

AIGKC TAC 2026/27

June 25, 2026 – 10 AM Alaska (11 AM Pacific)

Join Zoom Meeting

<https://us06web.zoom.us/j/83389140667?pwd=XASQZB8dpdVeJNfrslsUeOkCUQ44cH.1>

Meeting chat link

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Meeting ID: 833 8914 0667

Passcode: 289273

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2026/27 TAC

EAG: 3,184,000 lb (Full computed)

WAG: 1,558,000 lb (max 15% harvest strategy)

2026 Stock Assessment

Model 23.1c – 2024 & 2025 accepted model

Model 26.0 – ST GLMM CPUE standardization

Model 26.0a – Model 26.0 starting in non-equilibrium, equally weighted catch data

Model 26.1 – Model 26.0a with time varying selectivity during post rationalization, based on vessel dynamics

CPT / SSC / Council adopted 26.0a

- Model 26.1 fits data slightly better, but should see a better signal from fit to size composition, not just index data, needs more refinement

Model Uncertainty

Model issues mostly stem from nature of fishery dependent data, primarily in EAG

- CPUE is imperfect indicator of abundance, standardization attempts to account for influential factors, cannot resolve everything

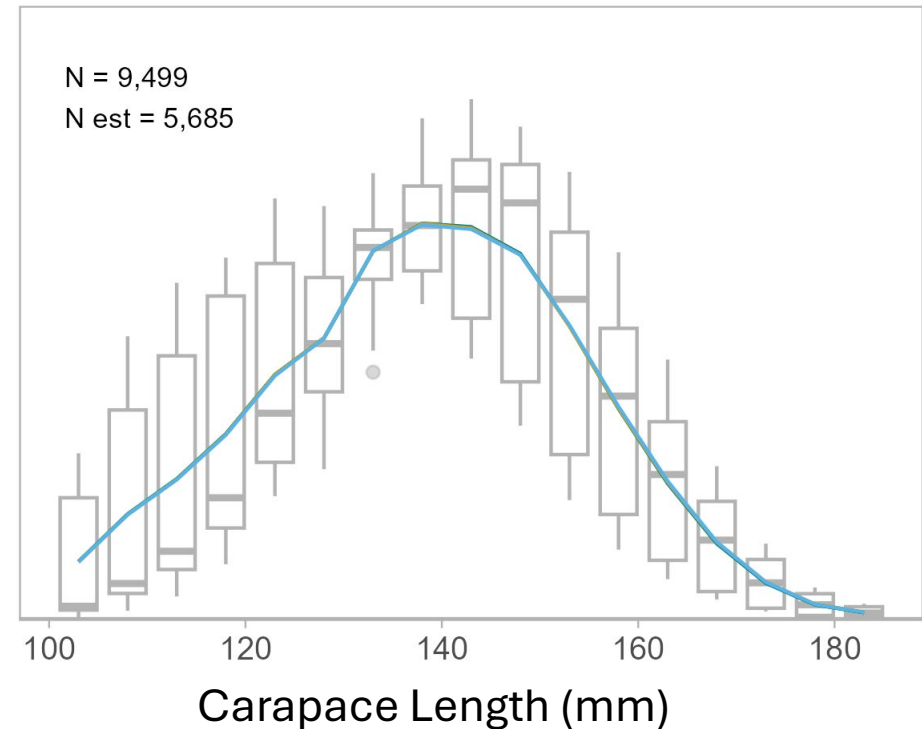
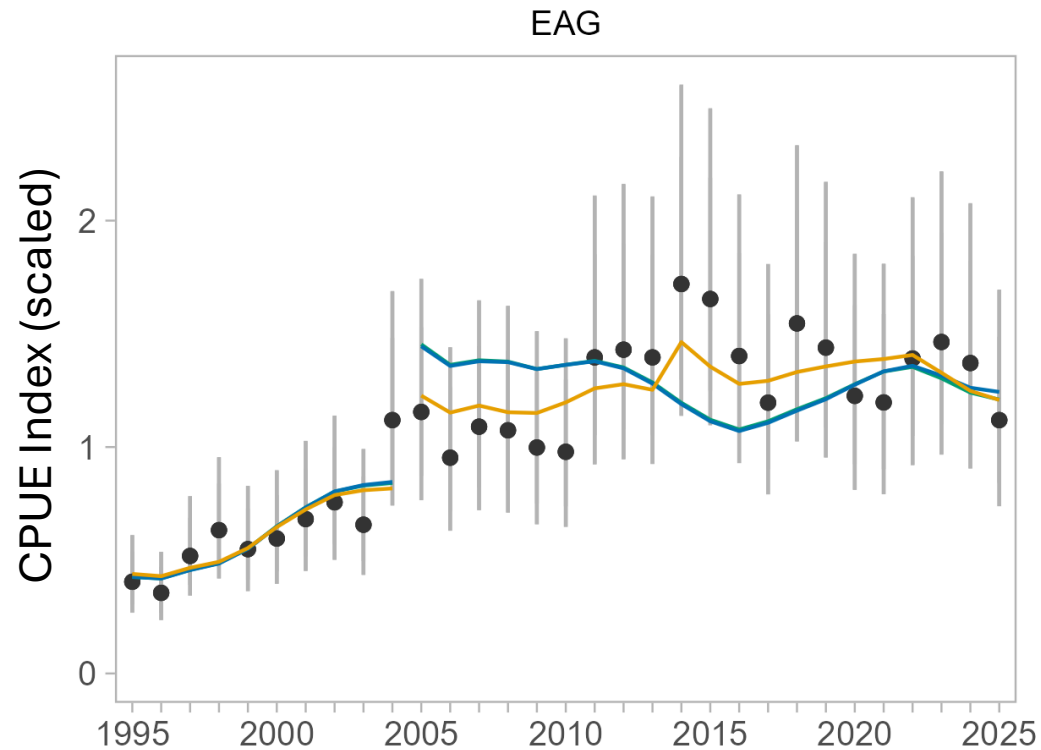
$\text{CPUE} \sim \text{Year} + \text{s}(\text{depth}) + \text{s}(\text{soak time}) + \text{Gear} + \text{RE}(\text{Vessel}) + \text{RE}(\text{Space}) + \text{RE}(\text{Space} \times \text{Time})$



Overall annual relative abundance trend accounting for pot size, depth, soak time assuming some scale difference by vessel and spatiotemporal non-randomness

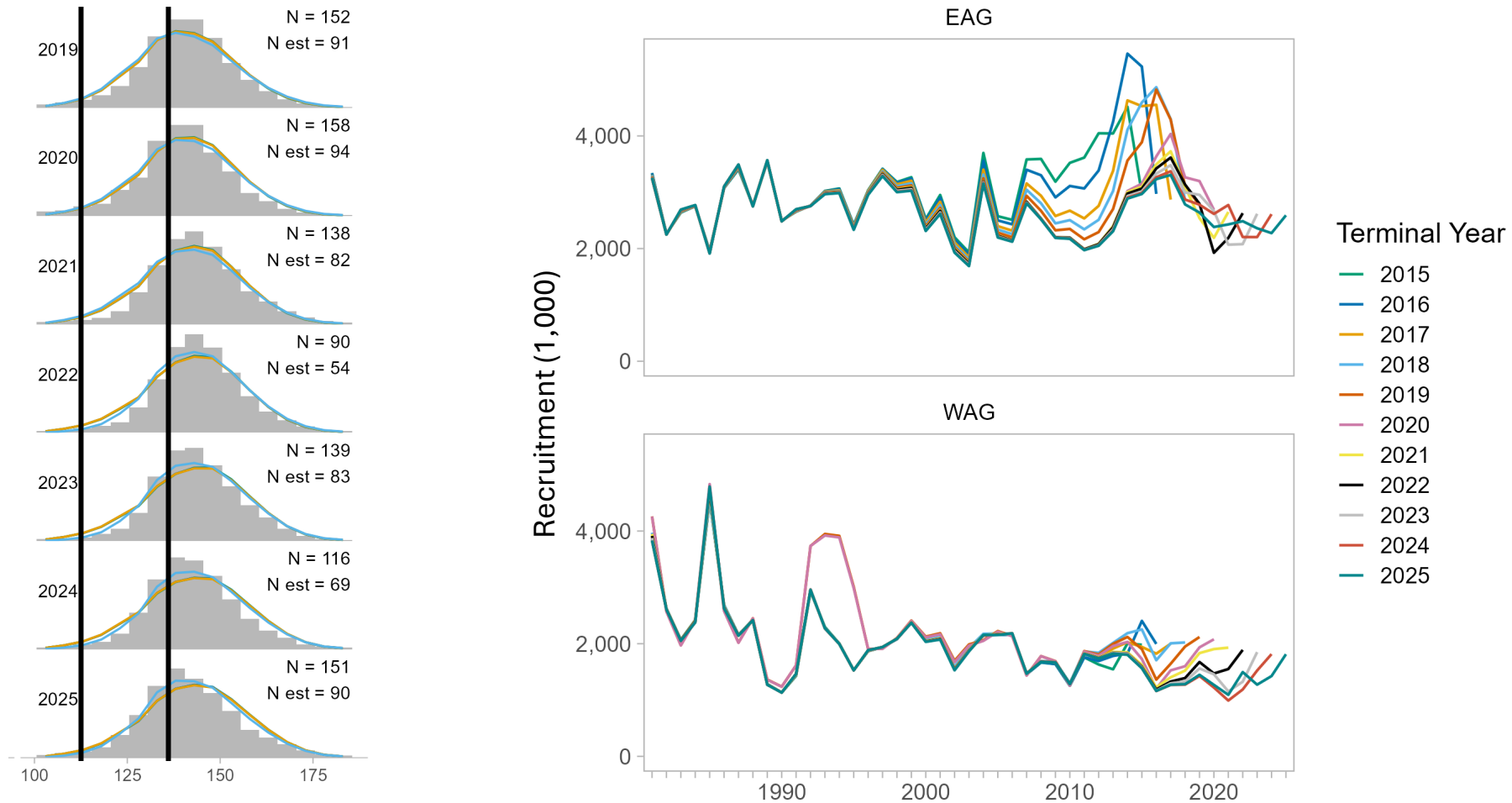
Model Uncertainty

Model better follows size composition and catch data since rationalization (more of issue in EAG)



Model Uncertainty

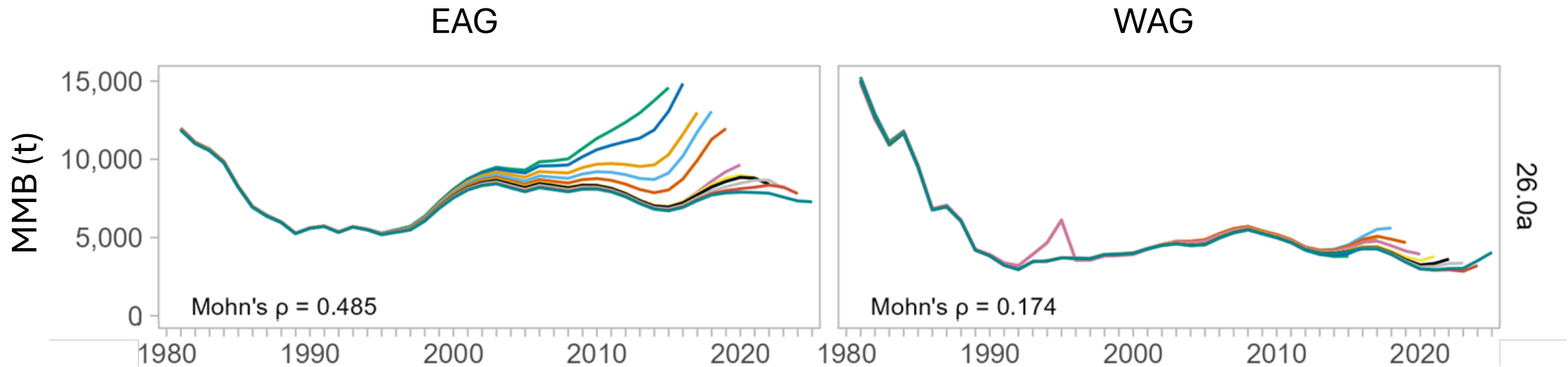
Recruitment information is sparse, growth/maturity are simplified



Model Uncertainty

All above contribute to “retrospective pattern” in MMB

Refit of model sequentially removing terminal year data, compare MMB estimate to ‘full’ model estimate



Model Uncertainty - Solutions

Allow fishing processes to time varying (tried in model 26.1, needs to be done better)

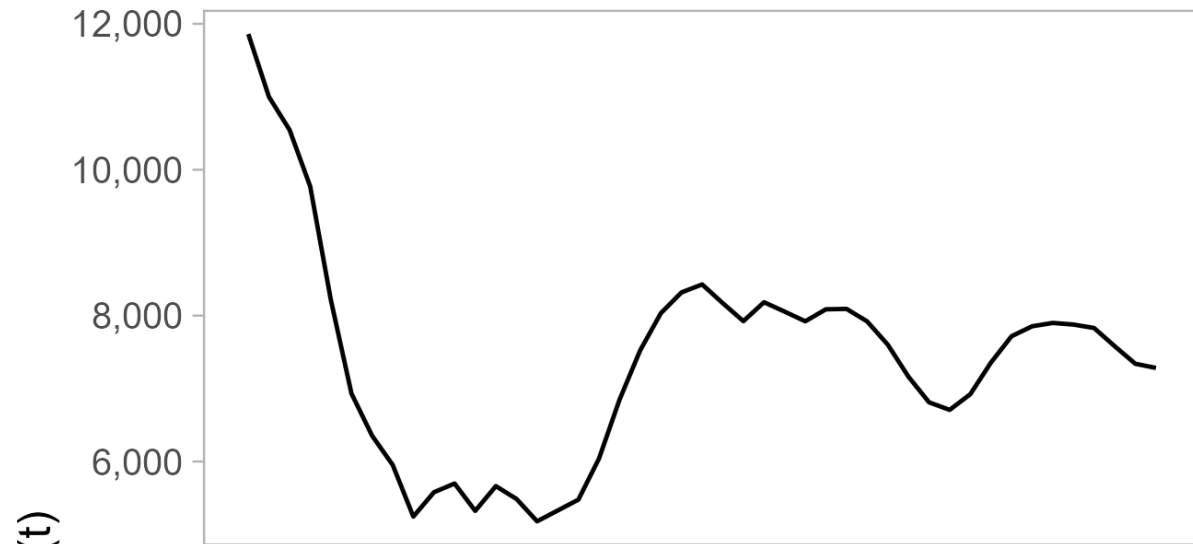
Model individual vessel dynamics?

Data weighting (looked at in 2024/25, not resolved)

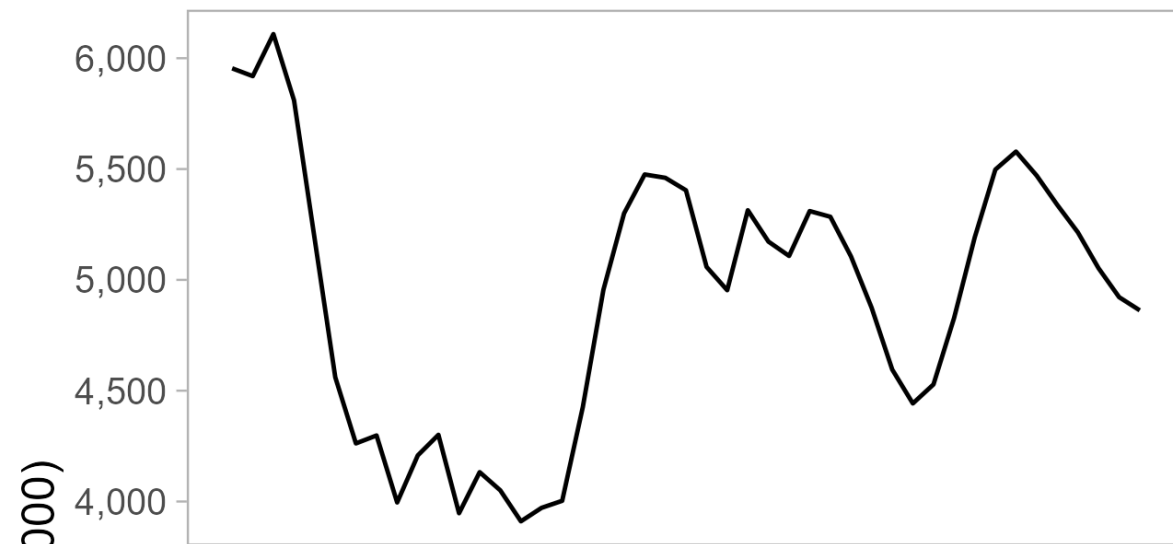
Refocus cooperative survey on recruitment – *more later*

Bottom Line: Confidence in model outweighs uncertainty, best available information

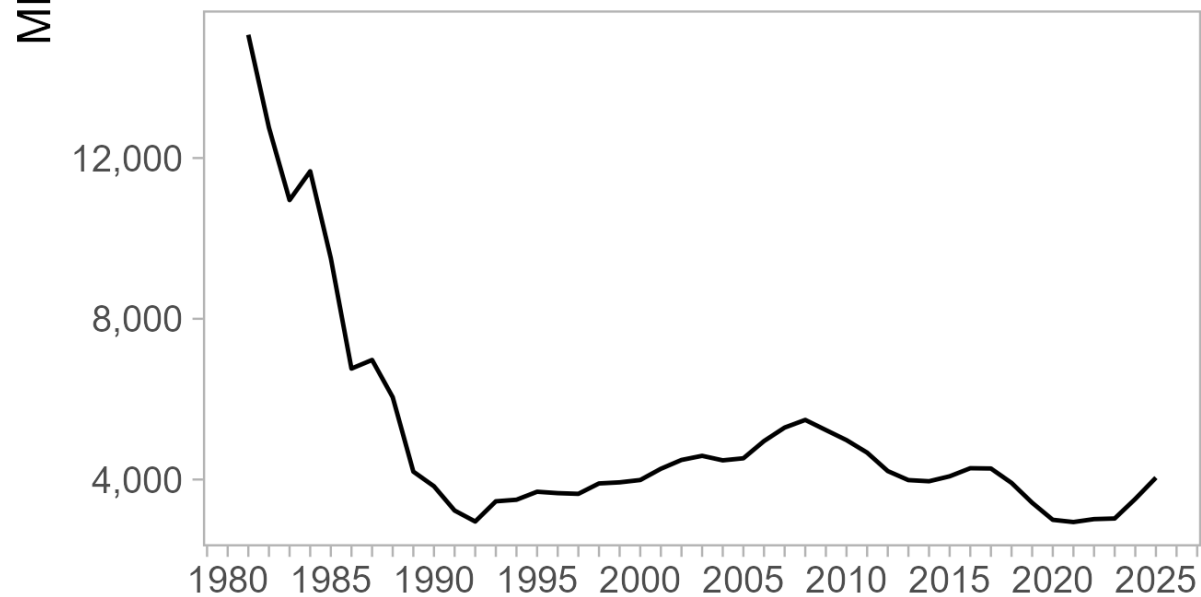
EAG



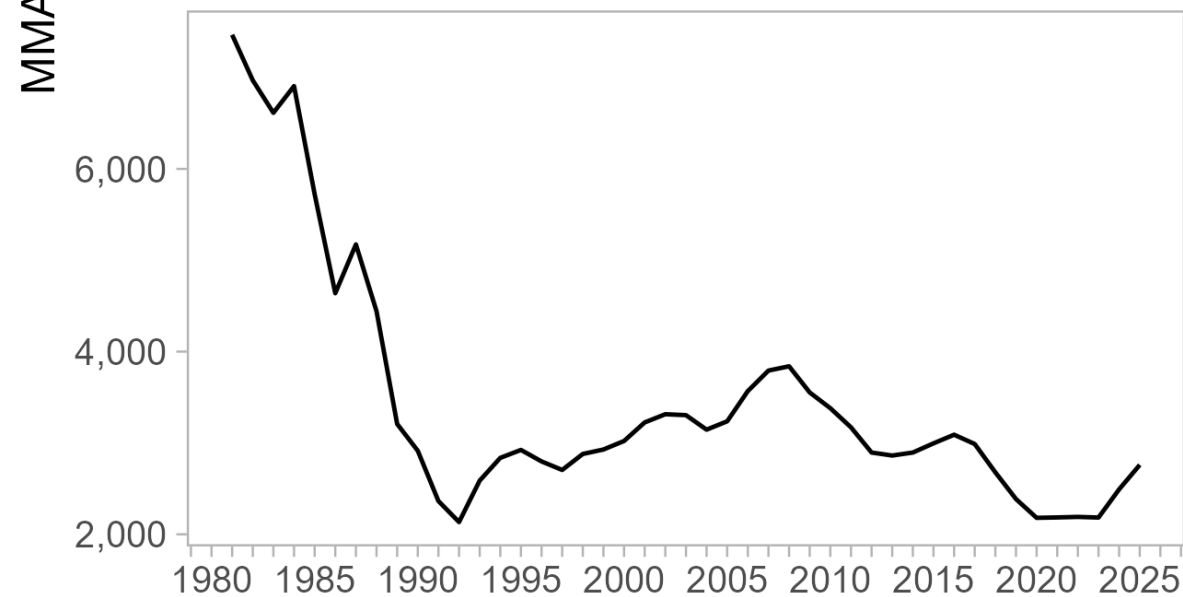
EAG



WAG



WAG



OFL and ABC

New – combined area OFL calculation, single stock status, recompute F_{OFL} , no area specific OFL

OFL is ~7% higher than it would be otherwise since EAG surplus (above B_{MSY}) pulls up WAG (above B_{MSY})

25% ABC Buffer

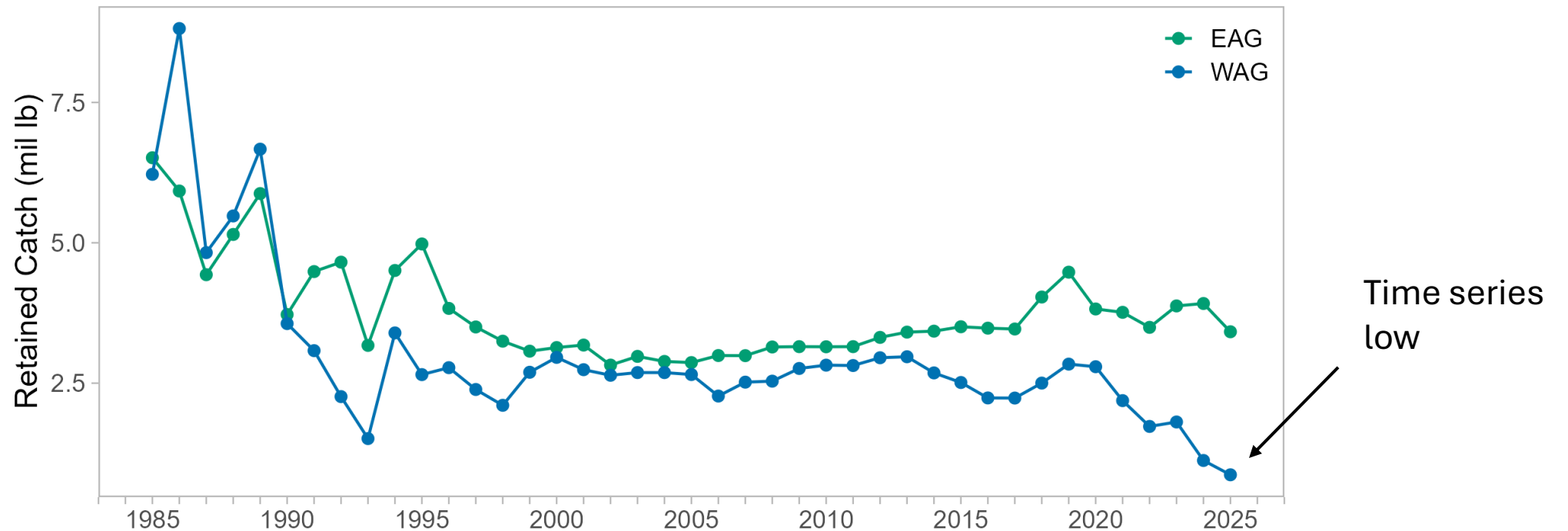
- Solely informed by fishery dependent data
- Poor fits to index data in EAG
- Retrospective pattern in EAG

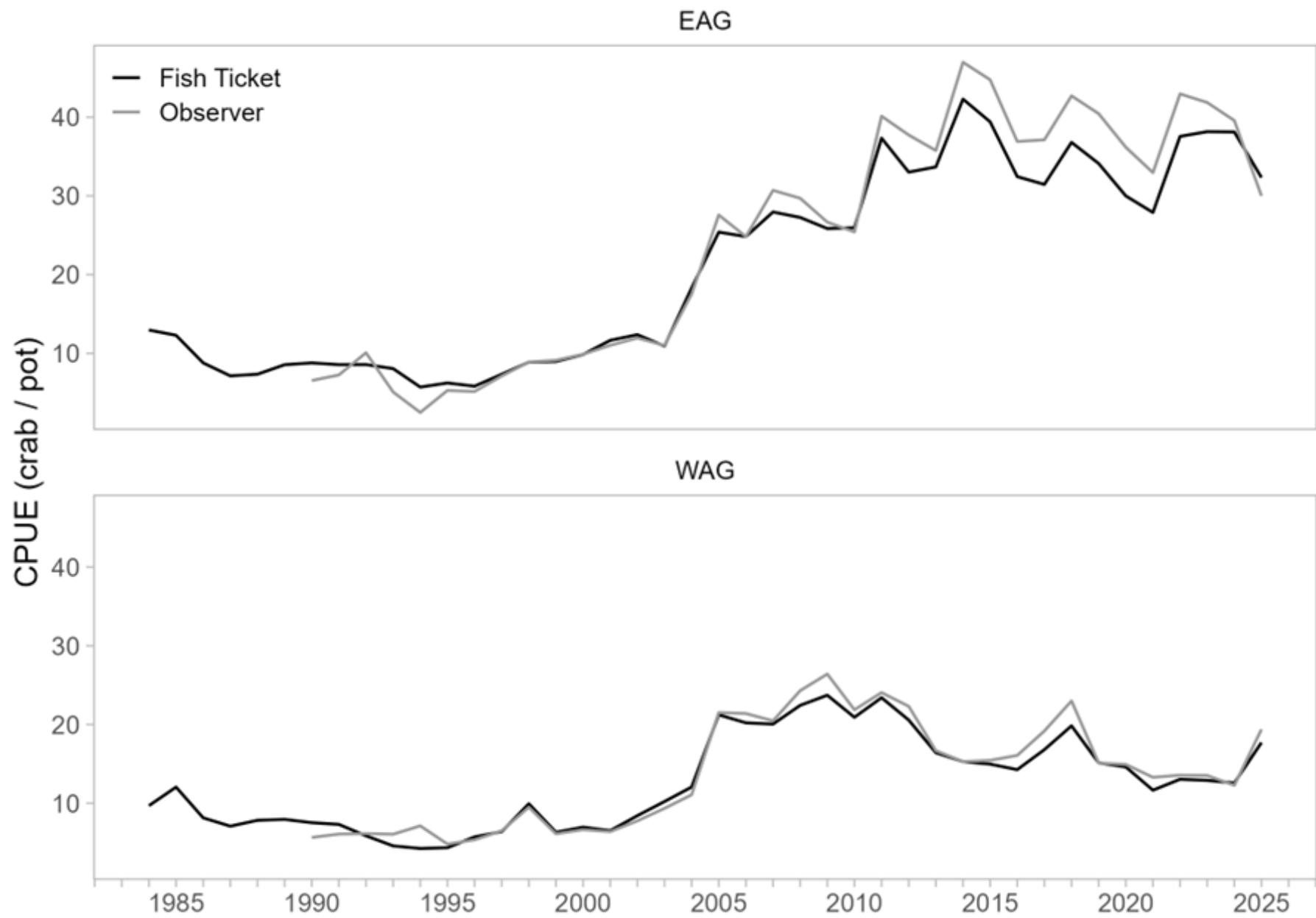
OFL = 7.701 mil lb
ABC = 5.776 mil lb

Stock at 96% B_{MSY}

2025/26 Fishery Performance

	EAG	WAG
TAC (WAG 15%)	3,320,000 lb	870,000 lb
Retained Catch	3,325,249 lb	867,942 lb
CPUE	32.3 crab / pot	17.7 crab / pot





Fishery Extent

Average pairwise distance between pots/strings (km)

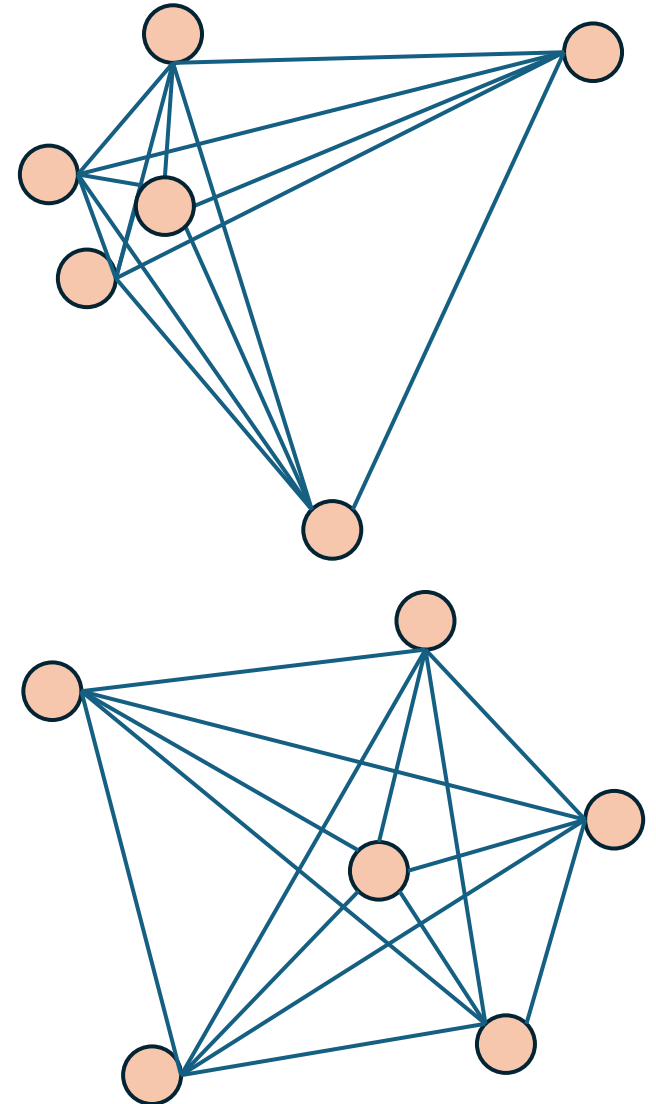
Measure of concentration of fishing effort

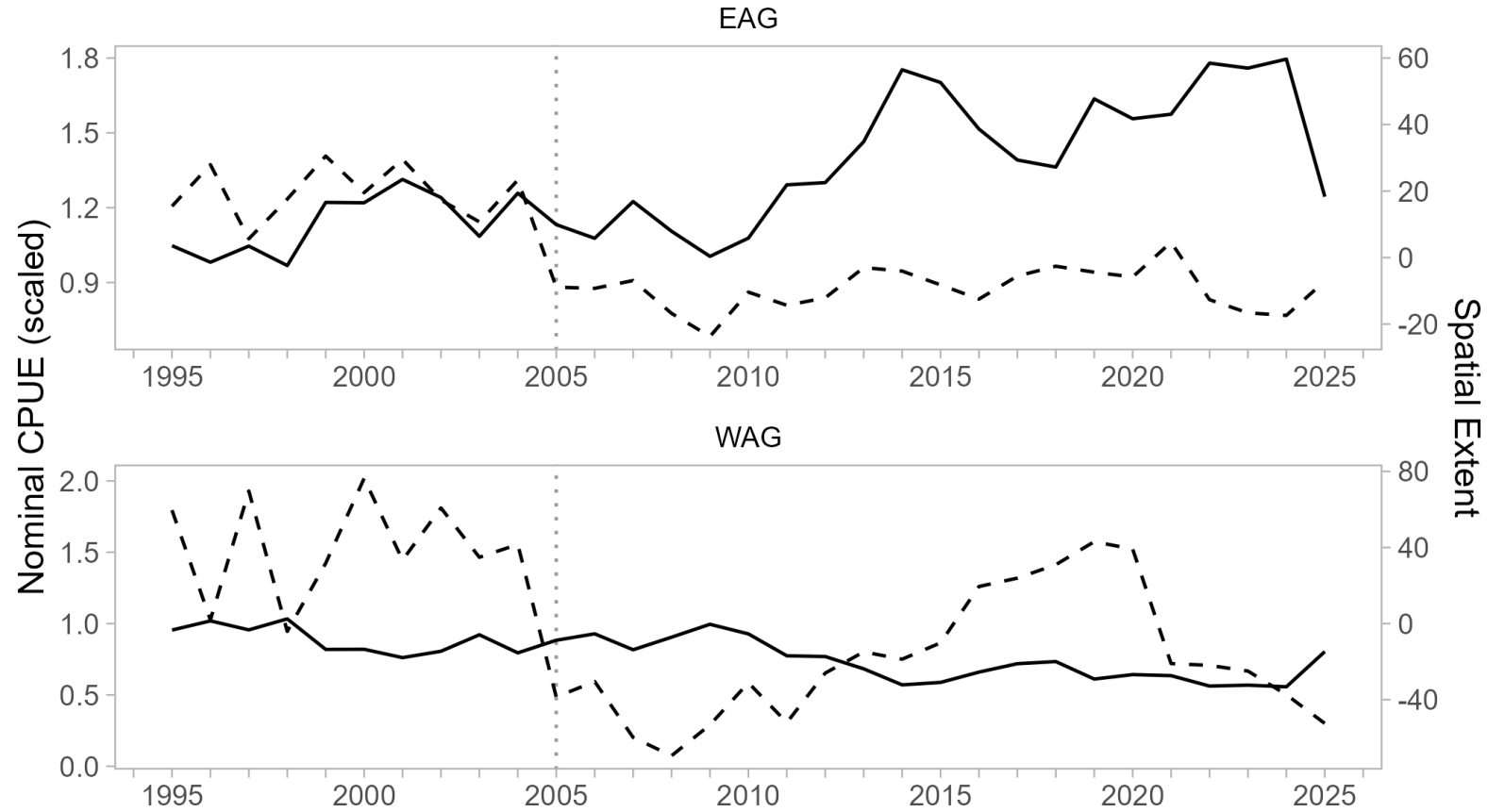
Why? CPUE is imperfect, influenced by many factors

Adds context to CPUE, hyperstability

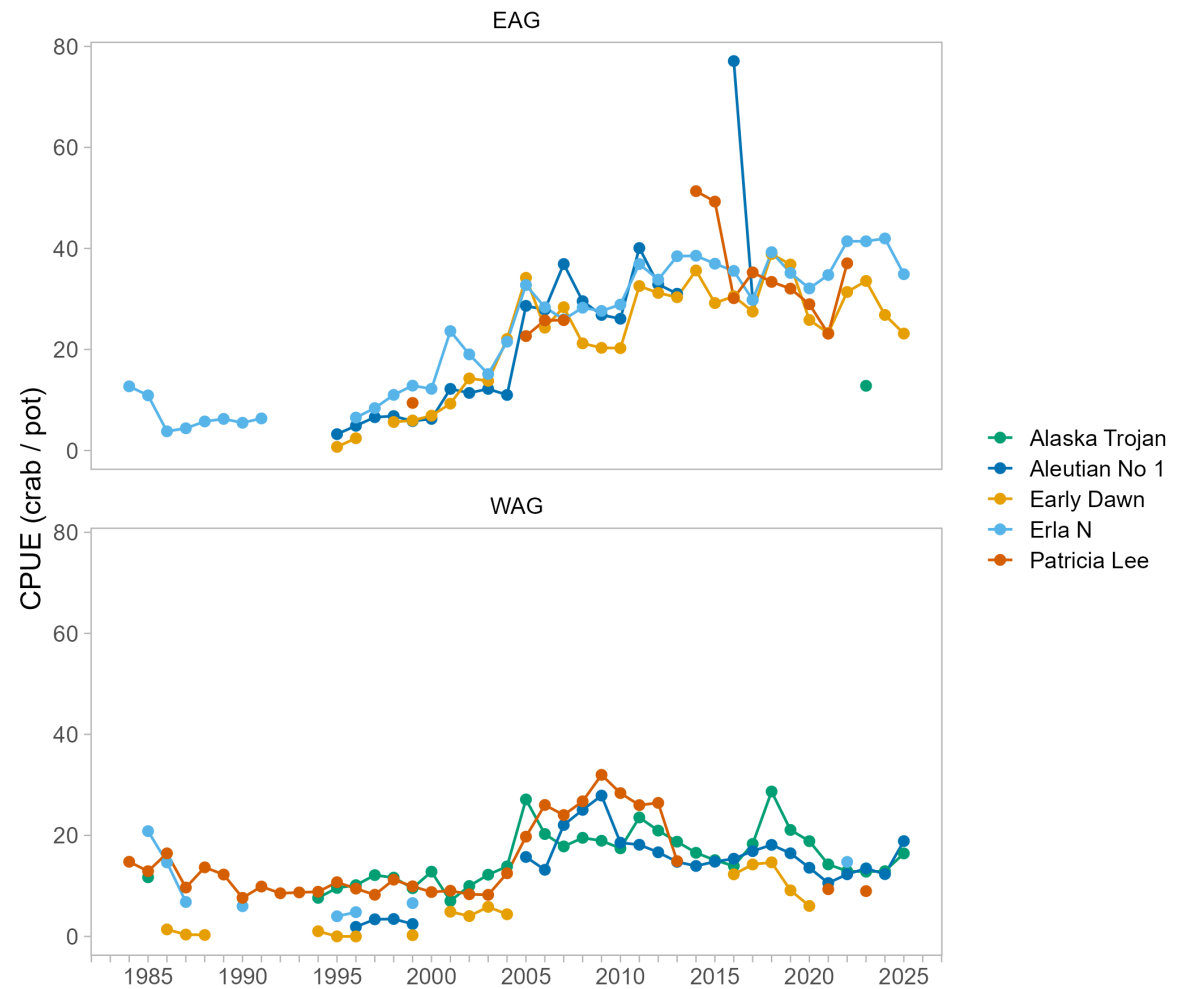
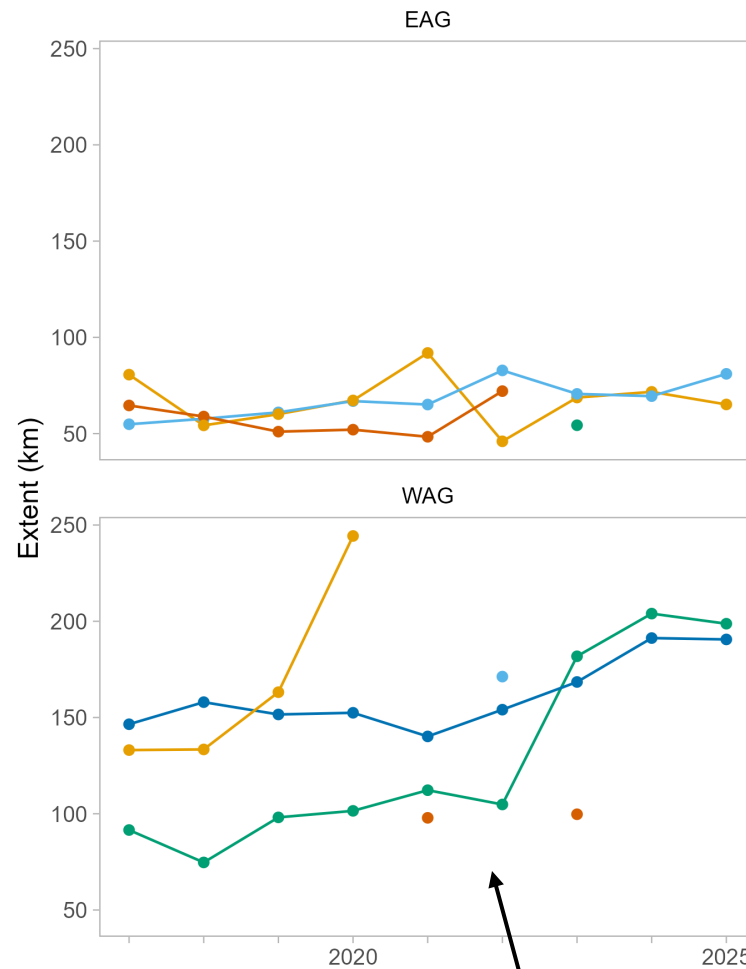
Increasing CPUE with decreasing extent could be indicative of hyperstability (i.e. population not necessarily increasing)

Stable / increasing extent with decreasing CPUE supports population declines



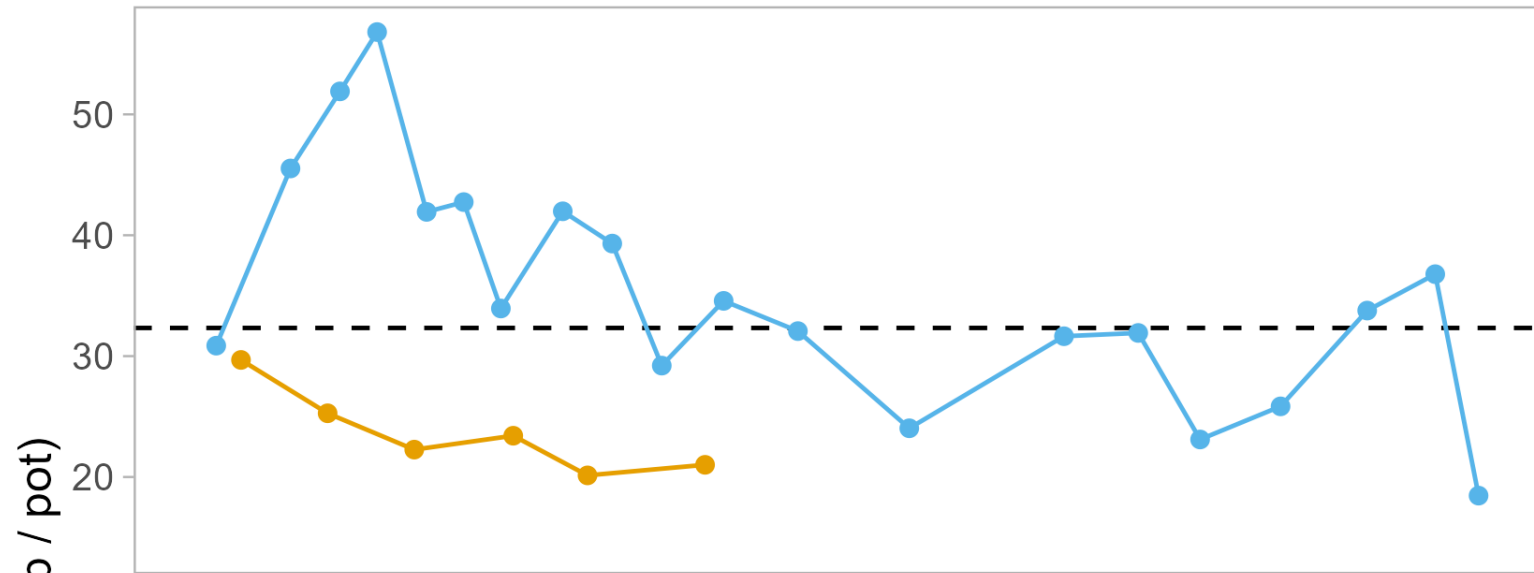


From SAFE Risk Table. Based on observer
pots....confounded with observer sampling, *DFL is likely
much better view*



Observer pots showed fishing getting more concentrated....may just be indicative of observed trips...*just take with grain of salt*

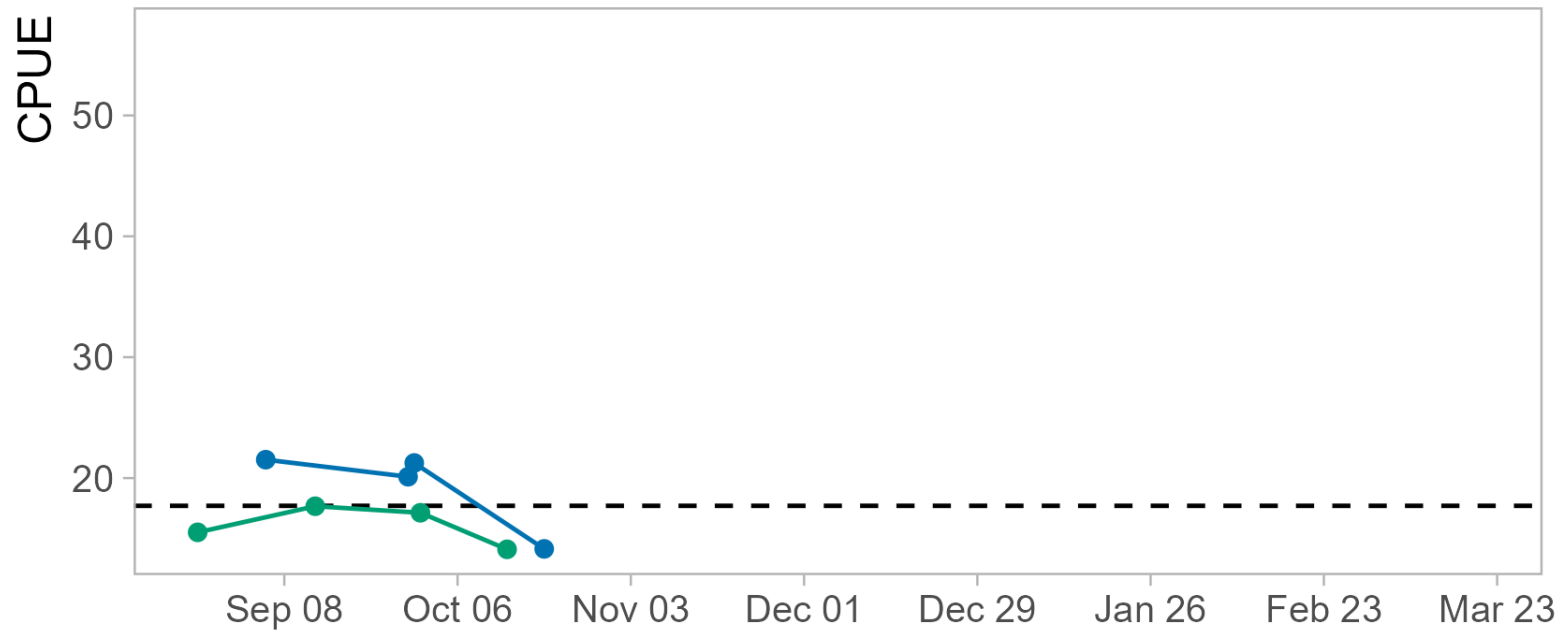
EAG



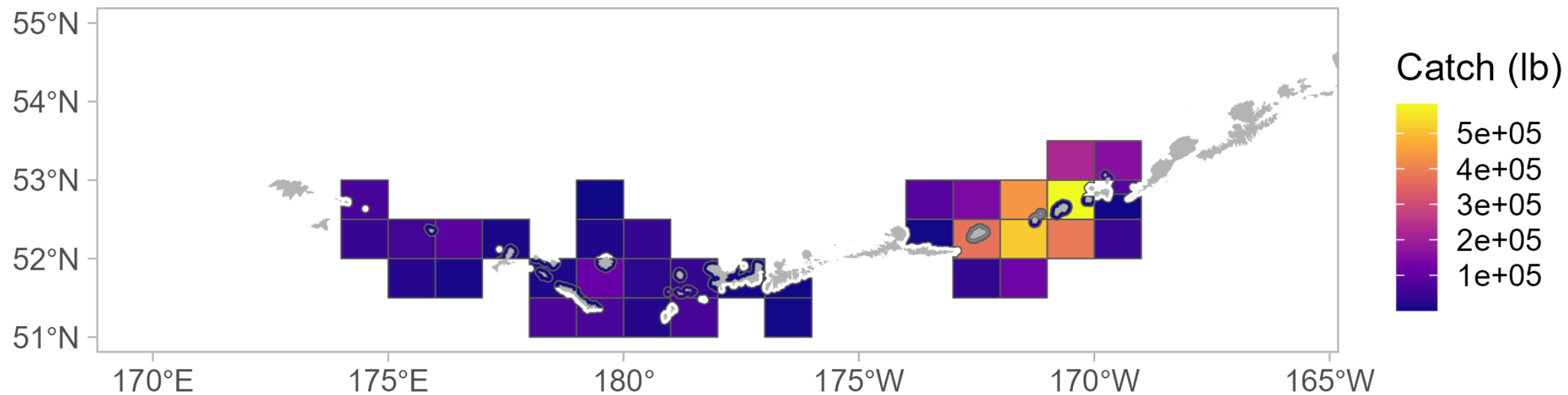
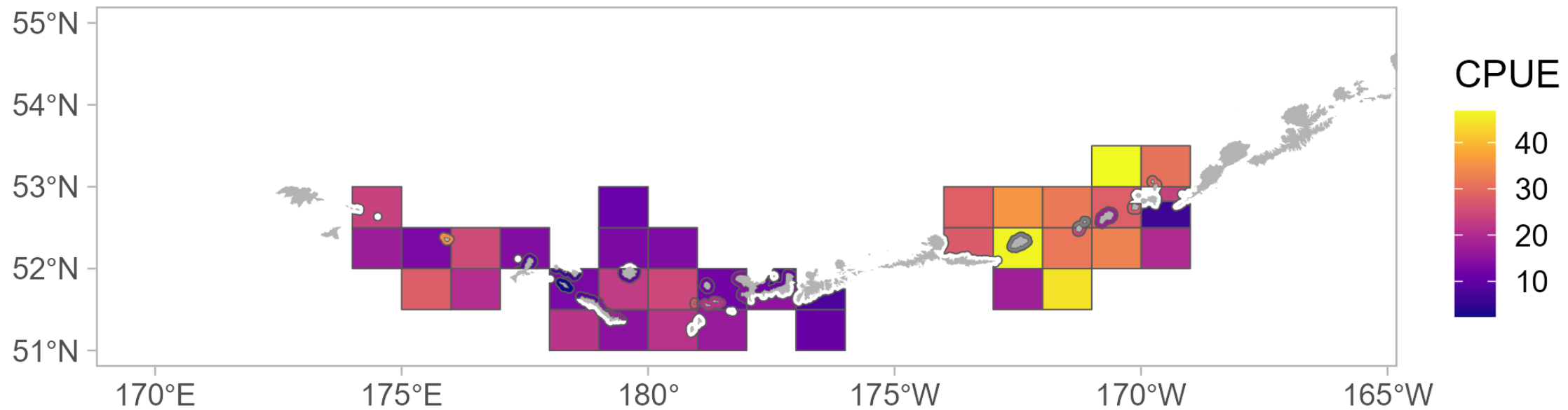
Depletion?

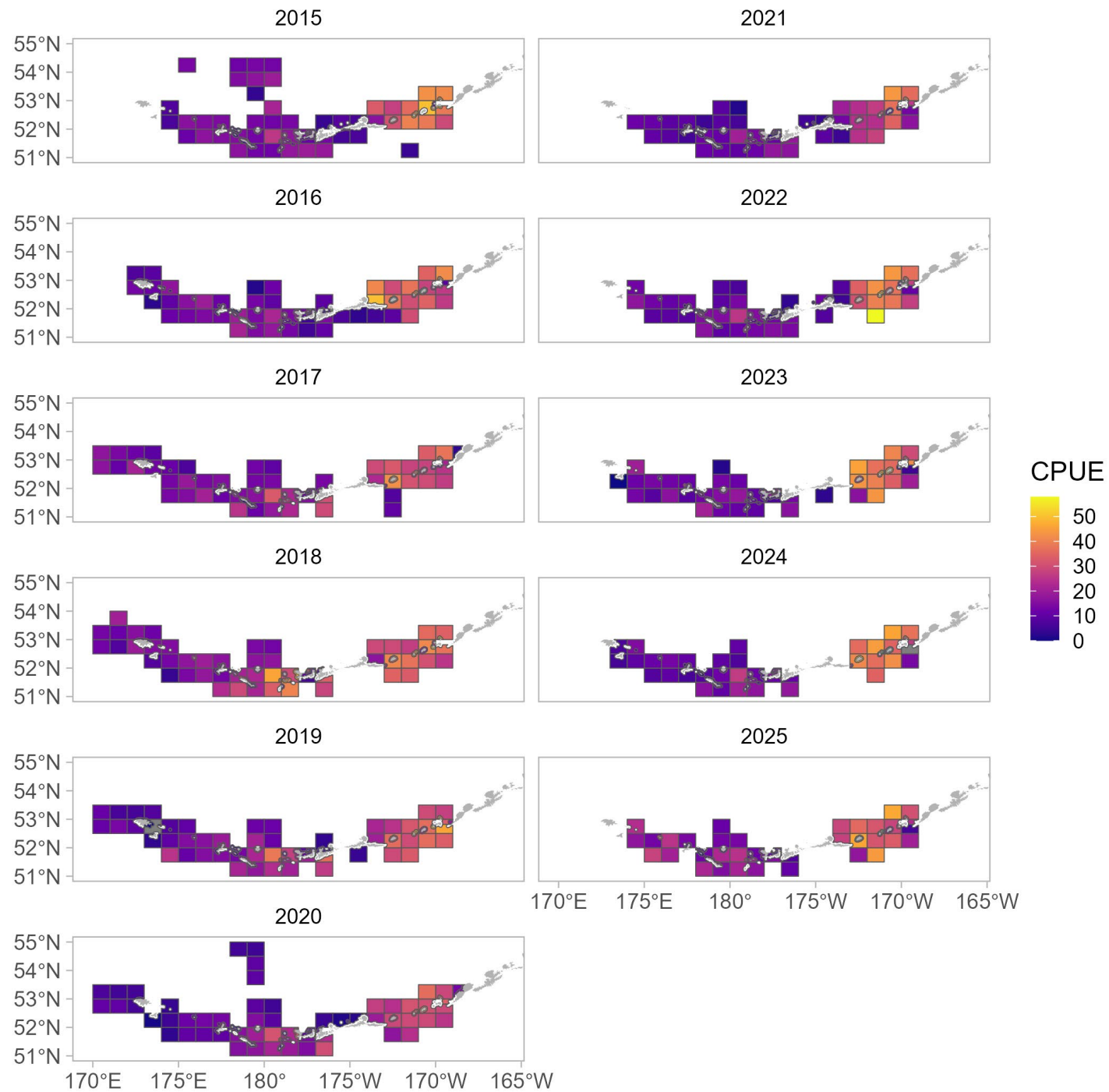
Center of active pots
shows they tend to
fish everywhere
throughout season

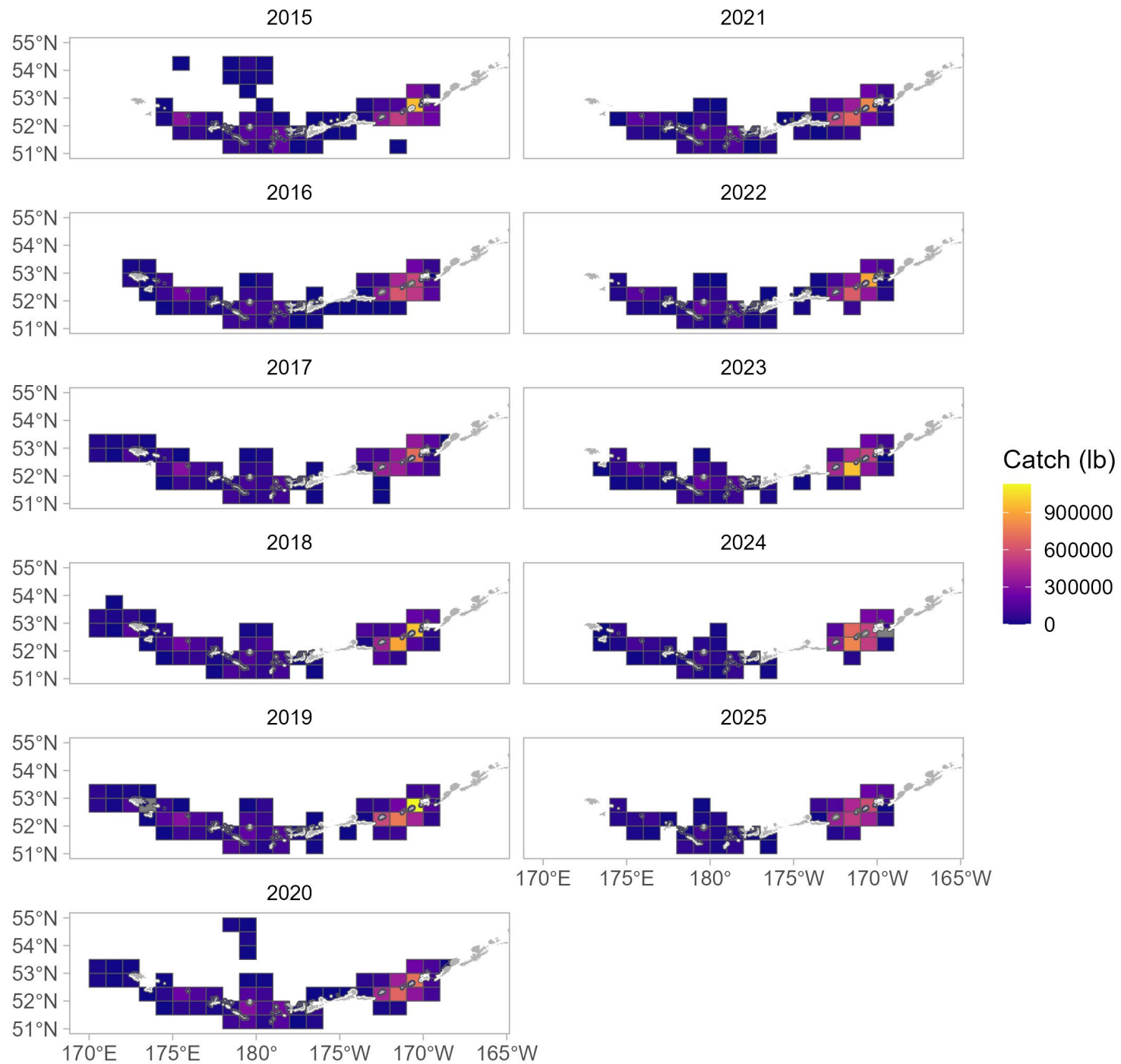
WAG



- Alaska Trojan
- Aleutian No 1
- Early Dawn
- Erla N







Harvest Strategy

Two parts:

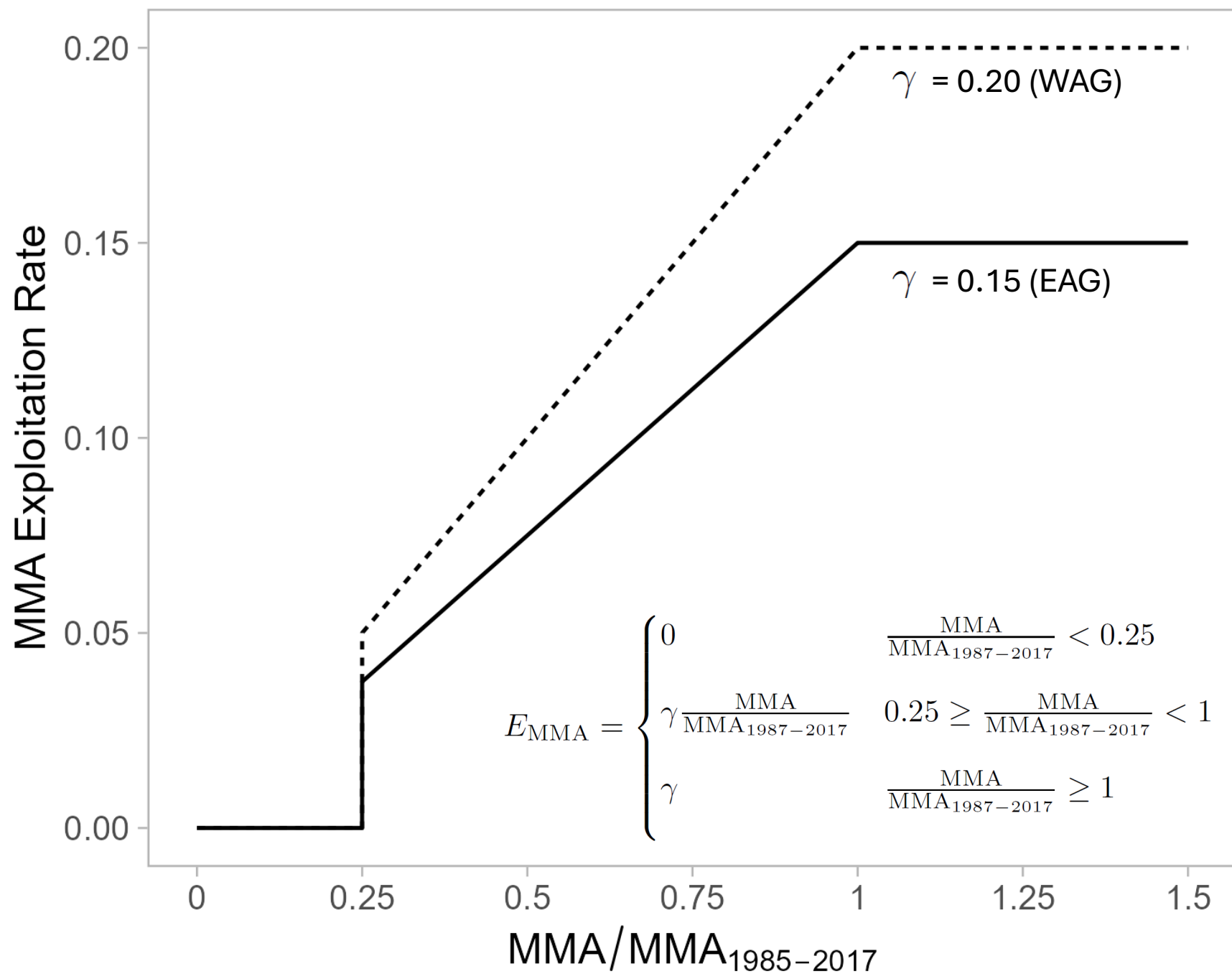
1) Sloping exploitation rate on mature male (≥ 116 mm CL) **abundance** (E_{MMA})

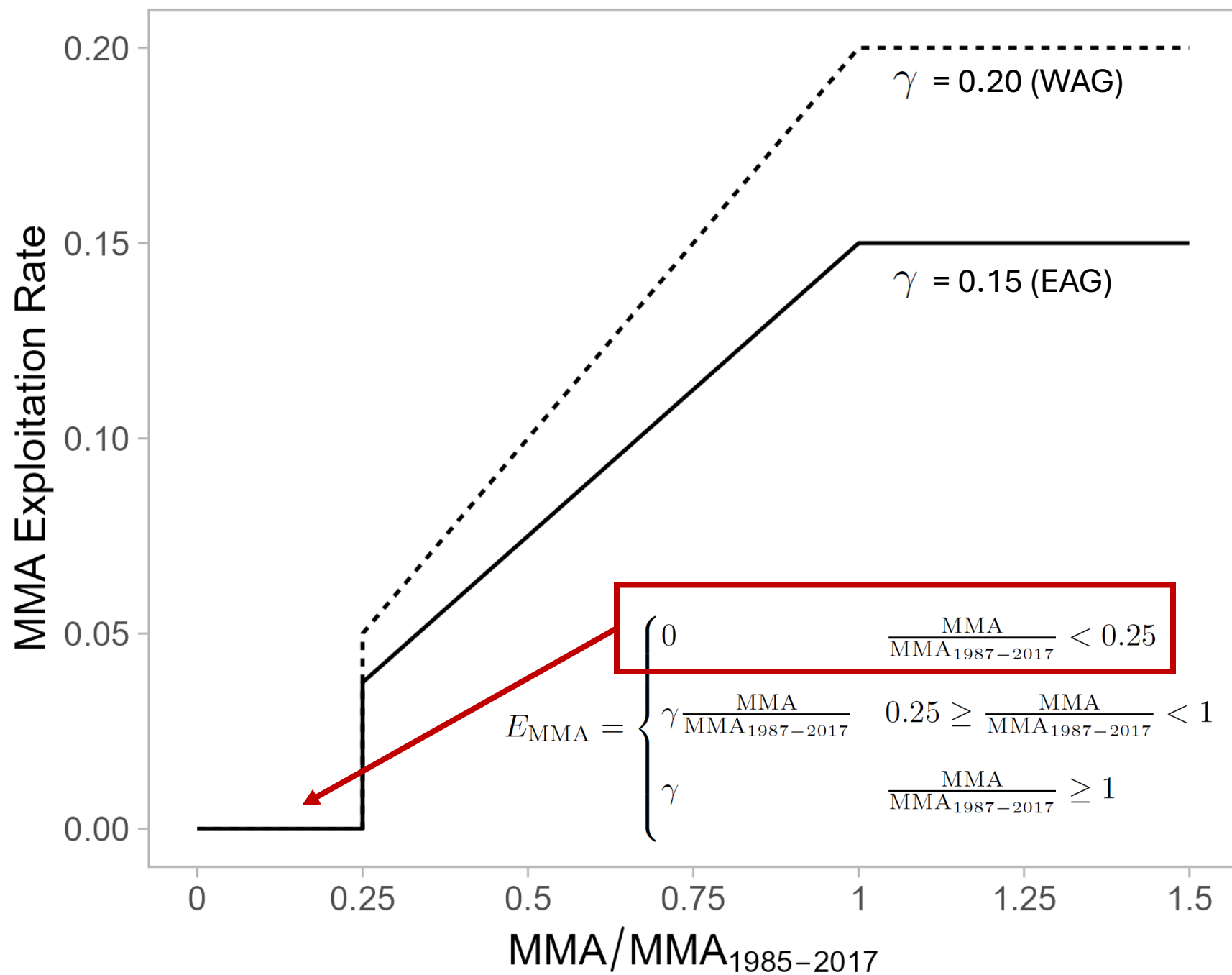
- 15% max exploitation rate EAG
- 20% max exploitation rate WAG – *historical catch and model suggested higher exploitation rates than EAG, larger area*

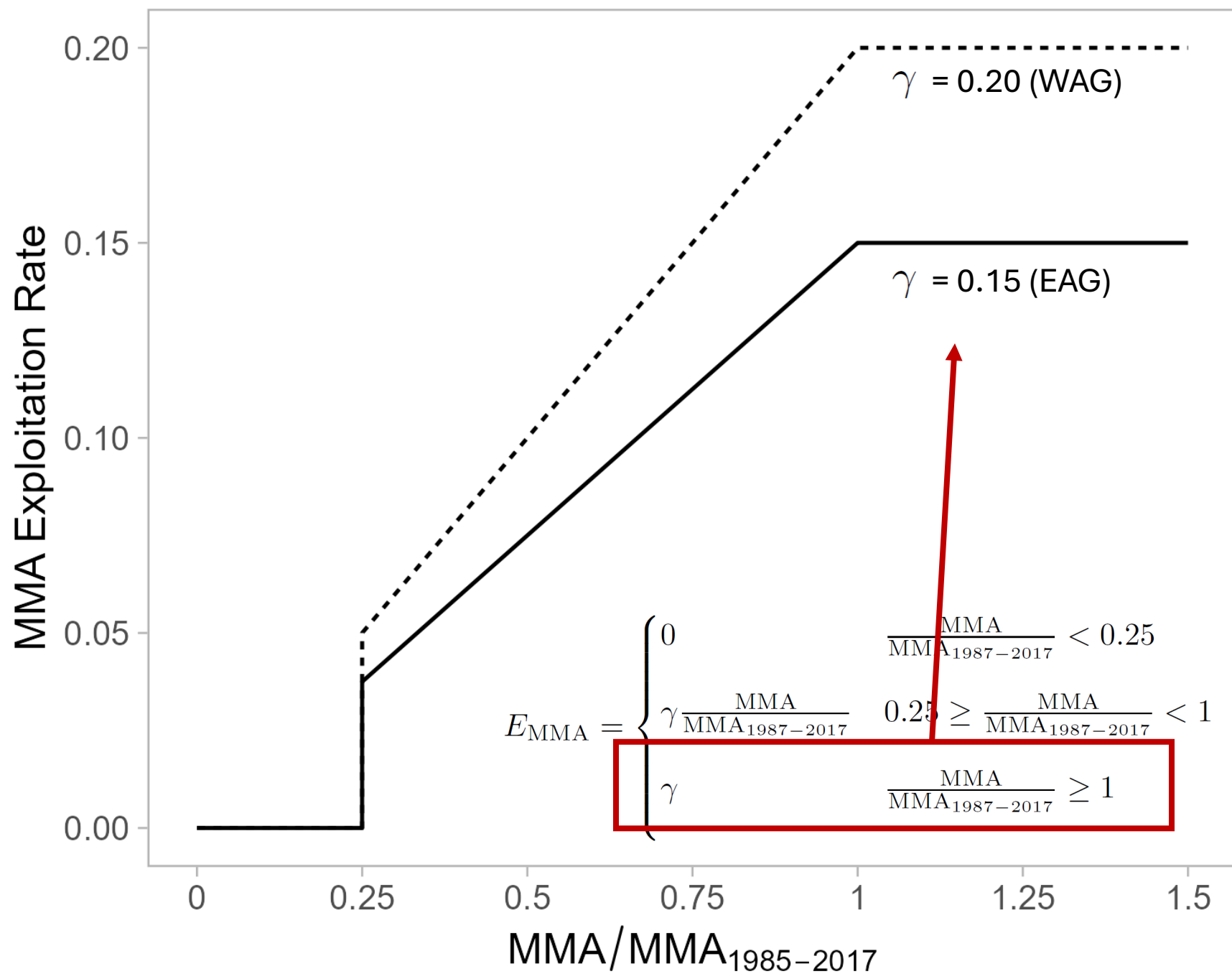
2) Max cap on 25% legal male ($\sim \geq 136$ mm CL) abundance

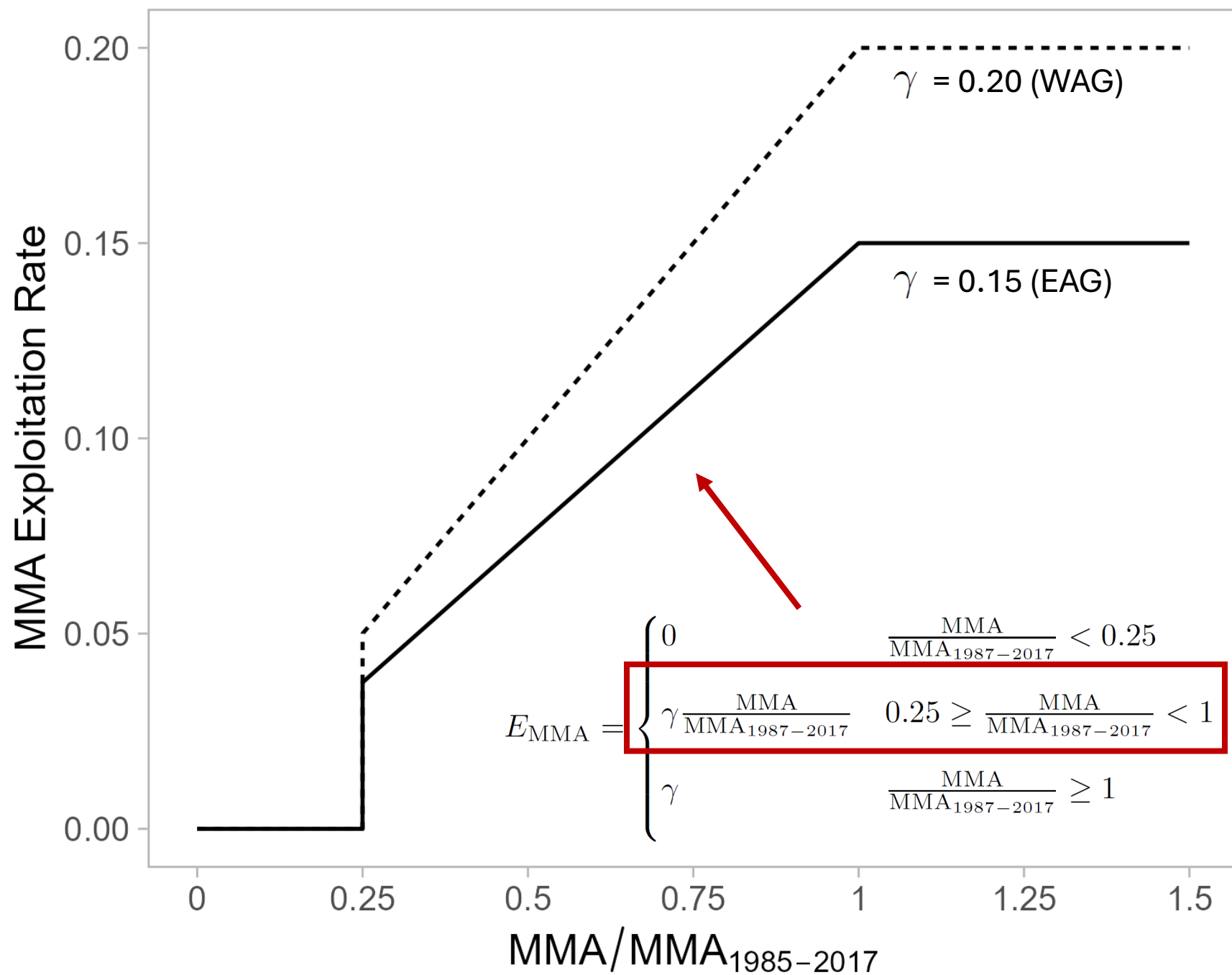
$$\text{TAC} = \text{Minimum of } \left[E_{\text{MMA}} \times \text{MMA}, \quad 0.25 \times \text{LMA} \right] w$$

↑
Average Legal Weight (lb)



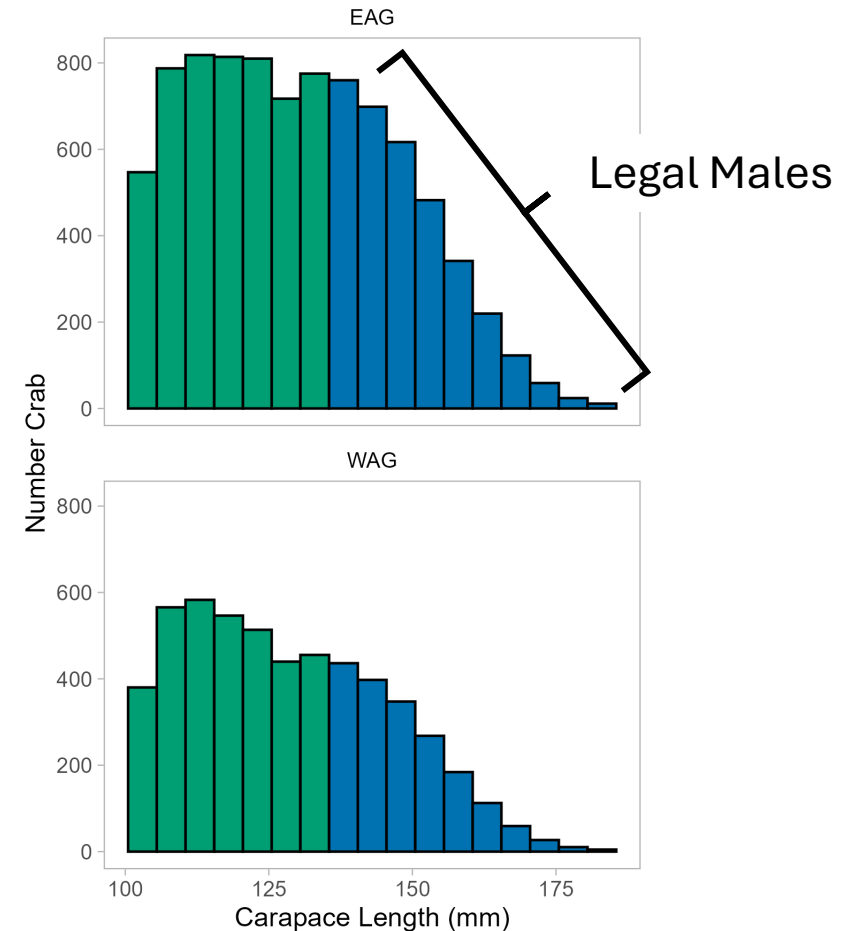
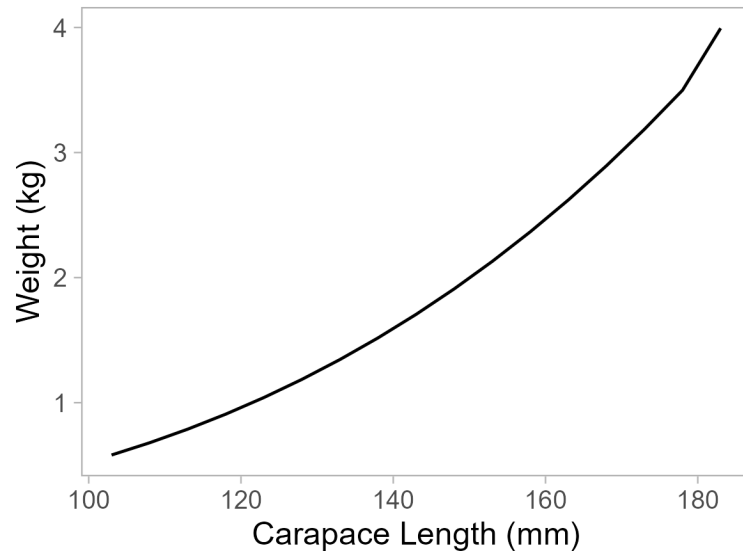




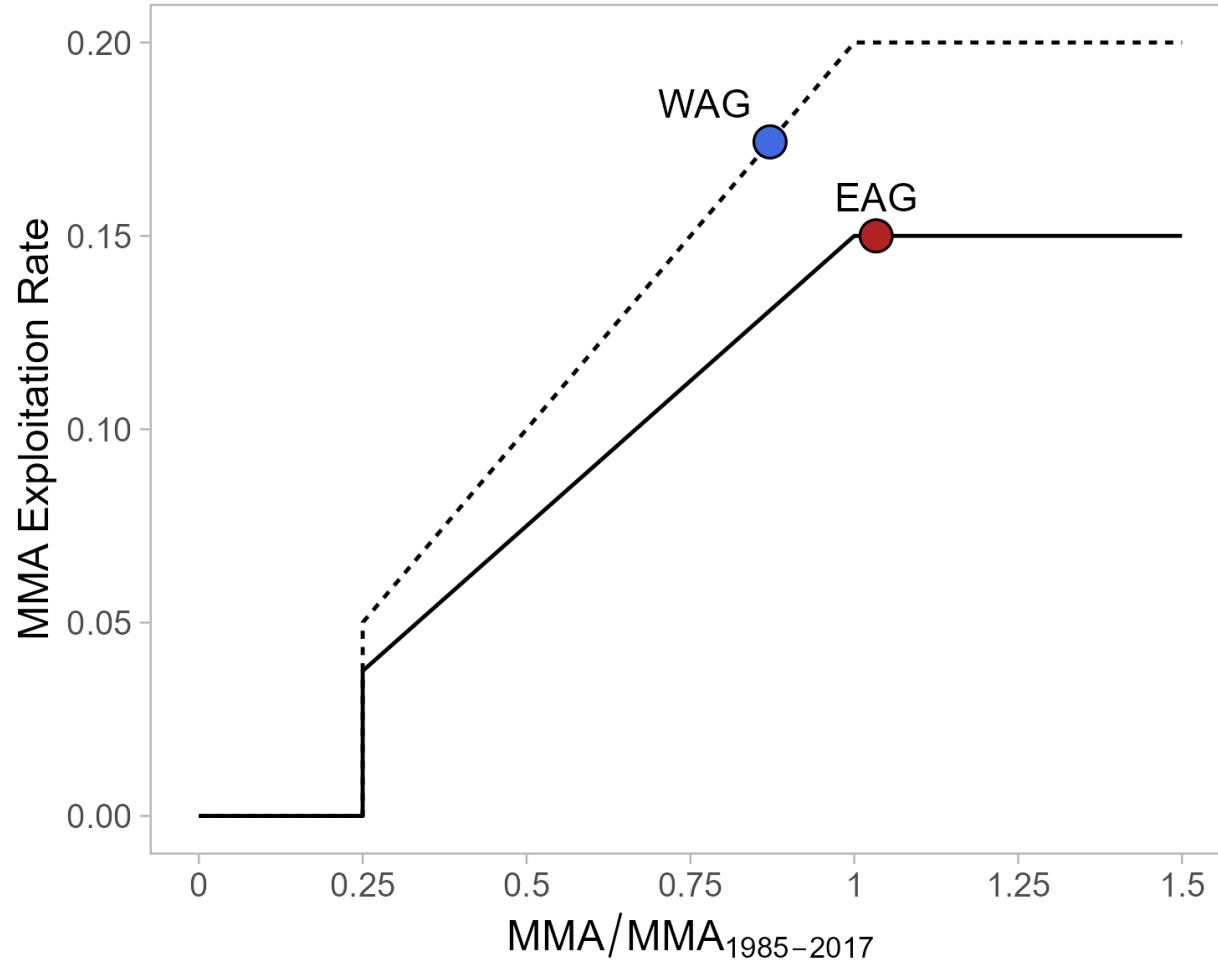


TAC Abundance $\rightarrow$ Weight

Average weight of legal males given incoming size composition



2026/27 Full Computed TAC

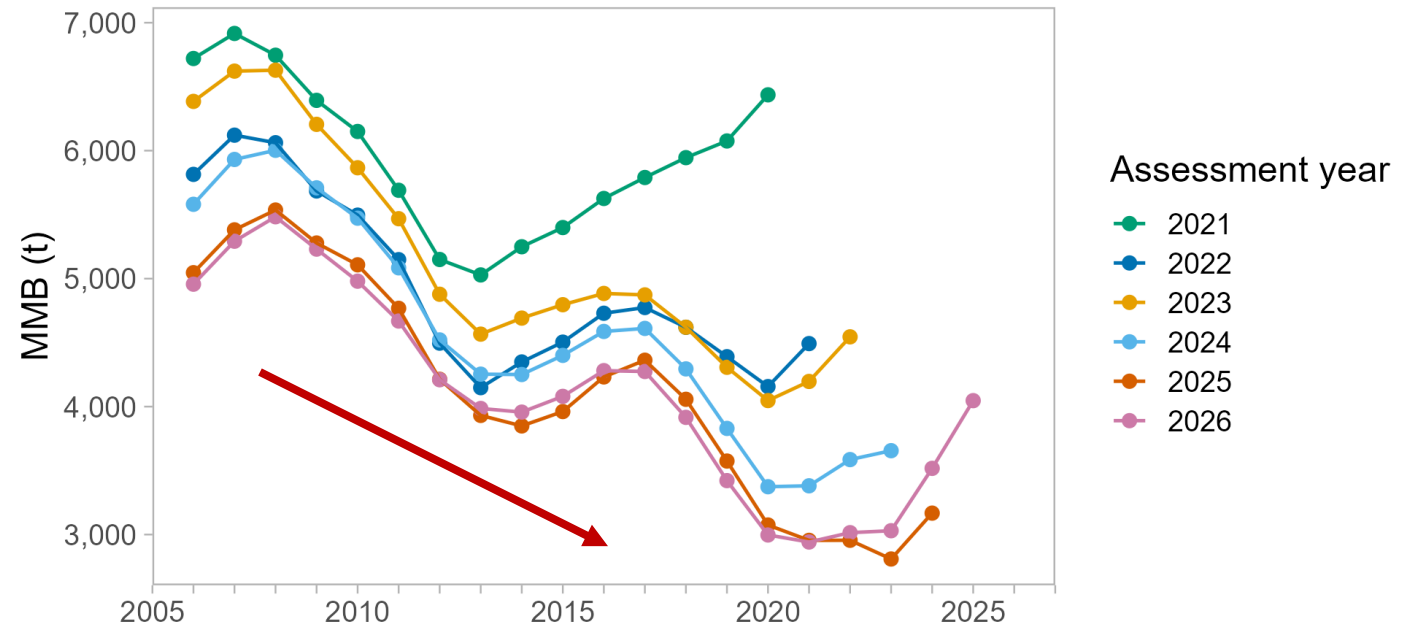
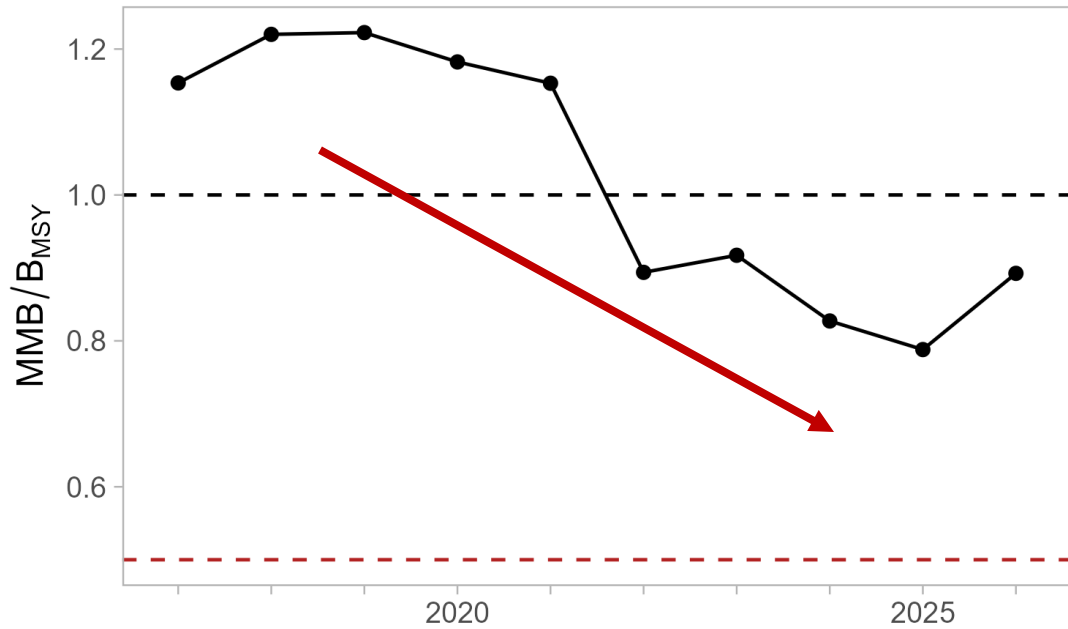


	EAG	WAG
MMA (2026) (mil)	4.862	2.760
MMA ₁₉₈₅₋₂₀₁₇	4.705	3.167
MMA / MMA ₁₉₈₅₋₂₀₁₇	1.03	0.871
Exploit. Rate MMA	15%	17.4%
$E_{\text{MMA}} \times \text{MMA}$	0.729	0.462
Legal Cap Not Limiting		
LMA (2026)	3.336	1.847
25% LMA (2026)	0.834	0.462
TAC (mil crab)	0.729	0.462
lb per crab	4.36	4.32
TAC (mil lb)	3.184	1.994

Exploitation Rate in WAG

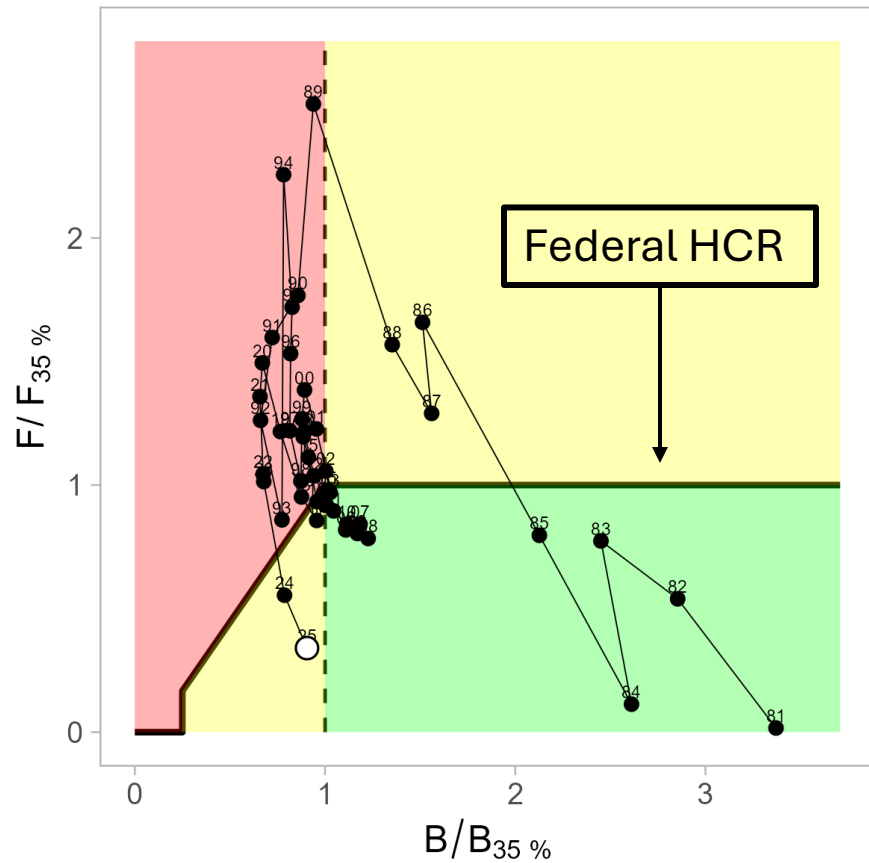
WAG TAC Computed on 15% ramp past two seasons

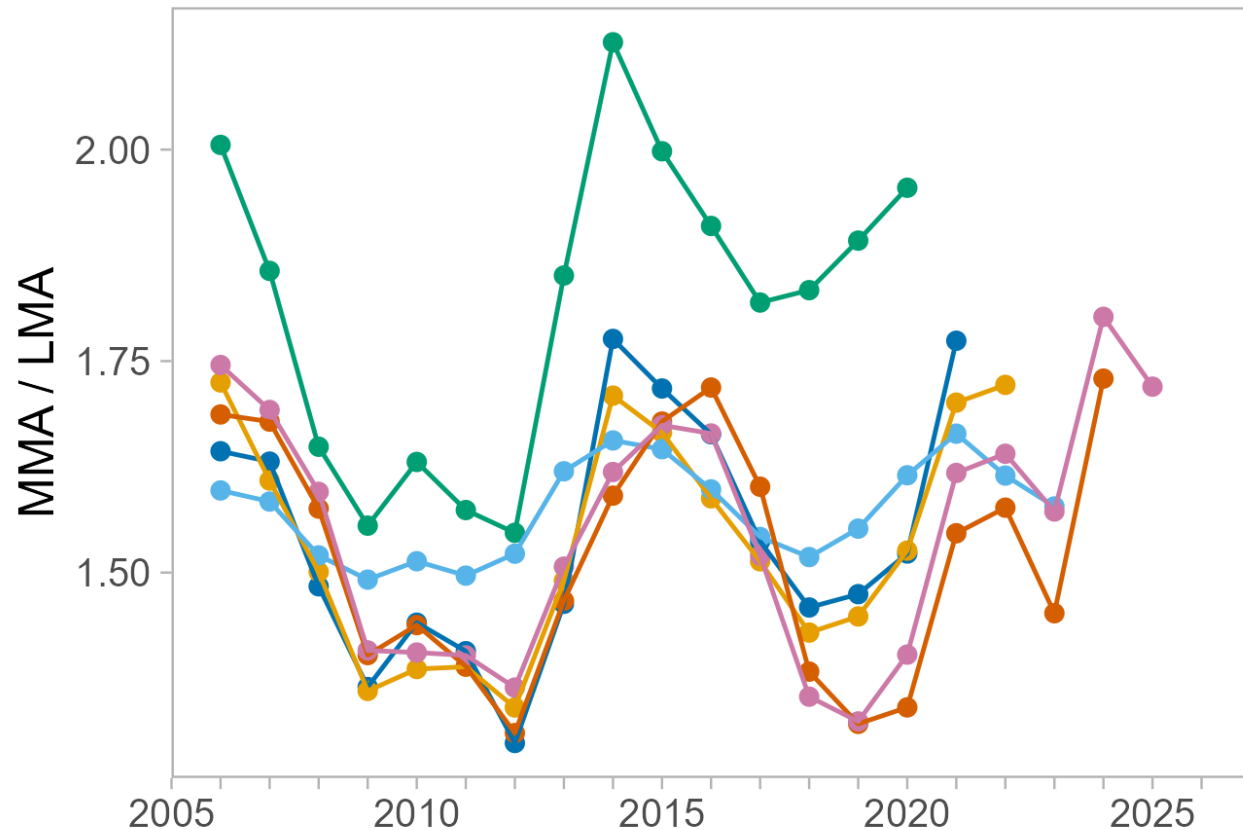
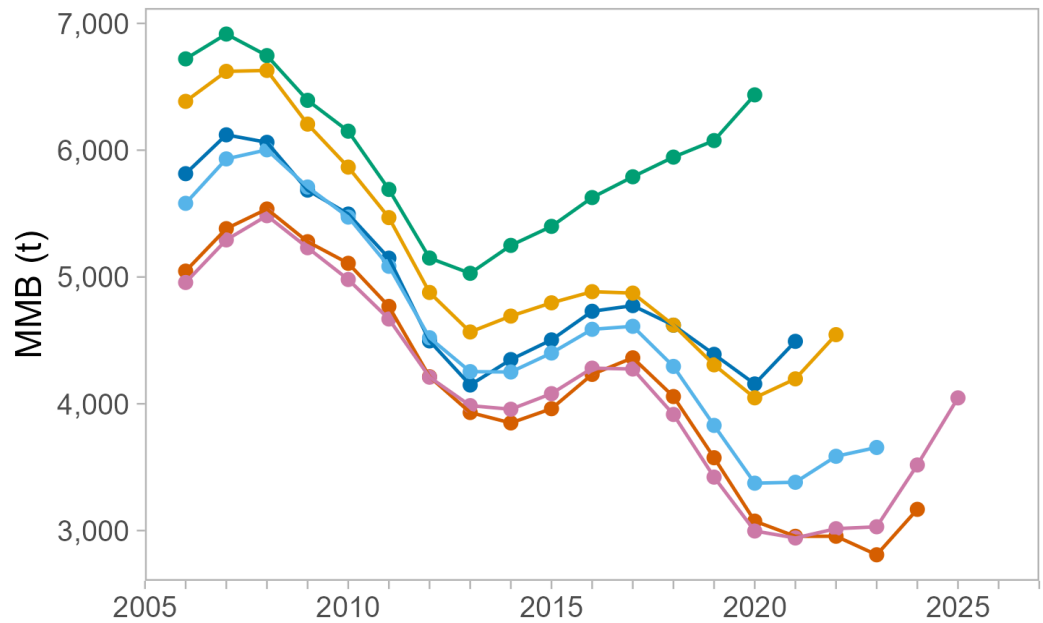
- Decreasing stock status
- Decreasing trend in MMB



Exploitation Rate in WAG

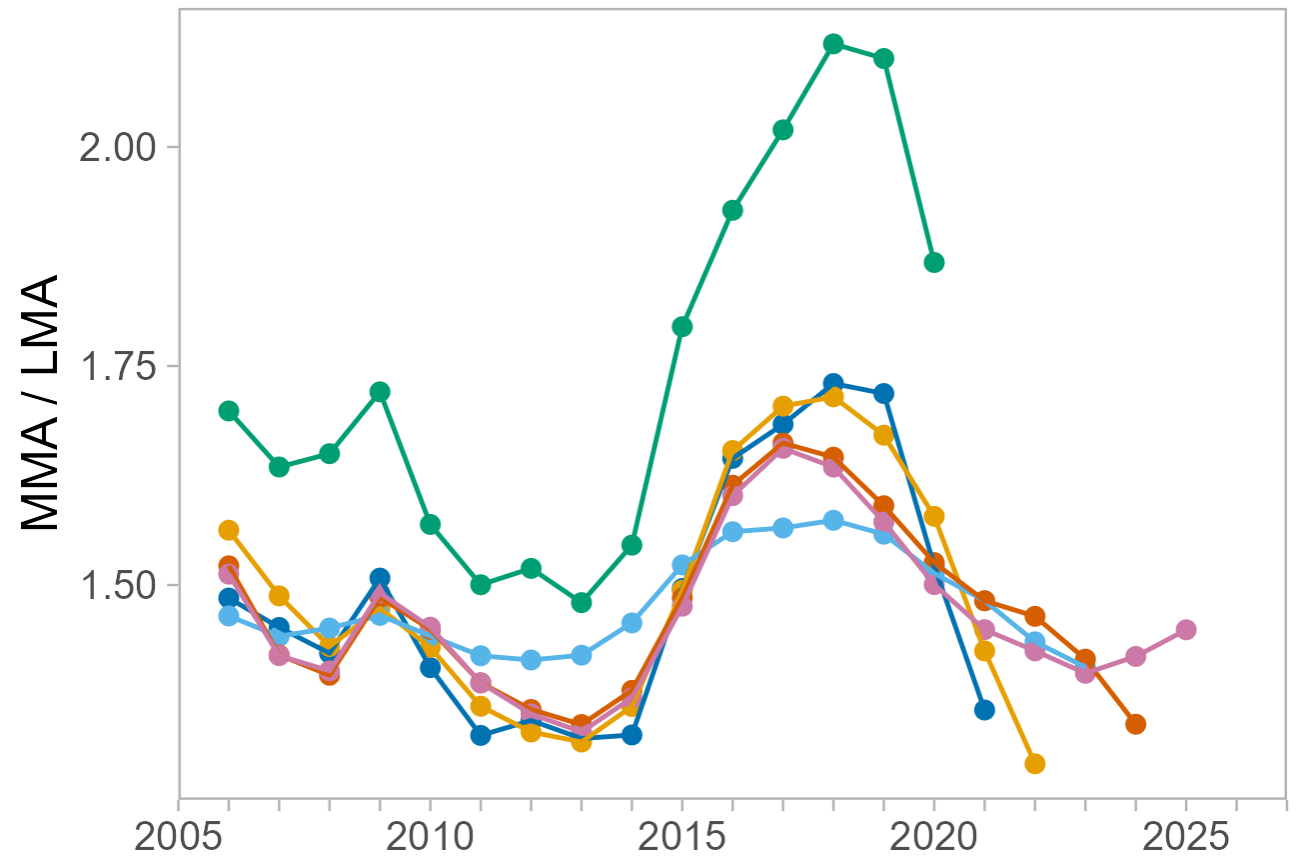
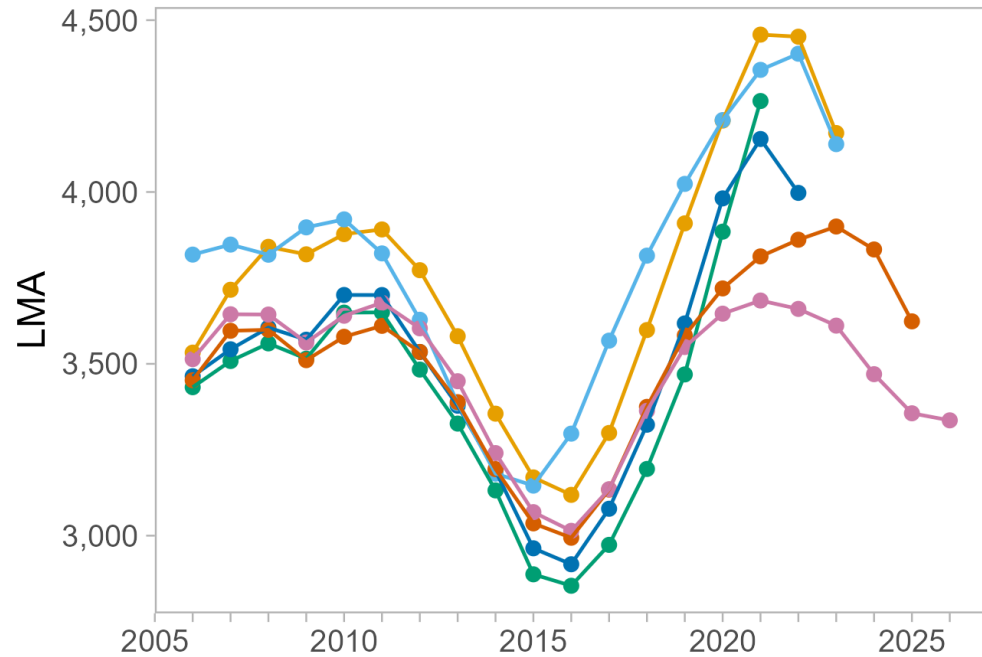
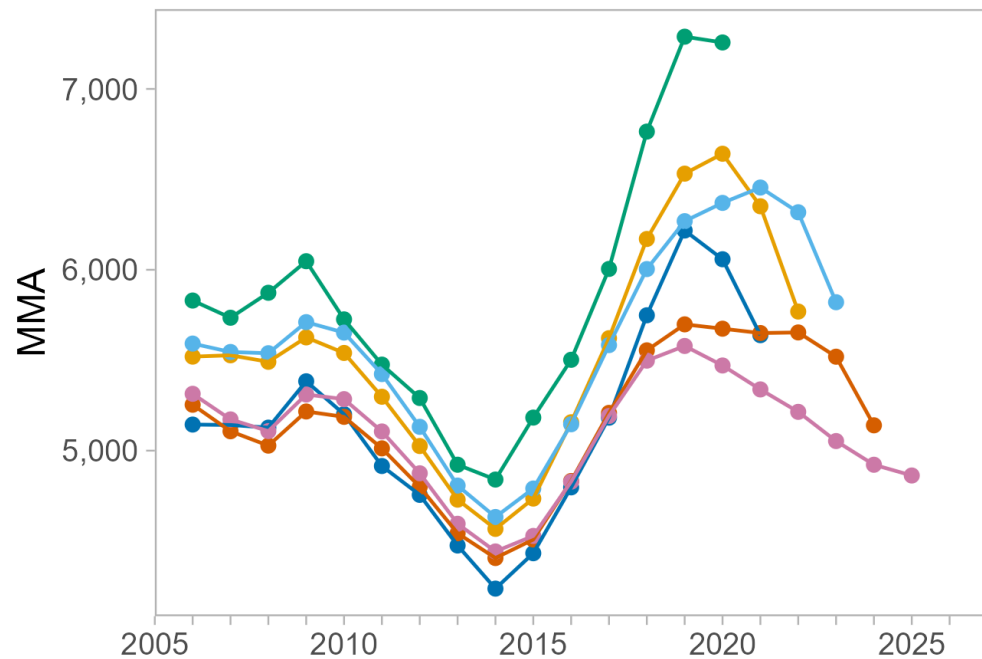
Model suggests recent over exploitation in WAG





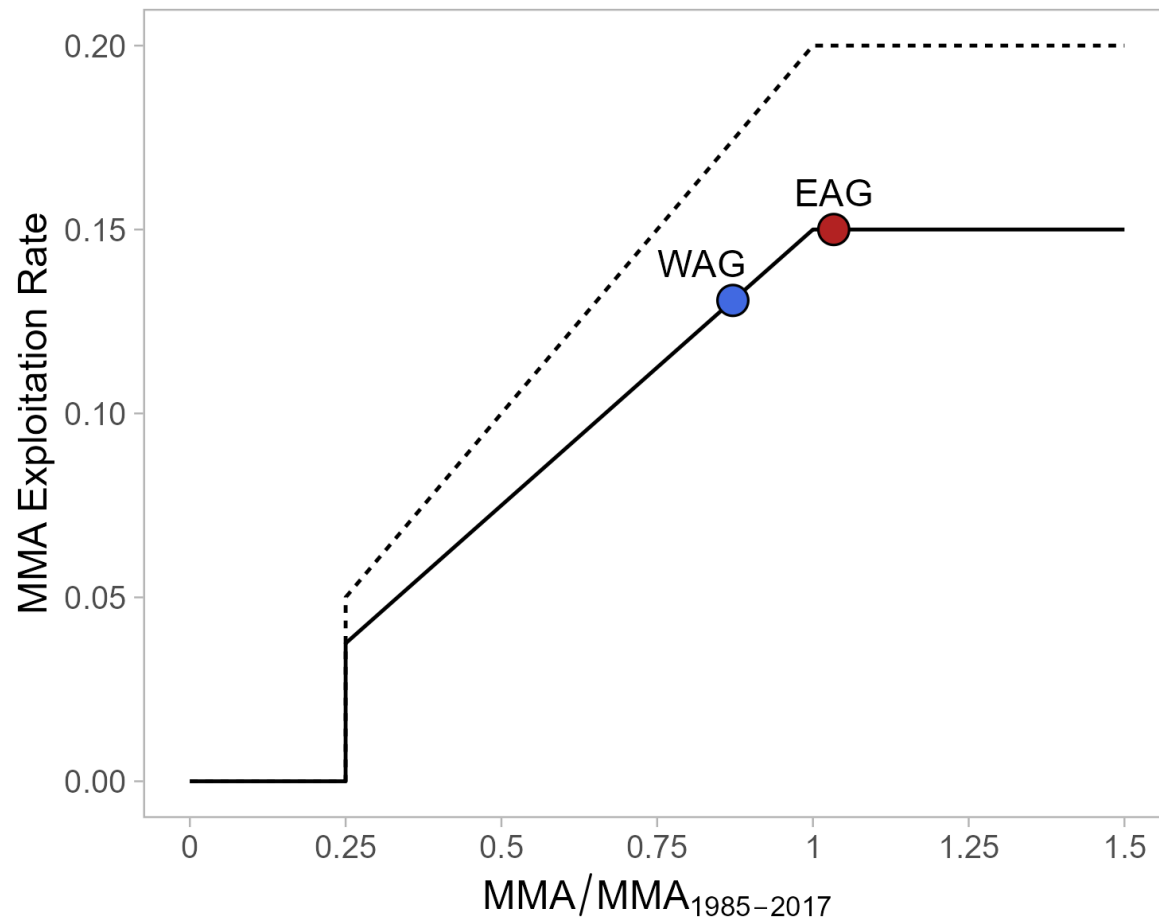
WAG assessments tend to overestimate terminal year MMA and LMA

MMA overestimation is proportionally less than LMA



LMA overestimates at similar or less rate to MMA – this buffers a bit of our retrospective view of ‘overexploitation’

2026/27 TAC w/ max 15% Exploitation



	EAG	WAG
MMA (2026) (mil)	4.862	2.760
MMA ₁₉₈₅₋₂₀₁₇	4.705	3.167
MMA / MMA ₁₉₈₅₋₂₀₁₇	1.03	0.871
Exploit. Rate MMA	15%	13.1%
$E_{\text{MMA}} \times \text{MMA}$	0.729	0.361
Legal Cap Not Limiting		
LMA (2026)	3.336	1.847
25% LMA (2026)	0.834	0.462
TAC (mil crab)	0.729	0.361
lb per crab	4.36	4.32
TAC (mil lb)	3.184	1.558

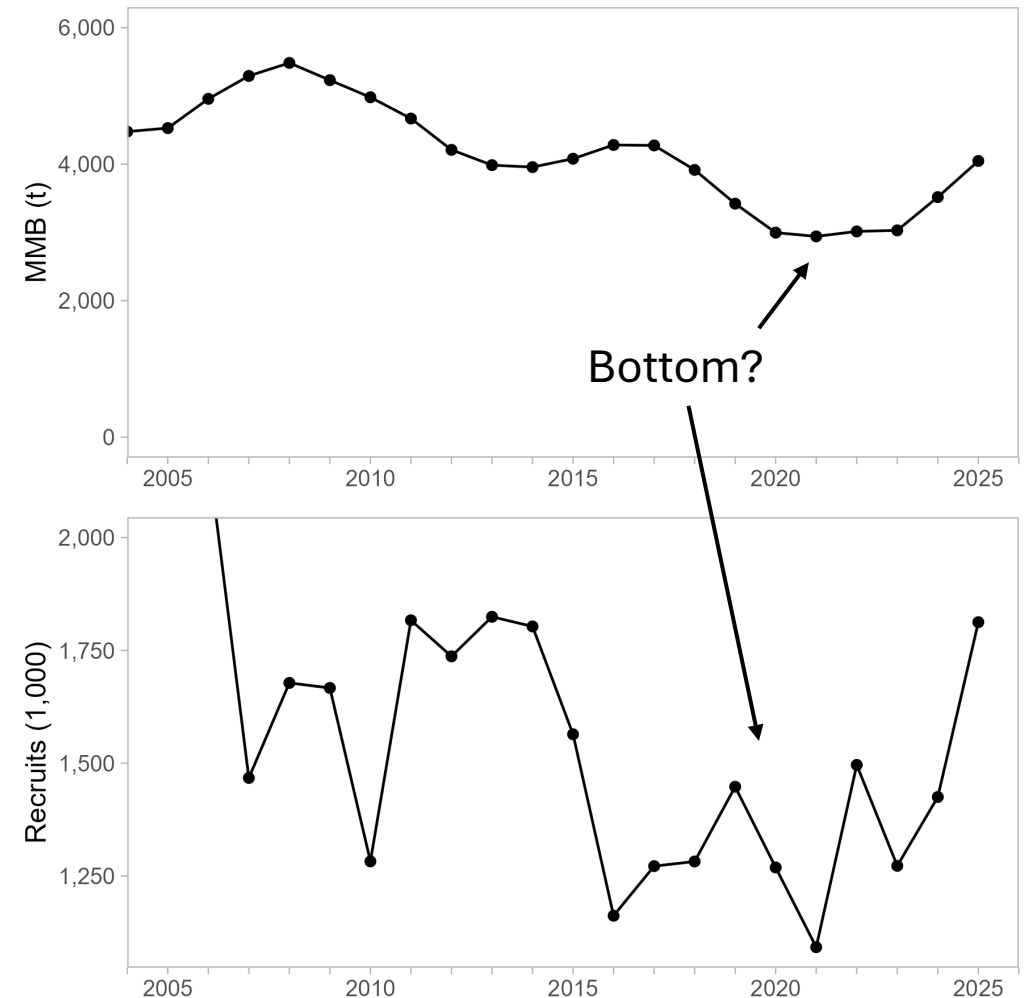
What exploitation rate to use for WAG??

Is WAG improvement result of management action? ***Tough to say...***

Thoughts:

- WAG seems to be rebounding
- TAC at 15% would be ~2x 2025/26 TAC
- 1st year model suggested preceding *F* not more aggressive than control rule

Let's be cautiously optimistic, try to repeat improved fishing performance, continue stock recovery – WAG 15%



Other Mortality

ABC = 5.776 mil lb

Full EAG, 15% WAG TAC = 4.742 mil lb

1.034 mil lb to buffer other mortality sources

- Directed discard mortality
- Groundfish bycatch
- State waters fishery → maximum 0.050 mil lb
- Cost recovery ~ 0.083 mil lb

GF Mortality

EAG decreasing, WAG
stationary, infrequent
pulses

10 yr average

0.075 mil lb EAG

0.012 mil lb WAG

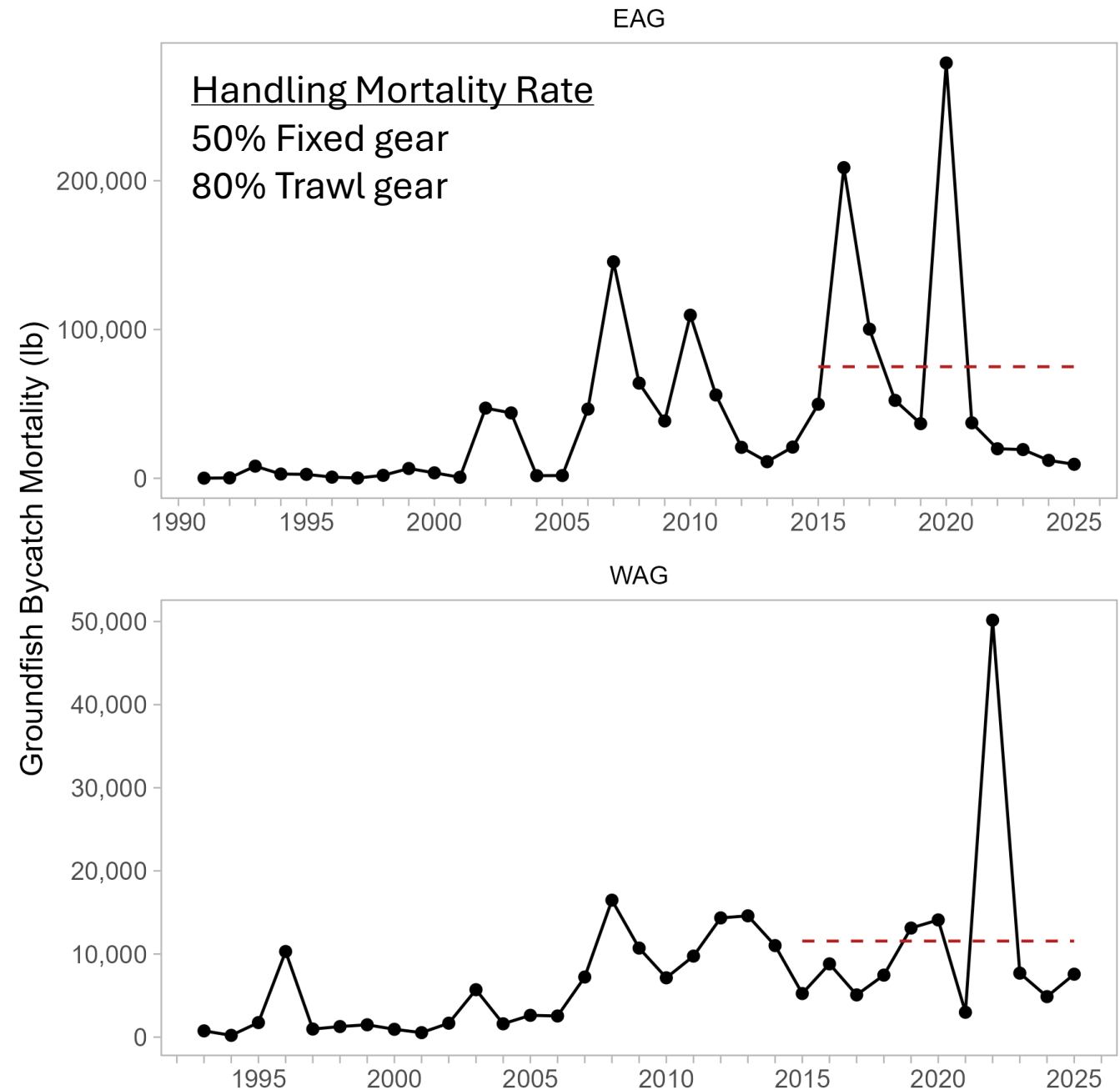
0.087 mil lb Total

Time series max

0.279 mil lb EAG

0.050 mil lb WAG

0.329 mil lb Total



Directed Sublegal Bycatch

Project discard mortality from stock assessment model at ABC

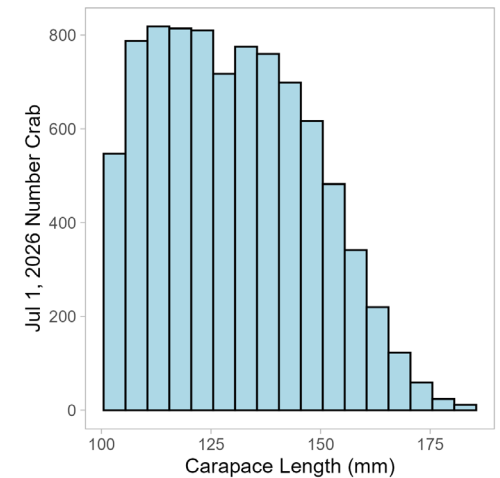
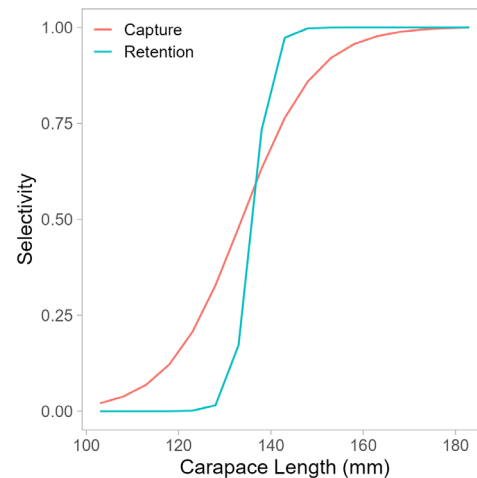
OFL is total catch, use selectivity and retention curves to estimate bycatch portion

Expected bycatch mortality

EAG = 0.217

WAG = 0.121

Total = 0.338



Total Mortality

ABC = 5.776 mil lb

ABC does not limit TAC

WAG @ 15% TAC = 4.742 mil lb

State Fishery = 0.050 mil lb

Cost Recovery = ~0.083 mil lb

GF Bycatch (10 yr avg) = 0.087 mil lb

+ Directed Bycatch (ABC) = 0.338 mil lb

Total = 5.300 mil lb

Upcoming Research

Alaska Ocean Observing System funded tagging project (Jared Weems, ADF&G)

- 50+ acoustic tags (small scaled, seasonal movement within EAG)
- Floy tags (number TBD, movement, growth)
- Deep water CTD to measure temp, salinity, current
- Data recovery of historical ADF&G Floy tagging data

Cooperative Survey Future – Small Mesh

Re-design (2026 planning, 2027 pilot)

- Small mesh pots w/ shorter soaks at index locations
- Utilize observer deployments?
- Data collection similar to current survey, *BUT*, captures recruitment class observer data collection does not encounter
- Empirical recruitment data → better informed recruitment, MMB

