



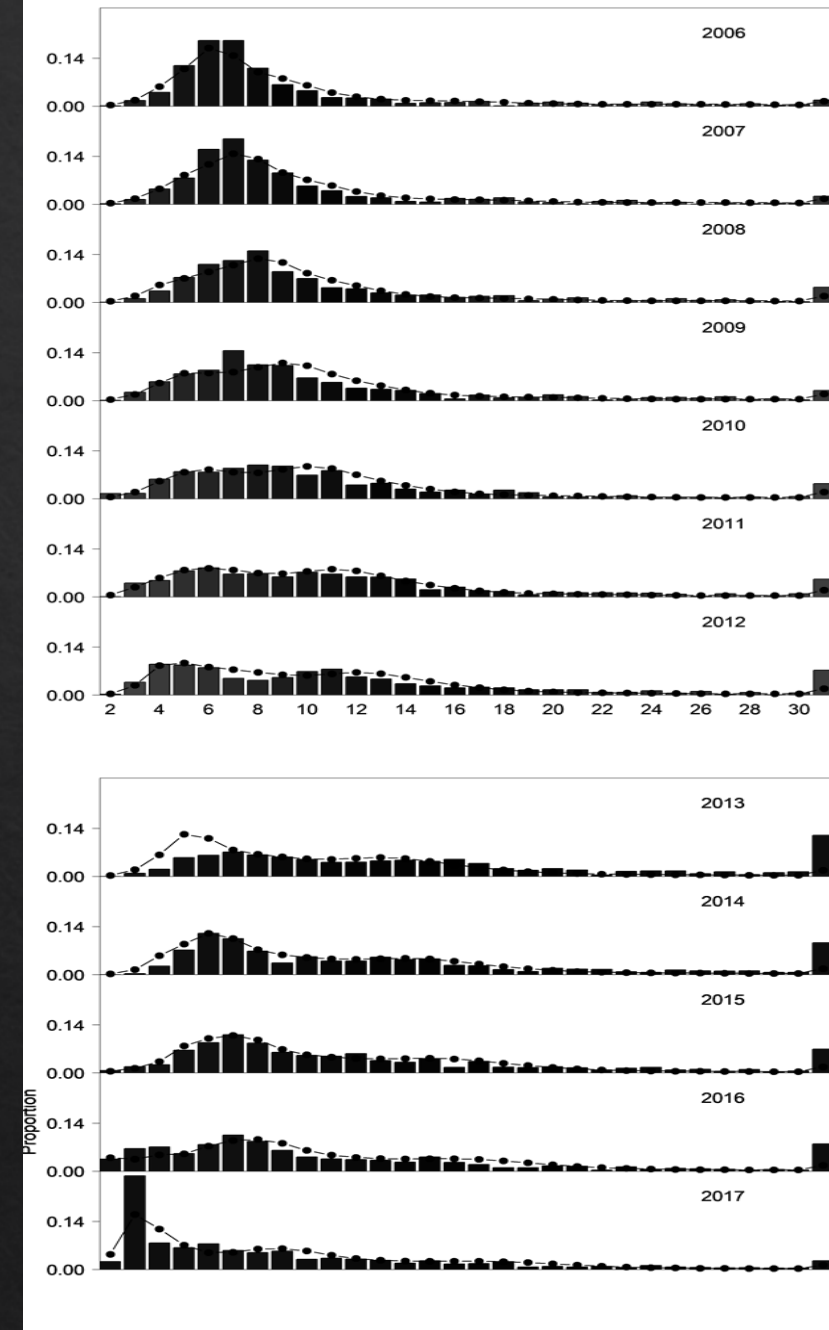
Source: <https://www.seafoods.com/>

# Sablefish Discarding Allowance

Discussion Paper for December 2019

# Background

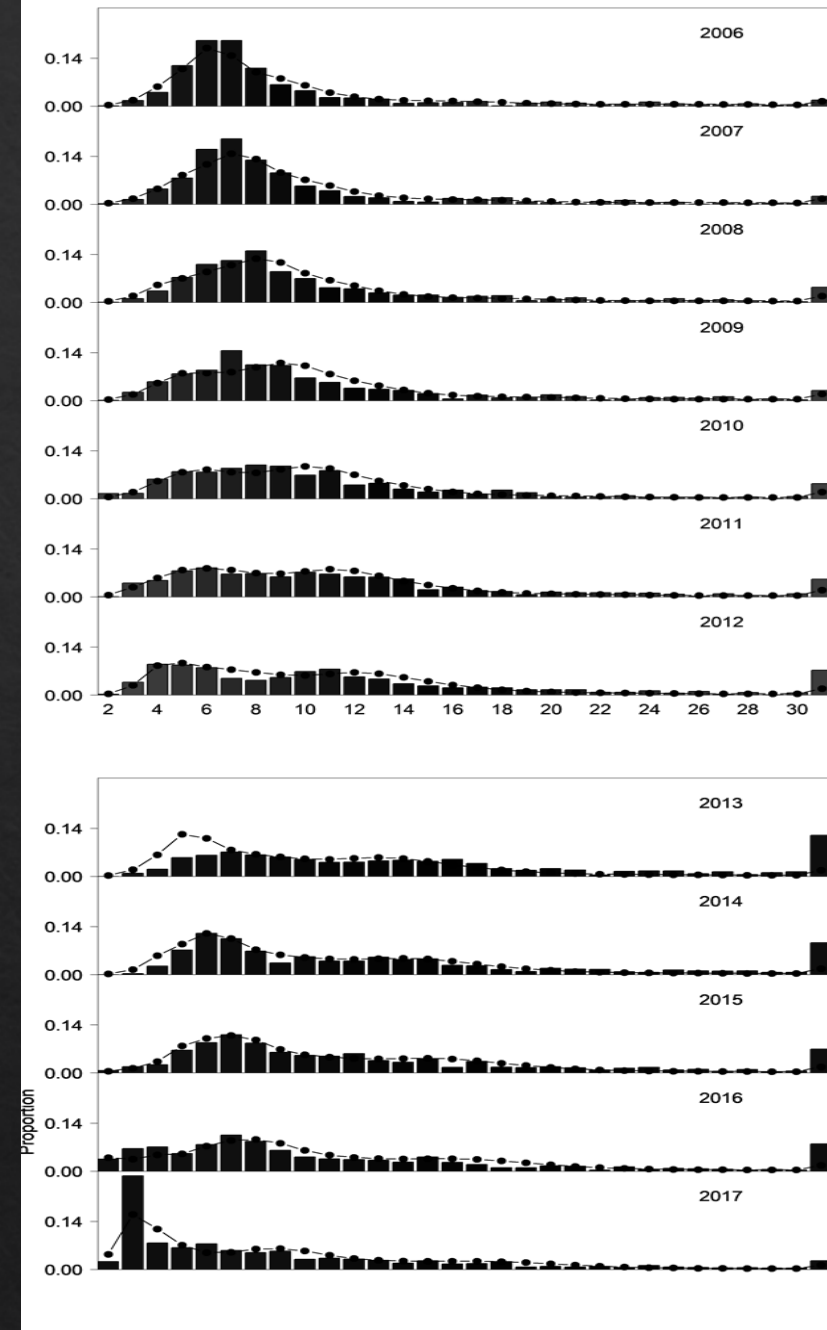
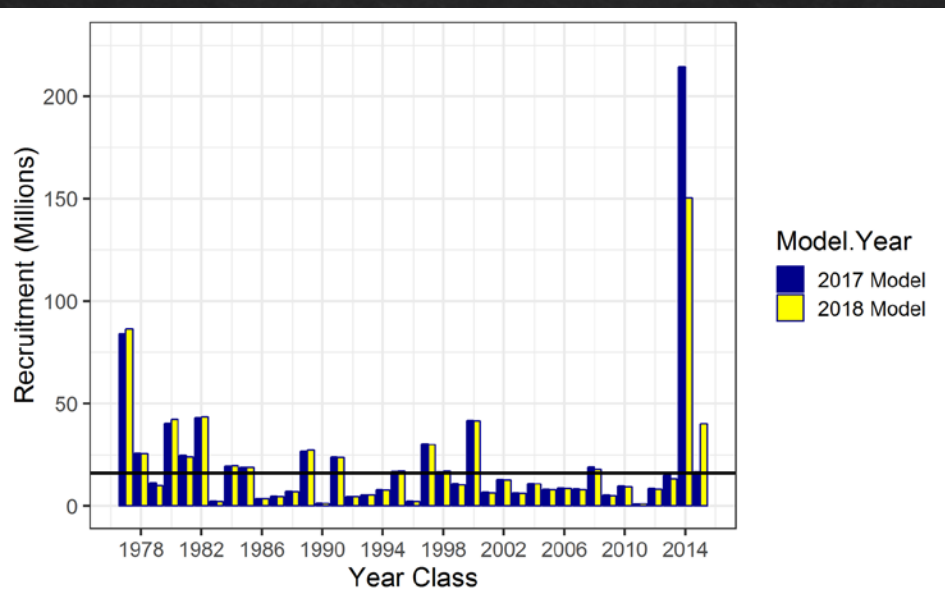
- Fixed gear IFQ fishery (80-90%)
- No Discarding
- Trawl MRA fishery (20-10%)
- Discarding with 100% DMR



Figures from 2018 SAFE

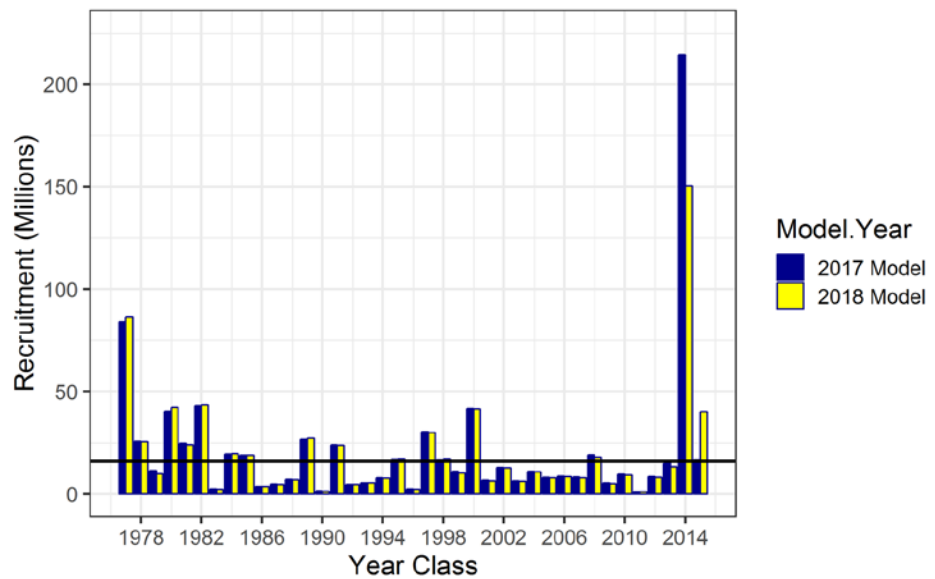
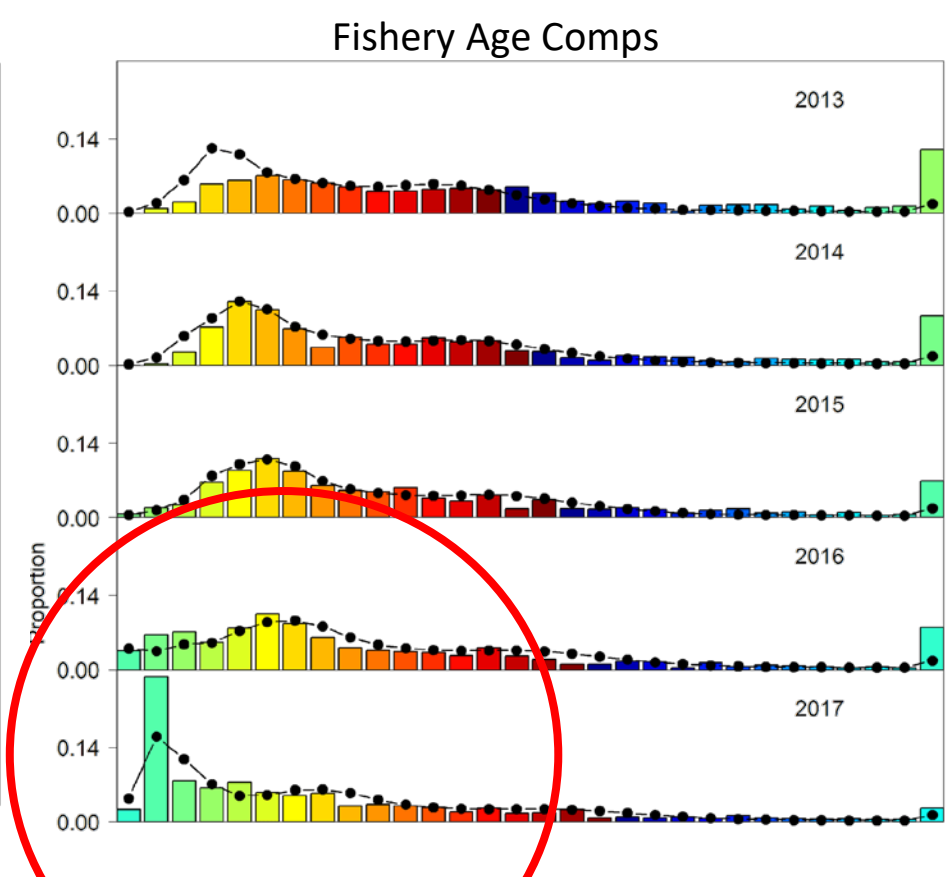
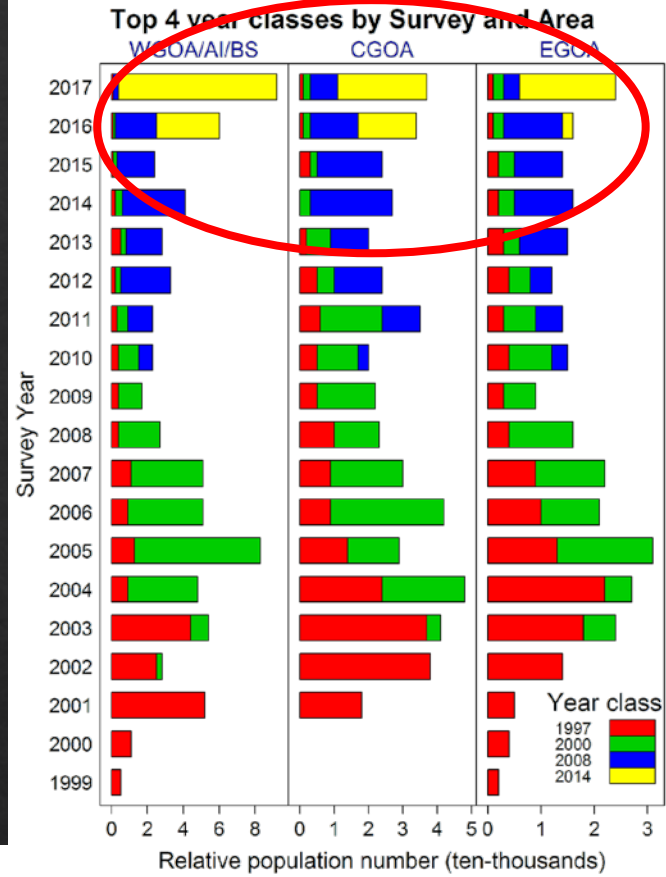
# Background

- 2014 Year Class
- 7.5 x average year class



Figures from 2018 SAFE

# Background



# Issues for 3rd Discussion Paper





- Voluntary versus mandatory release of sablefish
- Single size limits versus area specific size limits
- Discard accounting relative to ABC and TAC
- Proxy DMR options at the initiation of sablefish discarding
- Gear specific DMRs
- Concerns related to monitoring and enforcement
- Implications on stock abundance and allocations

# Issues for 3rd Discussion Paper





- Voluntary versus mandatory release of sablefish
- Single size limits versus area specific size limits
- ~~• Discard accounting relative to ABC and TAC~~
- ~~• Proxy DMR options at the initiation of sablefish discarding~~
- ~~• Gear specific DMRs~~
- ~~• Concerns related to monitoring and enforcement~~
- Implications on stock abundance and allocations

# Voluntary vs mandatory release

- *Voluntary*

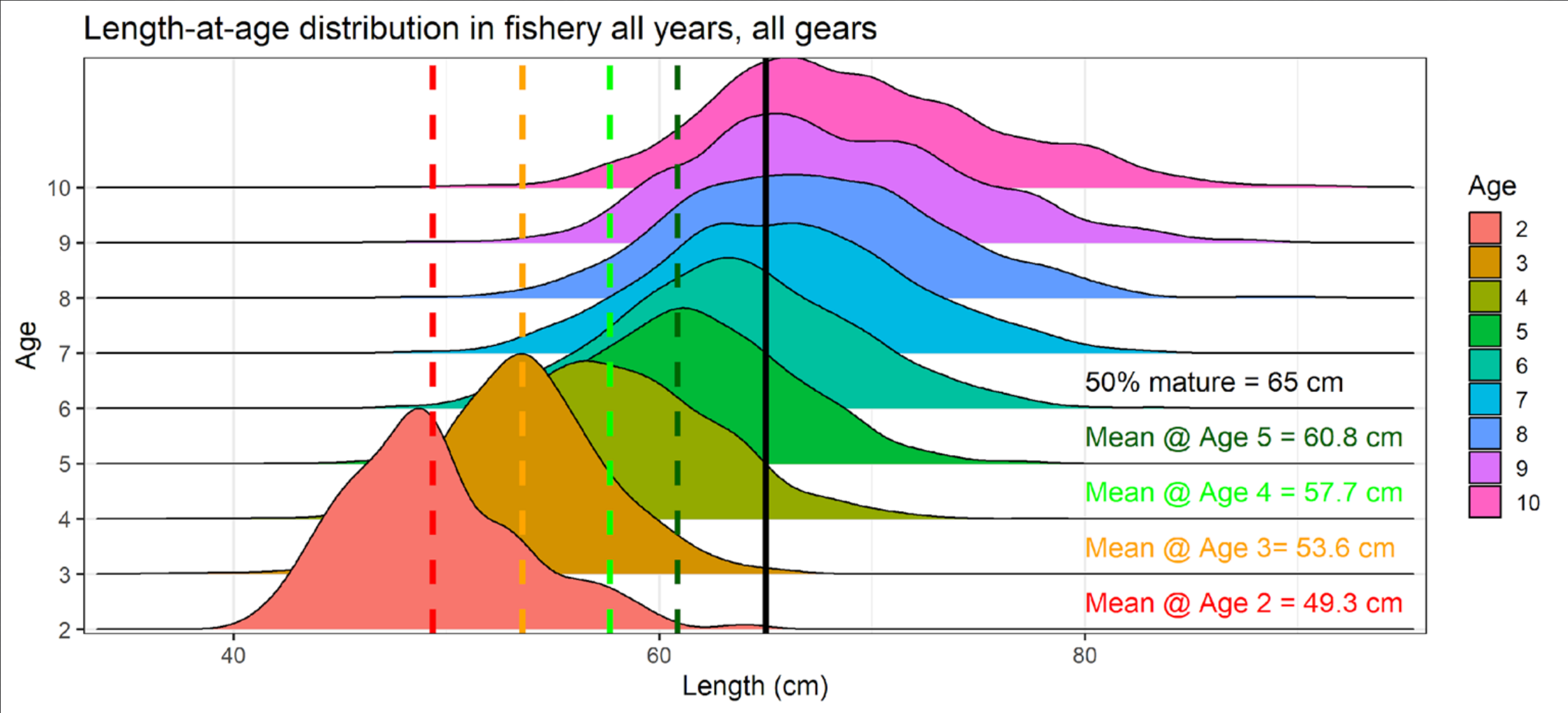
- Fishery 
- Enforcement 
- Monitoring 
- Uncertainty 

- *Mandatory*

- Fishery 
- Enforcement 
- Monitoring 
- Uncertainty 

Requires Size Limit

# Voluntary vs mandatory release








# Voluntary vs mandatory release

Question for the Plan Teams:

- Recommend ruling out voluntary discarding?
- Other recommendations?





# Area specific size limits

- Area-specific

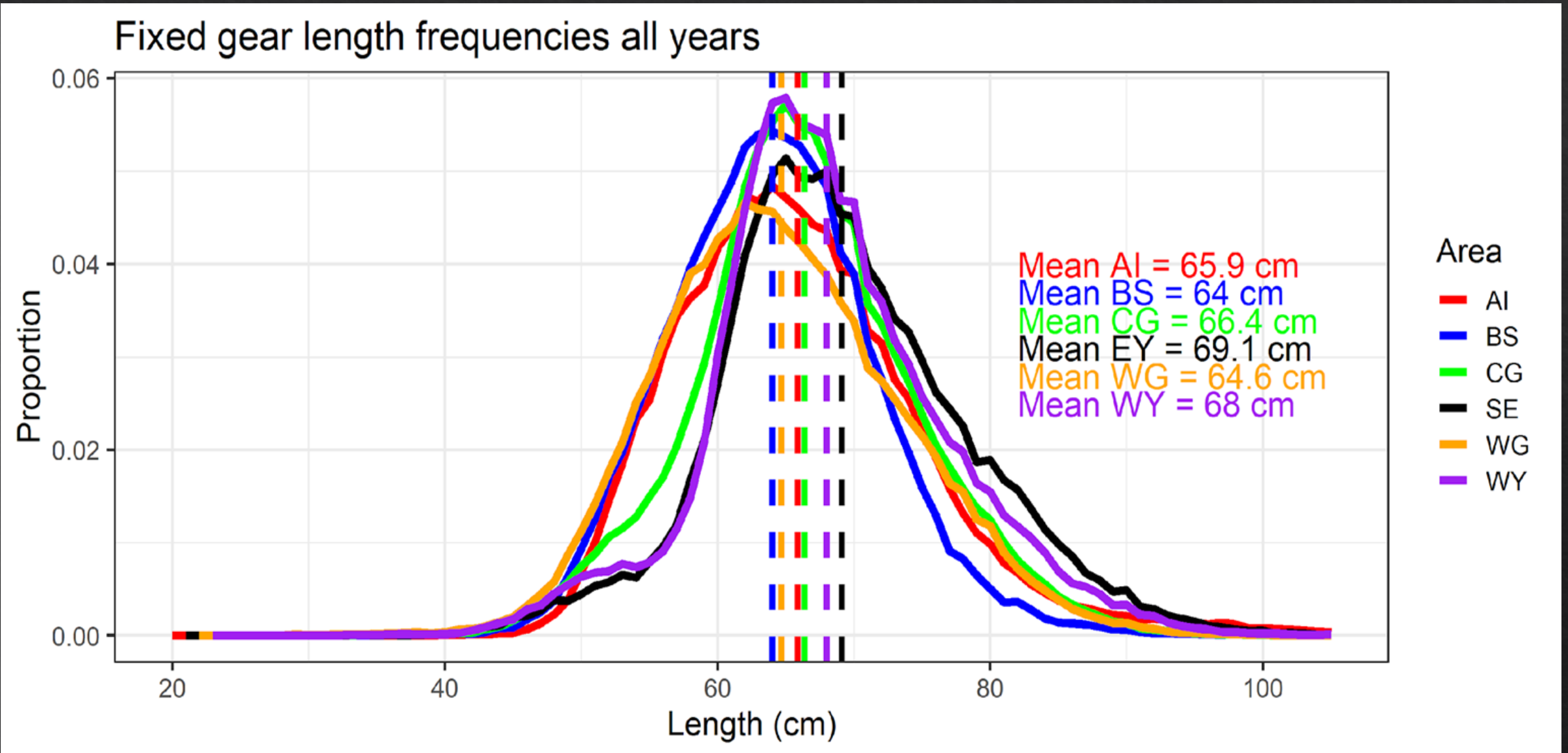
- Fishery 
- Enforcement 
- Monitoring 
- Uncertainty 

“Misses the point...”

- Single

- Fishery 
- Enforcement 
- Monitoring 
- Uncertainty 

# Area specific size limits



# Area specific size limits

Question for the Plan Teams:

- Recommendation on area-based size limits?
- Other recommendations?

# Discard estimation sources

- Survey
  - Selectivity inconsistencies
- Observer and EM data
  - Size only avail. from observers
  - Extrapolation issue if size assumed in EM
- Logbooks
  - Non-starter (need real time)

# Discard estimation sources

## Questions for Plan Team

- Recommendation on use of logbooks for discard estimates?
- Preferred source of estimates?

# Incorporating uncertainty in discard rate estimates

- No variance estimate for landings or discards
- Simulations possible
- Precautionary DMR and well-considered discard estimates is best option
- Focus on discard estimation methods to address

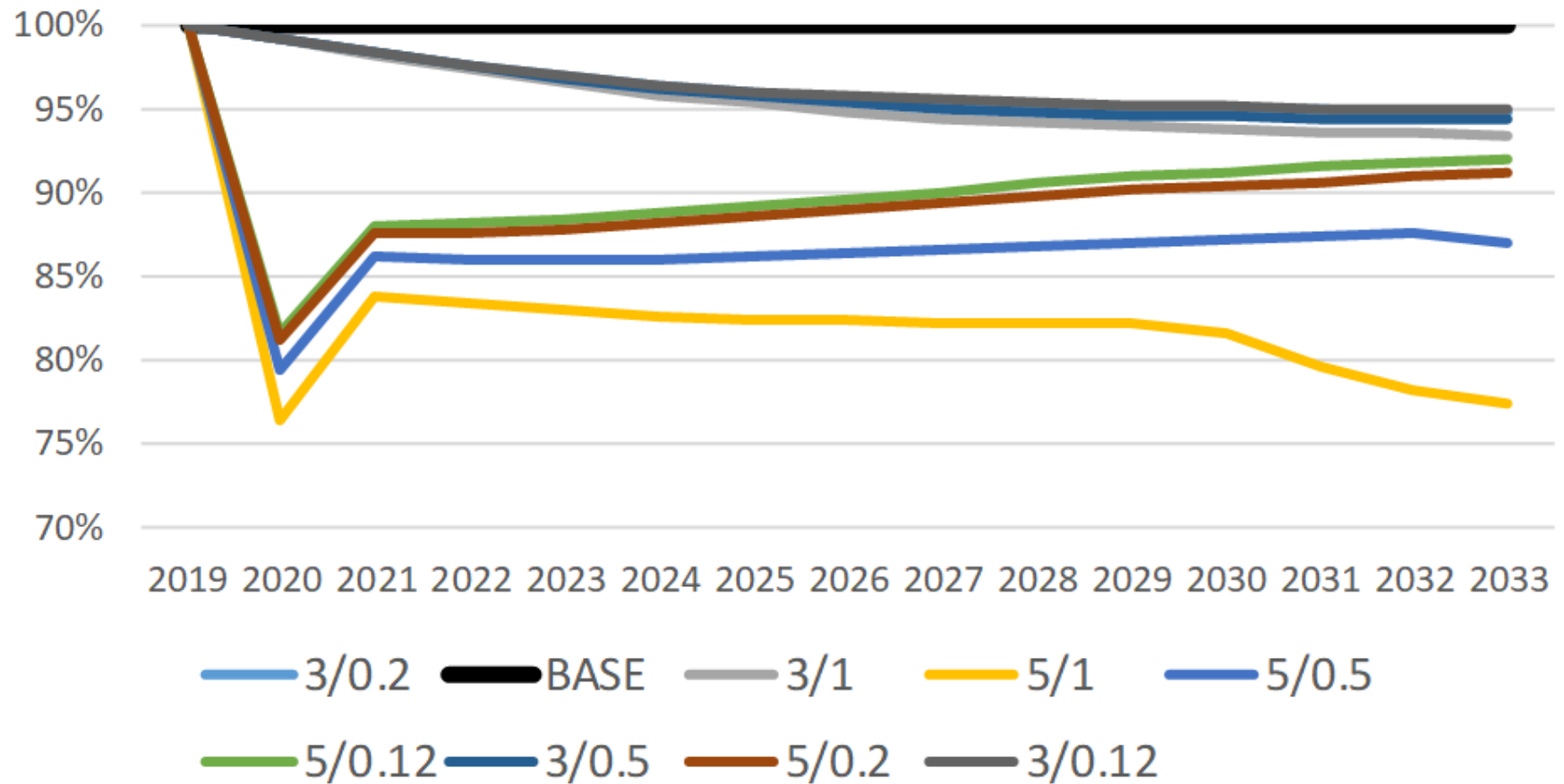
# Incorporating uncertainty in discard rate estimates

- Comments?



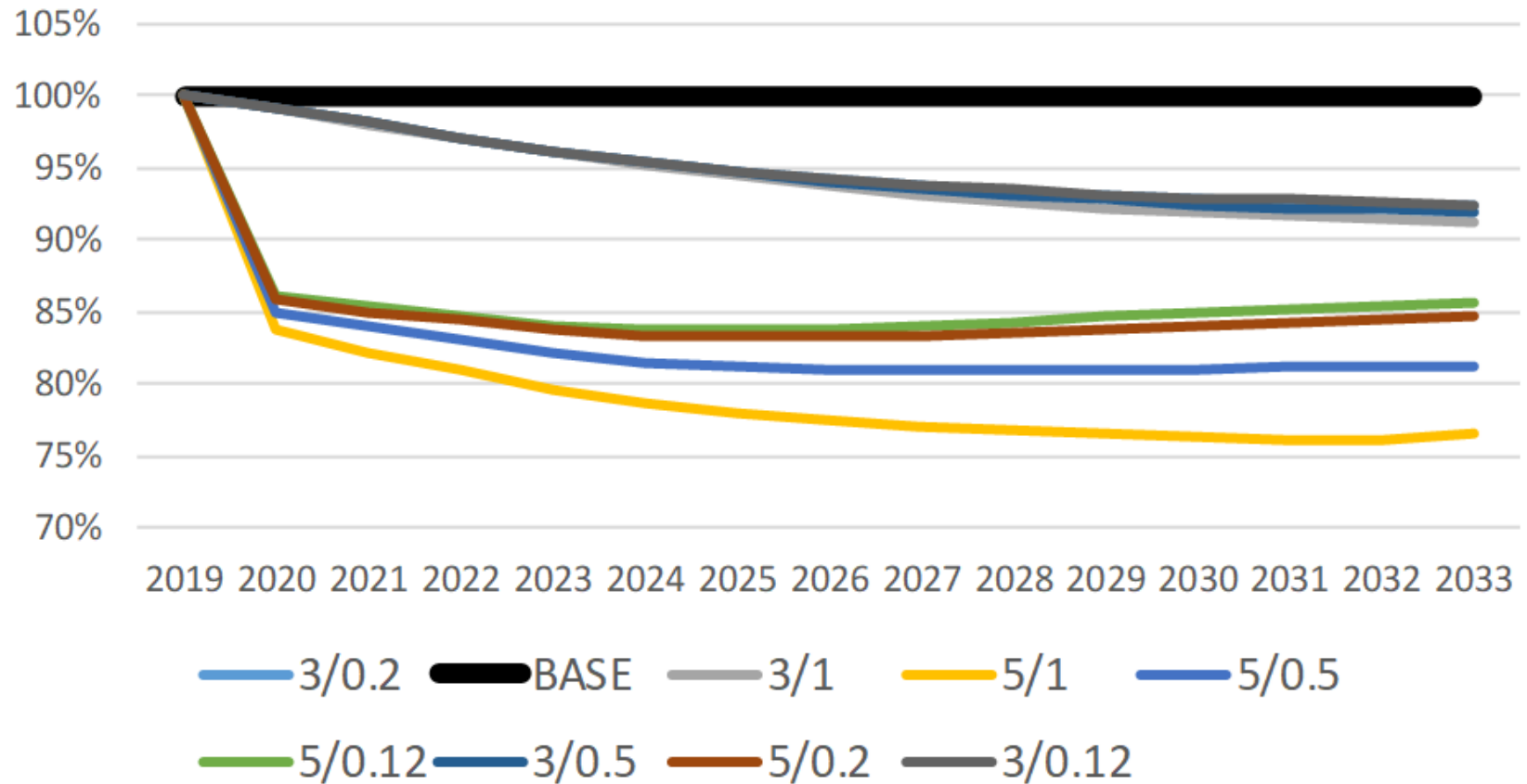
Extra Slides

## Comparison of ABC trajectories at DMR ages



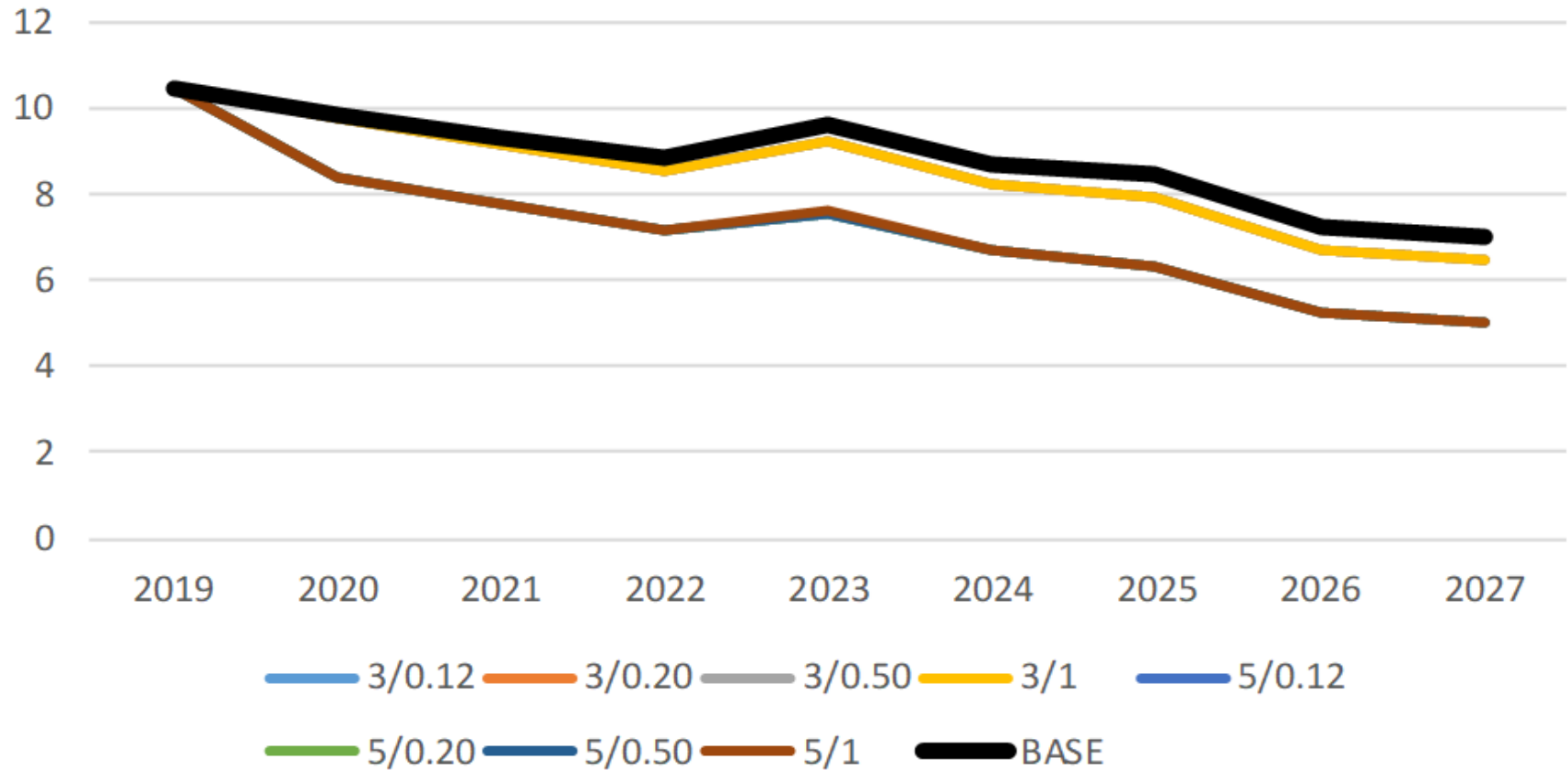
1<sup>st</sup> number is age of discarding and 2<sup>nd</sup> number is discard mortality rate (e.g. 5/0.12 means all ages 5 and below are discarded with a DMR of 0.12)

## Comparison of SSB trajectories at DMR ages



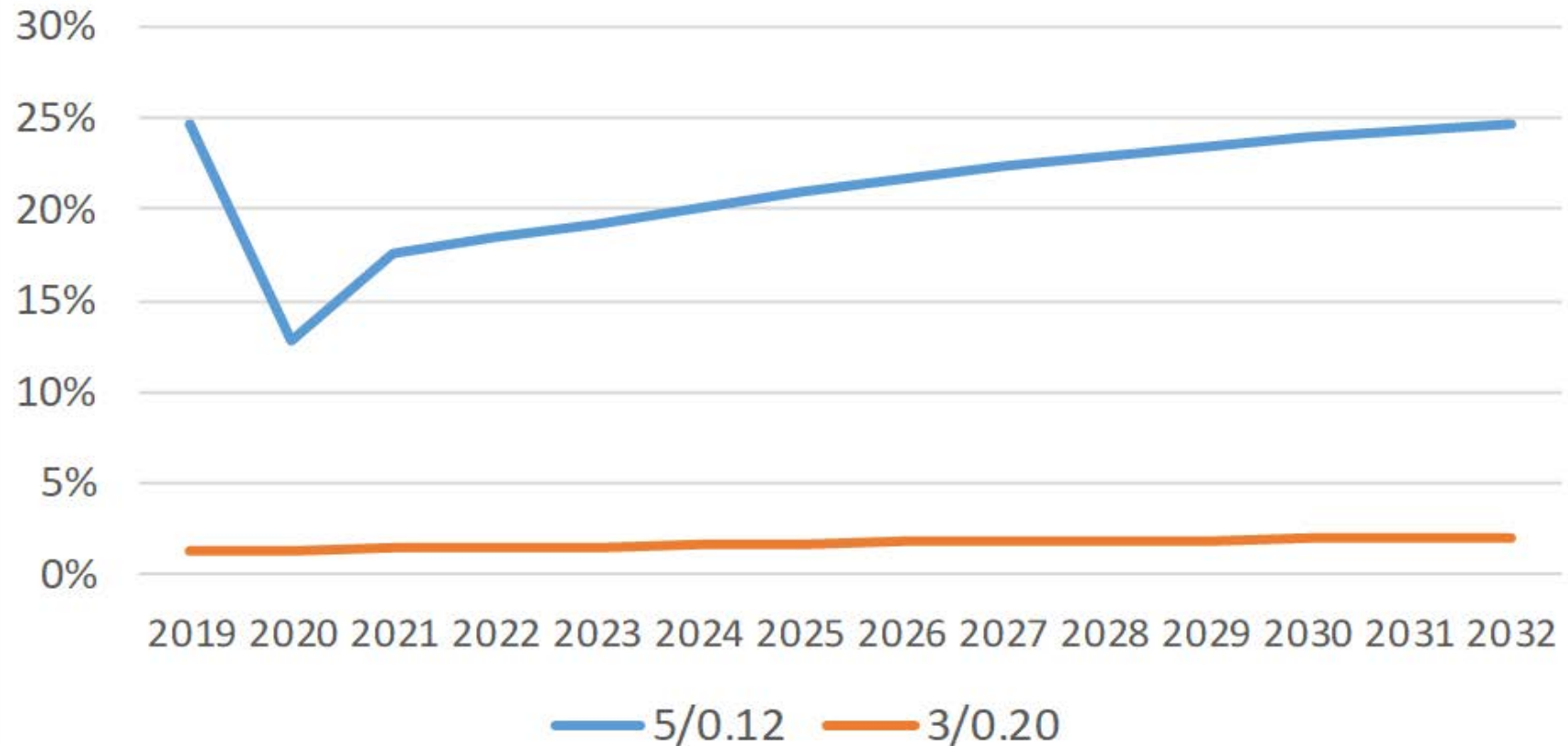
1<sup>st</sup> number is age of discarding and 2<sup>nd</sup> number is discard mortality rate (e.g. 5/0.12 means all ages 5 and below are discarded with a DMR of 0.12)

## Millions of 15+ year olds



1<sup>st</sup> number is age of discarding and 2<sup>nd</sup> number is discard mortality rate (e.g. 5/0.12 means all ages 5 and below are discarded with a DMR of 0.12)

## Increase in fishing mortality on older ages



1<sup>st</sup> number is age of discarding and 2<sup>nd</sup> number is discard mortality rate (e.g. 5/0.12 means all ages 5 and below are discarded with a DMR of 0.12)

## Goals

- Rule out some management options
- Identify concerns
  - Uncertainty?
  - Impacts to stock?
- Issues to consider