

# GOA Thornyhead Rockfish



- Tier 5 species – represented by SST (idiots)
  - Following the prioritization process, TH remain on biennial schedule, with a full assessment produced in even years and no assessment produced in odd years
  - HOWEVER- we present a partial assessment because the ABC has been exceeded in the past in the WGOA and because trawl survey biomass estimates have often shown extreme variability between surveys
- **New Data:** 2017 trawl survey biomass
  - Exploitable biomass estimation and harvest allocation were provided using the random effects model, fit with 1984-2017 trawl survey biomass and uncertainty estimates
  - New exploitable biomass: 90,570 t
  - **4% increase in exploitable biomass** from previous estimate in 2016 assessment
- **Catch Update** (October 17, 2017)
  - **2017 catch down 19%** from 2016
  - This is <50% of gulfwide ABC

# GOA Thornyhead Summary



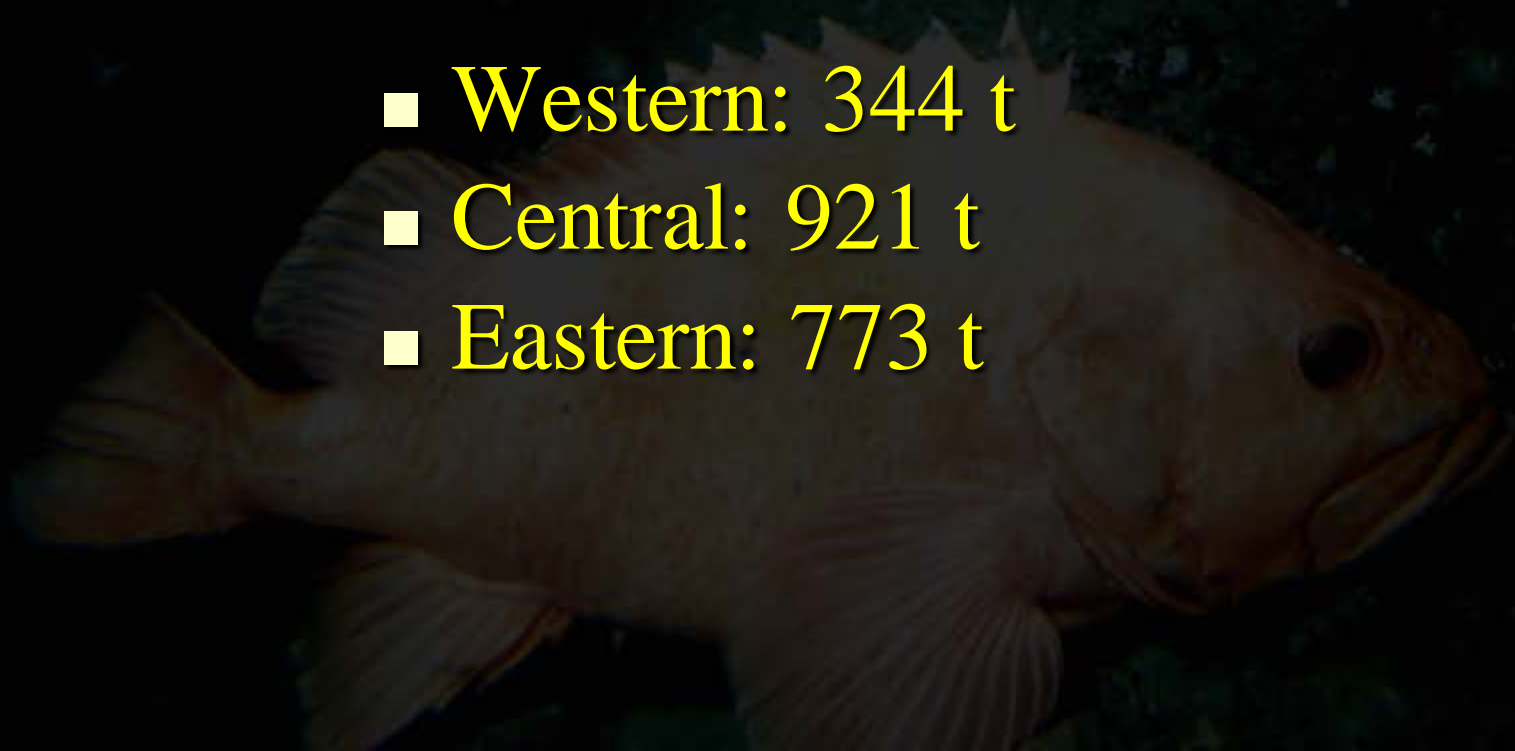
- GOA thornyhead recommendations for 2018 (tier 5):
  - $F_{OFL} = M = 0.03$
  - $B$  (exploitable biom.) = 90,570 t
  - **OFL** =  $90,570 \times 0.03 = \mathbf{2,717\ t}$
  - $F_{ABC} = 0.75 * M = 0.0225$
  - **ABC** =  $90,570 \times 0.0225 = \mathbf{2,038\ t}$   
(↑ 3.9% from 1,961 t in 2016 & 2017)

# Thornyhead: Apportionment of ABC for 2017

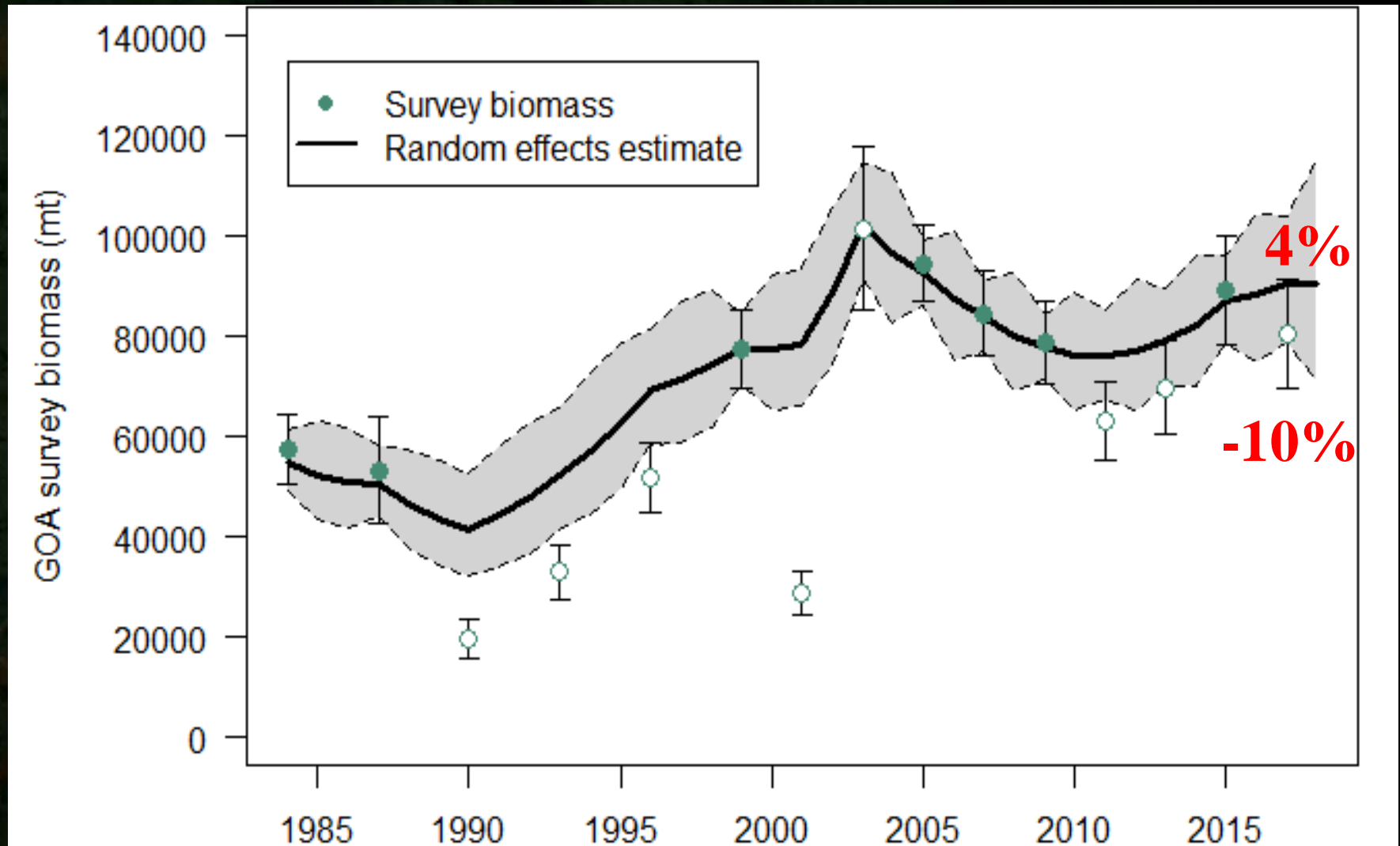


Apportionment is based on random effects estimation of biomass by region, fit to 1984-2017 trawl survey biomass estimates

- Western: 344 t
- Central: 921 t
- Eastern: 773 t



# Estimated Exploitable Biomass via Random Effects Model

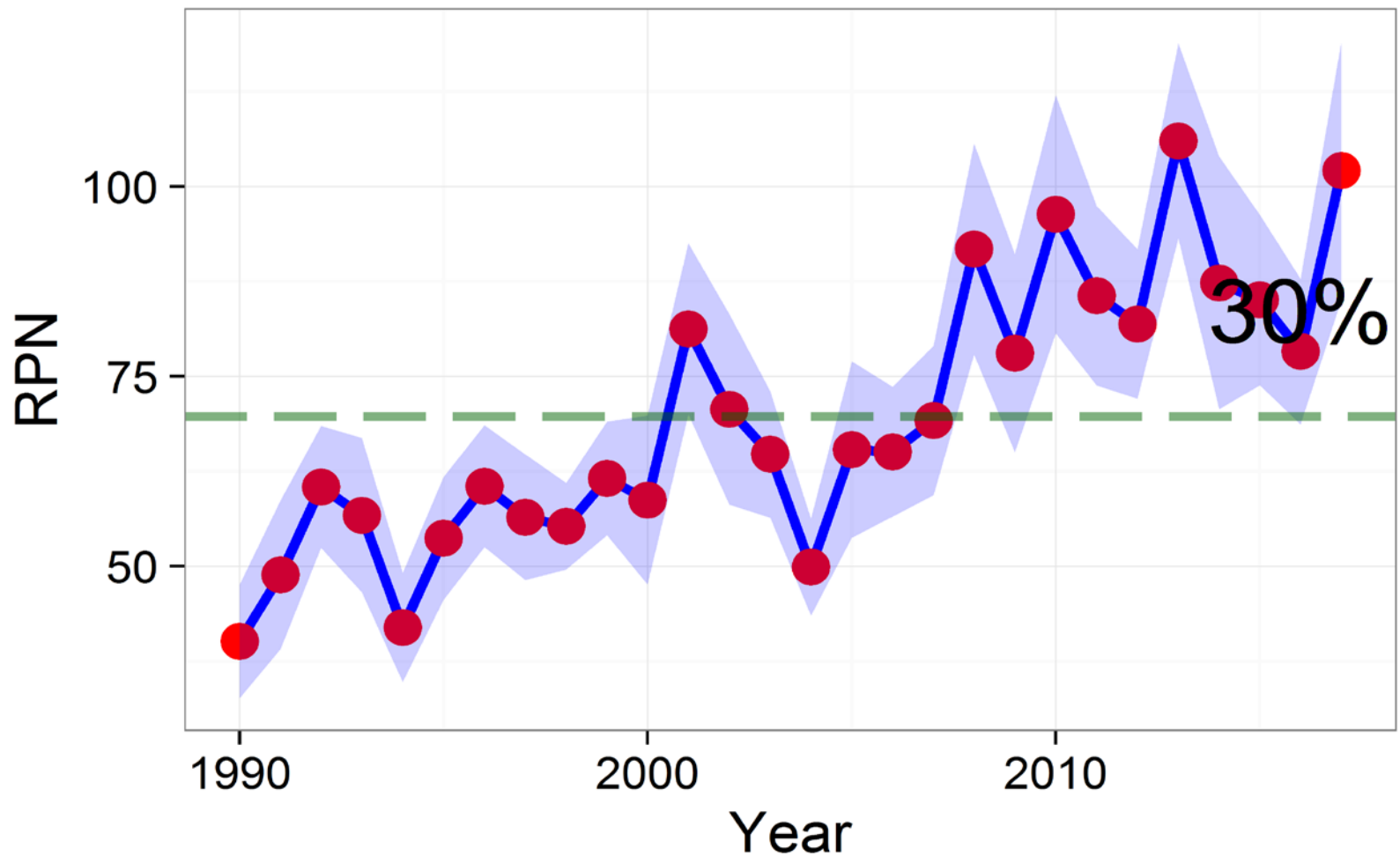




# LL Survey RPNs



GOA Thornyhead longline survey RPNs w/ 95%



# Thornyheads: Catch/Biomass

