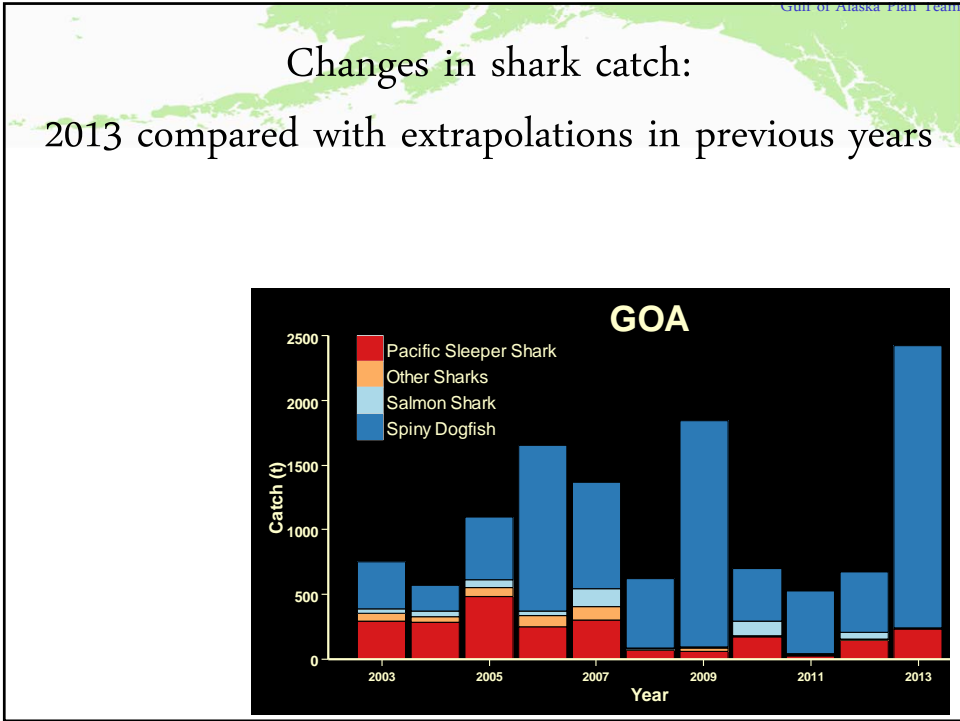
- **Reduction of MRAs provide no additional benefit to the skate populations**
  - ♦ Under the assumption of 100% mortality there is no conservation benefit to doing this
  - ♦ The stock assessment author and the Team continue to raise concerns regarding catch > ABC in some areas, particularly for Big skates in the CGOA.
  - ♦ Regardless of the range of mortality rates evaluated, catch remained > ABC in the CGOA.
  - ♦ The Team noted that the modification in the MRA may not address any of the Team's previously discussed concerns regarding the impact of catch exceeding ABCs in some areas
    - Likely to increase discards while overall catch remains the same



## Shark assessment issues for 2014

### 4 issues requested by SSC

- Large increase in the 2013 shark catch data
- Treatment of catch in inside waters (Areas 649/659).
- Connectivity of shark across regions
- Tier 6 specifications for sharks.





## 2013 catch comparison; influence on OFL and ABC


- ◆ Increase in catch in 2013 at least partially due inclusion of IFQ halibut fishery
- ◆ 2013 not comparable to past
- ◆ Catch in 649/659 ~3-10% of catch in GOA
- ◆ Most catch is spiny dogfish (tier 5). Complex OFL/ABC dominated by spiny dogfish
- ◆ Catch does not count against TAC
- ◆ Adjustments to catch history will have small impact on complex ABC/OFL



## Shark stock connectivity


- Genetics show that spiny dogfish and Pacific sleeper sharks do not have distinct stocks within the North Pacific Ocean
- Tagging data shows both species moving into and out of 659 and into 649 (tags were not released inside 649)
- Stock structure template 2012 concluded:
  - ◆ no biological justification for managing the shark species as separate stocks within the GOA (including areas 649/659).





▪ **Plan Team recommendation**

- ◆ That both the shark and skate assessments include a table of catches in inside waters for an historical time frame as available.
- ◆ If survey data exist in those areas then those data should also be included in the assessment.
- ◆ Comparison of catch estimates with HFICE
  - Also suggested that the authors look into the feasibility of establishing discard mortality rates for shark species and summarize what data and studies have evaluated this



**GOA pollock allocation**

- ◆ Only species (in GOA) where NMFS authorized to reallocate TAC amongst areas and seasons
- ◆ 50CFR 679.20(a)(5)(iv)(B) allows unused pollock TAC to be reallocated if a seasonal allocation is not harvested
- ◆ Reallocation to other areas within the year can allow for an area-specific ABC to be exceeded (TAC=ABC)
- ◆ Consideration of designating sub-area apportionments in harvest specifications not as ABCs but sub-area ABCs (or sub-area ACLs) to correct any perception that the ACL has been exceeded due to this reallocation

