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Scoping Amendment 16 Shark Quotas and Management

Atlantic Highly Migratory Species Management Division
Spring 2023

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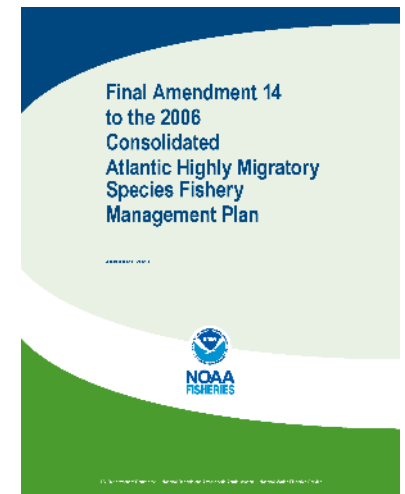
BACKGROUND



Acronyms

- ABC – Acceptable biological catch
- ACL – Annual catch limit
- EFP – Exempted fishing permit
- LAP – Limited access permit
- LCS - Large coastal shark
- OFL – Overfishing limit
- SCRS – Standing Committee on Research and Statistics
- SEFSC – Southeast Fisheries Science Center
- SHARE – Shark fishery review
- SRF – Shark research fishery
- SRP – Scientific research permit
- TAC – Total allowable catch

Amendment 14



- Final Amendment 14 released on January 24, 2023 (88 FR 4157)

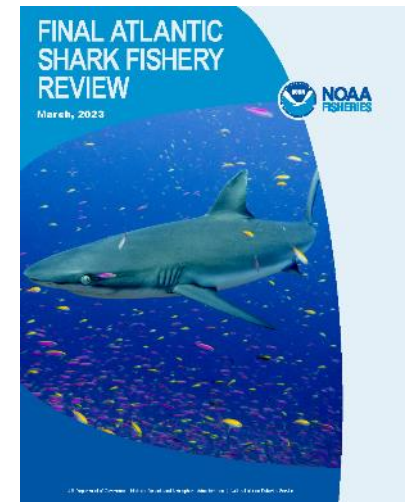
Preferred Management Options:

- Create a tiered ABC control rule
- Allow consideration of phase-in ABC control rules for any modifications in ABC
- Actively manage all sector ACLs (commercial and recreational)
- Establish an ACL for each Atlantic shark management group, without commercial ACL quota linkages
- Allow carry-over only for underharvest of commercial quotas (landings only) under certain conditions (i.e., the stock is not overfished and not experiencing overfishing)
- Compare a three-year average of fishing mortality estimates to the overfishing limit to determine overfishing status

Operational changes as a result of Amendment 14 will be considered in Amendment 16 (and future rulemakings)

SHARE Document

- Final SHARE document released on March 21, 2023 (88 FR 16944)



Potential Ways Forward

Potential modifications to:

- Vessel permit structure: Changing incidental LAPs to open access permits
- Commercial retention limits: LCS, blacknose, and other shark management groups
- Regional and sub-regional quotas
- Recreational size and retention limits

Additionally, beyond the regulations, NOAA Fisheries could:

- Improve communication and outreach within and outside the shark fishery
- Communicate best practices for commercial and recreational fishermen to mitigate shark depredation events



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AMENDMENT 16 SCOPING



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Amendment 16

- Scoping document released on May 8, 2023 (88 FR 29617)

Objectives:

Consistent with Amendment 14 and Scientific Advice...

- Establish ABCs for non-prohibited shark species
- Establish ACLs for non-prohibited shark species
- Optimize the ability for the commercial and recreational shark fisheries to harvest quotas to the extent practicable
- Increase management flexibility to react to additional factors impacting the Atlantic shark fisheries and account for changes in the distribution of shark harvest among sectors

Potential Placement of Shark Stocks in the ABC Control Rule Tier Structure

Tier 1: Data-rich stage-structured stock assessment

- Blacktip – Atlantic region
- Smoothhound – Atlantic region

Tier 2: Data-moderate stock assessment

- Atlantic sharpnose – Atlantic region
- Atlantic sharpnose – Gulf of Mexico region
- Blacktip – Gulf of Mexico region
- Finetooth – All regions
- Smoothhound complex – Gulf of Mexico region

Tier 3: Data-limited stock assessment

- No shark stocks

Placement continued

Tier 4: No accepted stock assessment

- Blacknose – Gulf of Mexico region
- Bonnethead – Atlantic region
- Bonnethead – Gulf of Mexico region
- Bull – All regions
- Carolina hammerhead* – All regions
- Great hammerhead* – All regions
- Lemon – All regions
- Nurse – All regions
- Smooth hammerhead* – All regions
- Spinner – All regions
- Silky – All regions
- Tiger – All regions

Under Rebuilding Plan

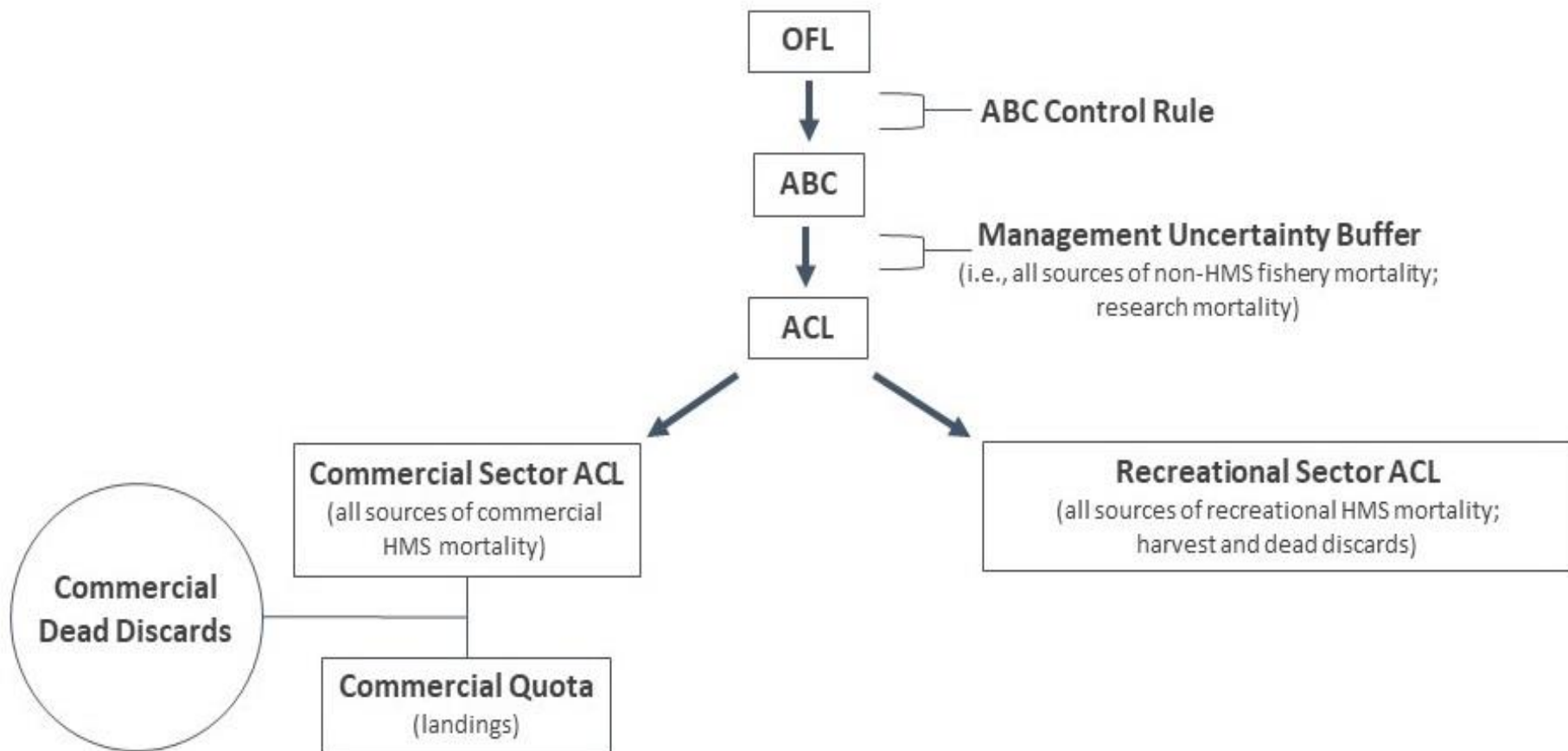
- Blacknose – Atlantic region
- Sandbar – All regions
- Scalloped hammerhead* – All regions

ICCAT Assessed and Pelagic Shark Stocks

- Blue – North Atlantic region
- Porbeagle – Northwest Atlantic region
- Shortfin mako – North Atlantic region
- Thresher – All regions

**Hammerhead shark species may move after completion of SEDAR 77*

ACL Framework for Non-Prohibited Shark Species



Scoping Options for Examples

Determining the Appropriate Number of Years of Data to Use

- A1 – Use all years of available catch history for each shark stock
- A2 – Use the last 10 years of catch history
- A3 – Use the last 5 years of catch history

Implementing the HMS Risk Policy for Tiers 1 and 2 Stocks

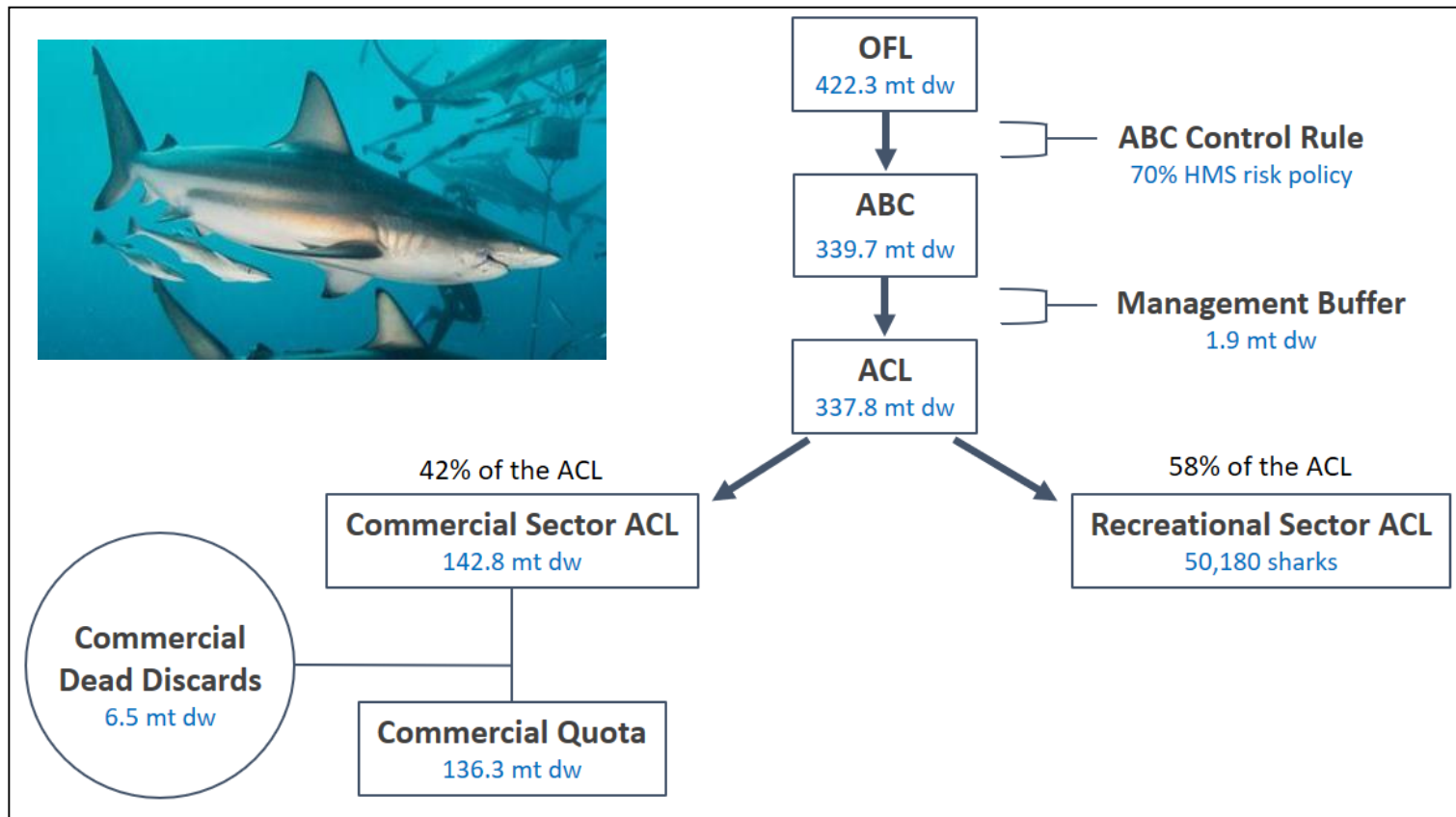
Example - Blacktip Shark Stocks

- B1 and C1 – Use an HMS risk policy of at least 70%
- B2 and C2 – Use an HMS risk policy of at least 60%
- B3 and C3 – Use an HMS risk policy of at least 50%

Example ABCs and Resulting ACLs

Tier 1: Blacktip sharks (Atlantic region) under Option B1

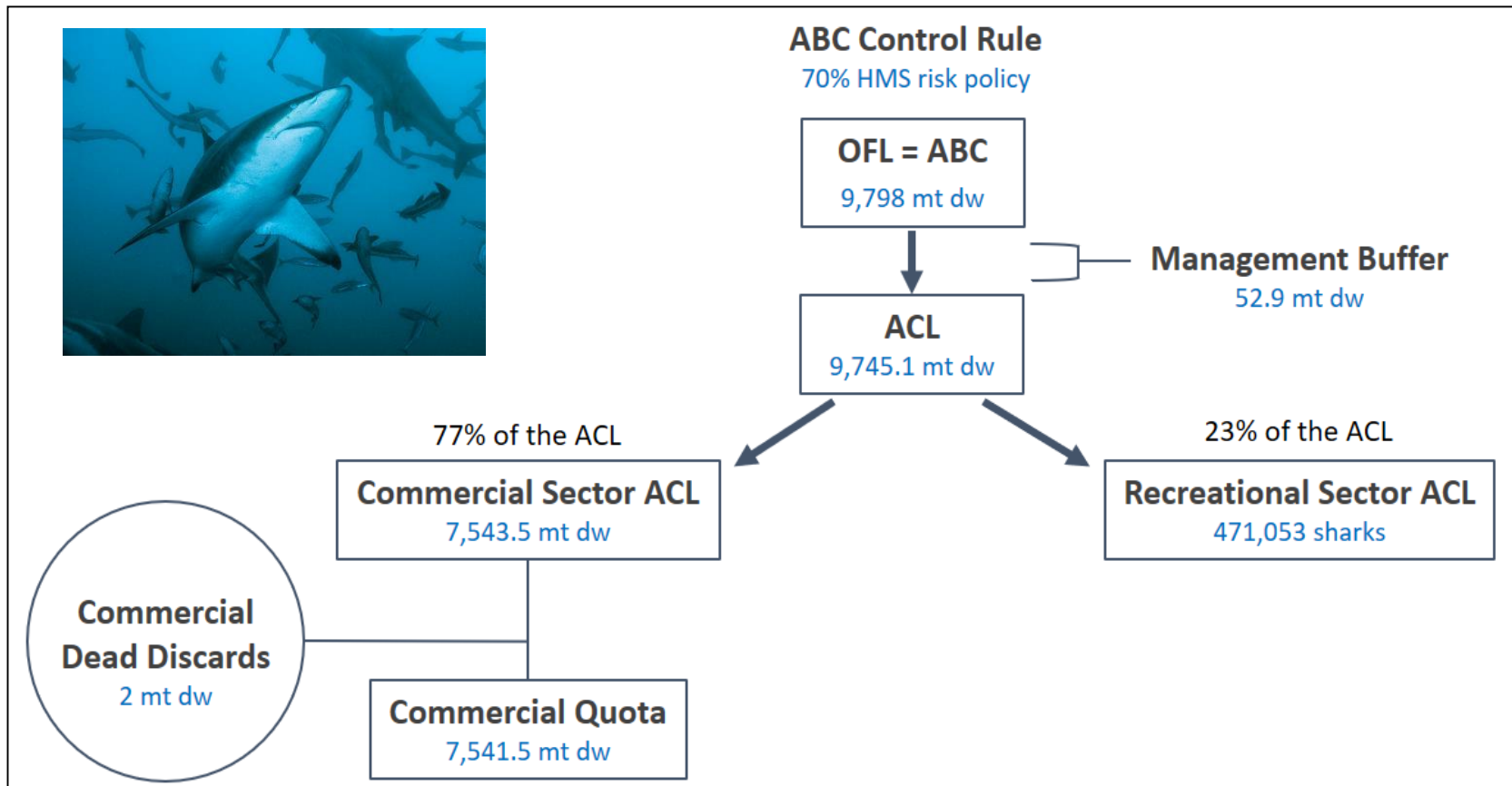
- SEFSC calculated the OFL (422.3 mt dw) and a minimum estimated scientific uncertainty



Example ABCs and Resulting ACLs

Tier 2: Blacktip sharks (Gulf of Mexico region) under Option C1

- If we phase-in the ABC control rule for a shark stock, the $OFL=ABC=TAC$ from the stock assessment



Example ABCs and Resulting ACLs

Tier 4: Bull sharks under Option A1

- Use scalars of mean reference period of catch to determine an OFL proxy to calculate the ABC
- Scalars (proxies as needed) for Tier 4 stocks:
 - Productivity attributes: age at maturity, maximum age, reproductive cycle, and number of pups
 - Susceptibility to fishing pressure attributes: post-release mortality rates, percentage of landings within management groups (last 5 years), and overlap of range (essential fish habitat) and the commercial fishery (shark targeted sets, weight of each fishery based on landings)

Example ABCs and Resulting ACLs

Tier 4: Bull sharks continued

Productivity Attributes

Attribute	Productivity	Scalar
Age at Maturity	F: 15 years M: 15-17 years	Moderate
Maximum Age	F: 27 years M: 25 years	Moderate
Reproductive Cycle	Biennial	Low
Number of Pups	1-10 pups	Low

Example ABCs and Resulting ACLs

Tier 4: Bull sharks continued

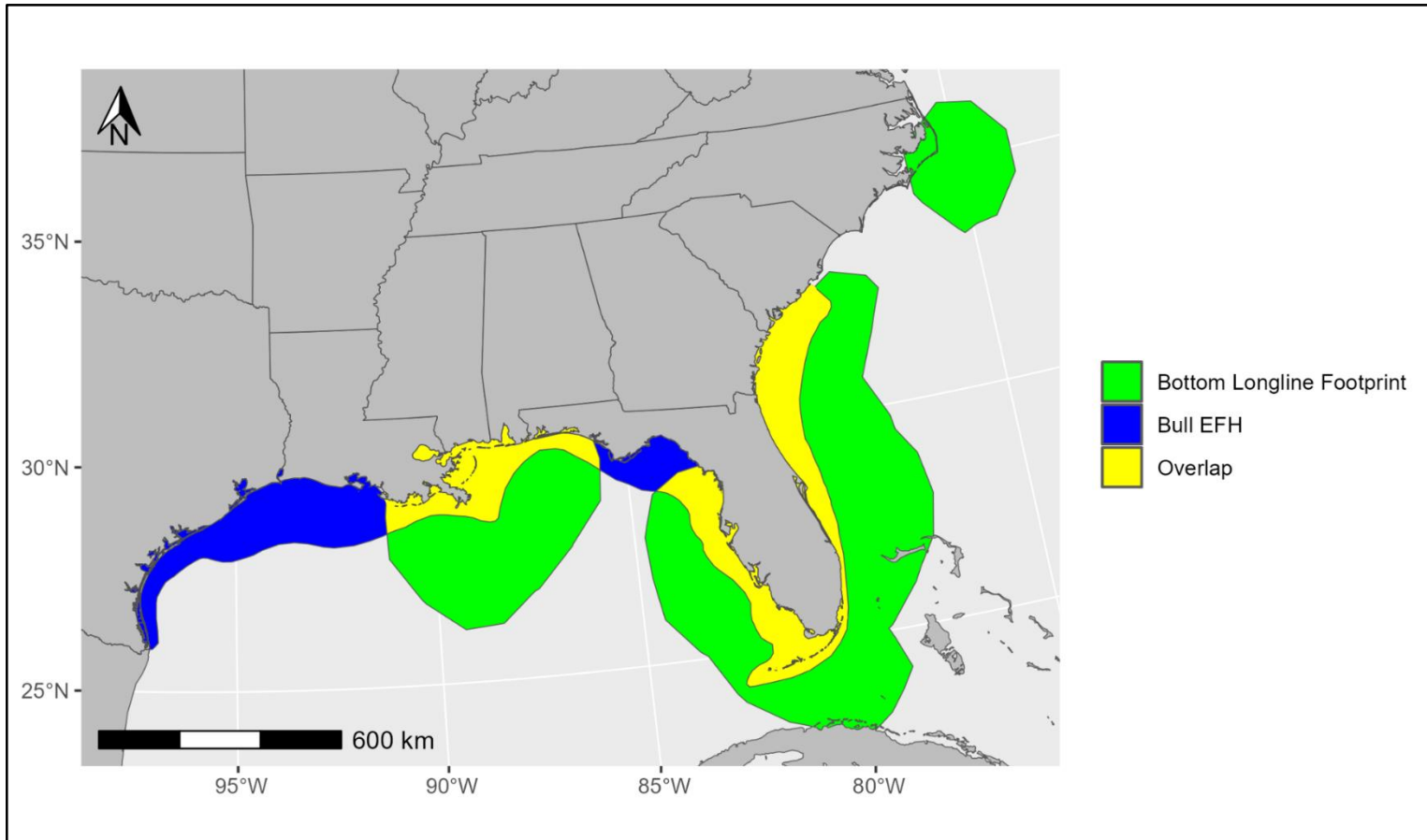
Susceptibility to Fishing Pressure Attributes

Attribute	Susceptibility	Scalar
Commercial Post-Release Mortality Rates	7.1% (bottom longline)	Low
Recreational Post-Release Mortality Rates	25.9%	Moderate
Percentage of Commercial Landings within Management Group	29.7%	Moderate
Percentage of Recreational Catch	9.8%	Low
Overlap of EFH Range and Commercial Fishery	60.0%	Moderate

Example ABCs and Resulting ACLs

Tier 4: Bull sharks continued

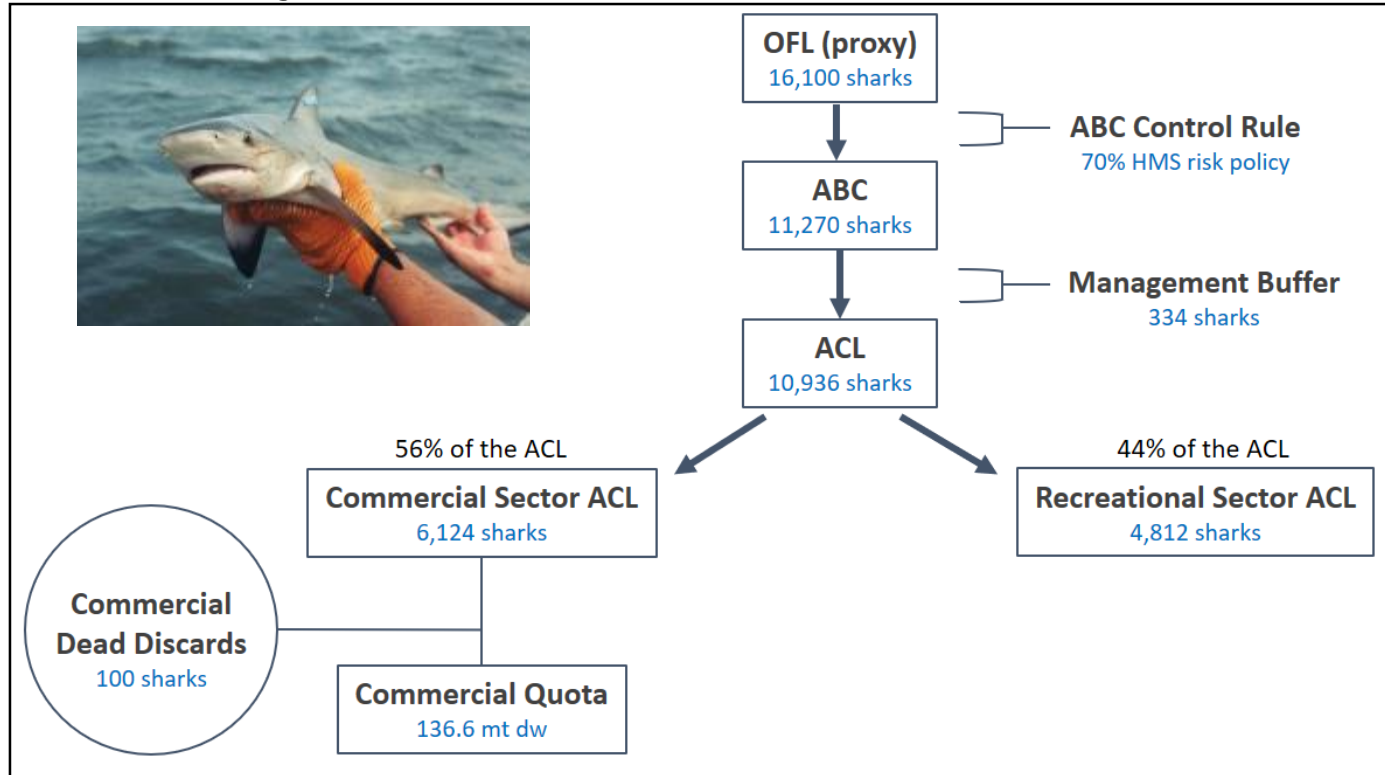
Overlap of EFH Range and Commercial Fishery



Example ABCs and Resulting ACLs

Tier 4: Bull sharks continued

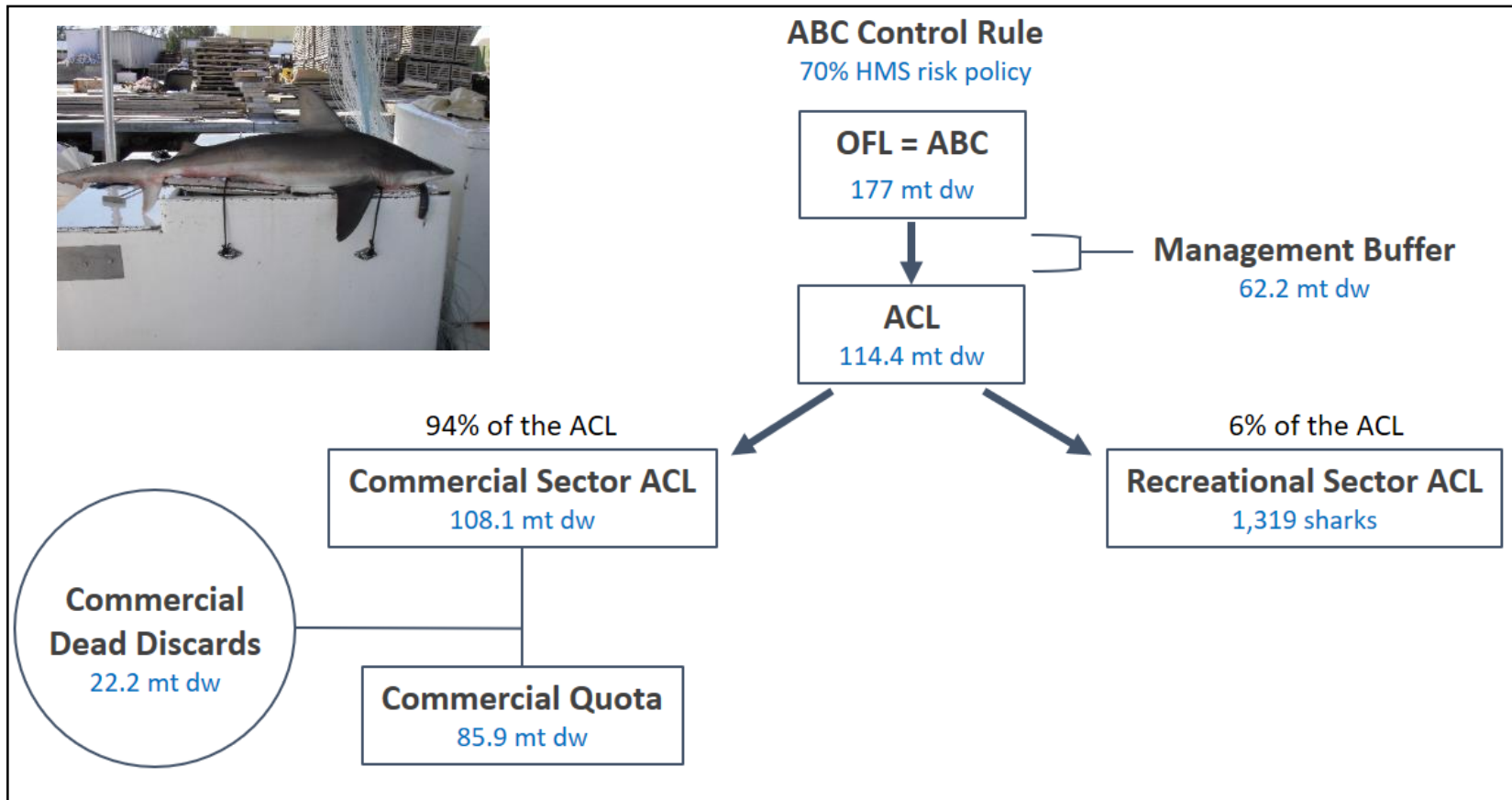
- Based on all of this information, a scalar of 2 as the multiplier of the mean reference period was considered
- Used all of the available catch data (Option A1) to represent a potential ABC and resulting ACLs



Example ABCs and Resulting ACLs

Under Rebuilding Plan: Sandbar sharks

- If we phase-in the ABC control rule for a shark stock, the OFL=ABC=TAC from the stock assessment



Example ABCs and Resulting ACLs

ICCAT Assessed and Pelagic Shark Stocks:

Blue sharks

Options:

- D1 – Maintain the current blue shark management group and quota
- D2 – Determine blue shark ACLs, or pelagic shark complex ACLs, based on reference years
- D3 – Implement ICCAT-recommended quota for blue sharks



Management Group Structure Options

- E1 – Maintain the current shark management groups
- E2 – Create individual shark management groups for assessed shark stocks and combine unassessed shark stocks
- E3 – Create regional shark management groups for assessed and unassessed stocks
- E4 – Create shark management groups based on shark species typically caught together during the same trip



Regional and Sub-Regional Quotas Options

Atlantic and Gulf of Mexico Regional ACL Split

- F1 – Maintain the current regional splits
- F2 – Determine regional split based on catch history (10 yrs)
- F3 – Determine regional split based on catch history (5 yrs)
- F4 – Remove the regional splits for all stocks that do not have regional assessments



Atlantic Blacknose Shark Management Boundary

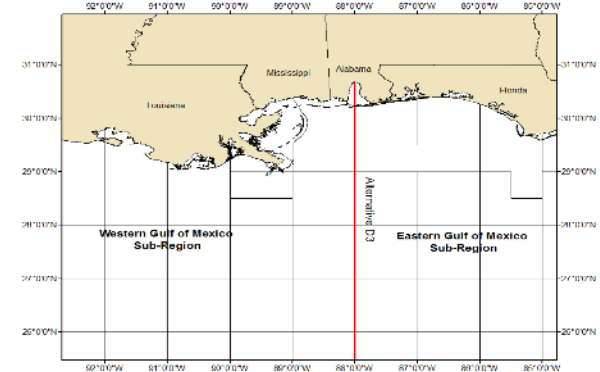
- G1 – Keep the current management boundary
- G2 – Remove the shark management boundary



Regional and Sub-Regional Quotas Options

Gulf of Mexico Sub-Regional Split

- H1 – Maintain the current sub-regional splits
- H2 – Determine sub-regional split based on catch history since Amendment 6
- H3 – Remove some Gulf of Mexico sub-regional quota splits
- H4 – Establish a flexible sub-regional split



Caribbean Shark Regional Quota

- I1 – Maintain status quo for accounting for Caribbean shark landings
- I2 – Create a separate Caribbean regional quota that would be higher than average reported landings of authorized shark species
- I3 – Create a separate Caribbean regional quota that would be higher than highest reported yearly landings of authorized species

EFP Program and SRF Options

- J1 – Maintain the current quotas for EFPs, SRPs, display permits, and the SRF
- J2 – Revise the quotas for EFPs and the SRF
- J3 – Allow the transferability of underutilized SRF sandbar quota to the commercial or recreational fishery
- J4 – Revise the SRF structure, objectives, and goals



Commercial Retention Limits Options

K1 – Maintain the current commercial retention limits

K2 – Revise the commercial retention limits

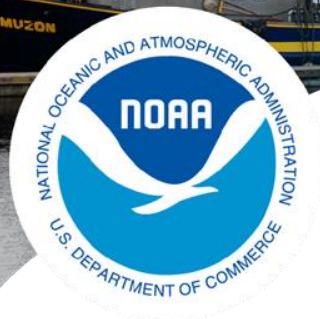
K3 – Remove the commercial retention limit for directed LAP holders and revise the limit for incidental LAP holders



Recreational Fishery Changes Options

- L1 – Maintain the current minimum size and bag limits
- L2 – Revise the minimum size and bag limits for all authorized shark species
- L3 – Remove minimum size and bag limits for some shark species





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REQUEST FOR COMMENTS



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Public Webinars

Venue	Date and Time	Location
Webinar	May 25 – 2 to 4 pm	Amendment 16 page for webinar info
Public Hearing	June 13 – 5 to 8 pm	Belle Chasse, LA
Public Hearing	June 21 – 5 to 8 pm	Cocoa Beach, FL
Public Hearing	July 25 – 5:30 to 8:30 pm	Manteo, NC
Webinar	August 7 – 2 to 4 pm	Amendment 16 page for webinar info

Amendment 16 website

<https://www.fisheries.noaa.gov/action/scoping-amendment-16-2006-consolidated-atlantic-highly-migratory-species-fishery-management>

Potential Timeline

- August 18, 2023 – Public Comment Period Ends
- Fall/Winter 2023 – Review Public Comment
- 2024 – Proposed rule for Amendment 16; waiting for the completion of SEDAR 77 stock assessment



Request for Public Comments

Comment period closes on:
August 18, 2023

Please submit comments to:

<http://www.regulations.gov>

Keyword - "NOAA-NMFS-2023-0010"



For more information go to the [HMS website](#) or contact (301-427-8503):

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