



# *Southern Flounder Fishery Management Plan*

Commercial and Recreational Fishery Allocation

*DEPARTMENT OF ENVIRONMENTAL QUALITY*

Marine Fisheries

MFC Meeting | Michael S. Loeffler and Anne L. Markwith | February 2021



# *Presentation Overview*

- FMP Steps
- Motion
- Background
- Southern Flounder Commercial and Recreational Allocations
- Allocation Considerations



# *Southern Flounder FMP Amendment 3*

## *Next Steps*

• Division holds public scoping period

• Marine Fisheries Commission approve goal and objectives of FMP

• Division draft FMP

• Division hold workshops to further develop draft FMP with plan advisory committee

• **Division update draft plan for Marine Fisheries Commission presentation**

Next Step

• Marine Fisheries Commission vote to send draft FMP for public and advisory committee review

• Commission advisory committees meet to review draft FMP and receive public comment

• Marine Fisheries Commission select preferred management options

• Department of Environmental Quality secretary and legislature review draft FMP

• Marine Fisheries Commission vote on final adoption of FMP

• Division and Marine Fisheries Commission implement management strategies

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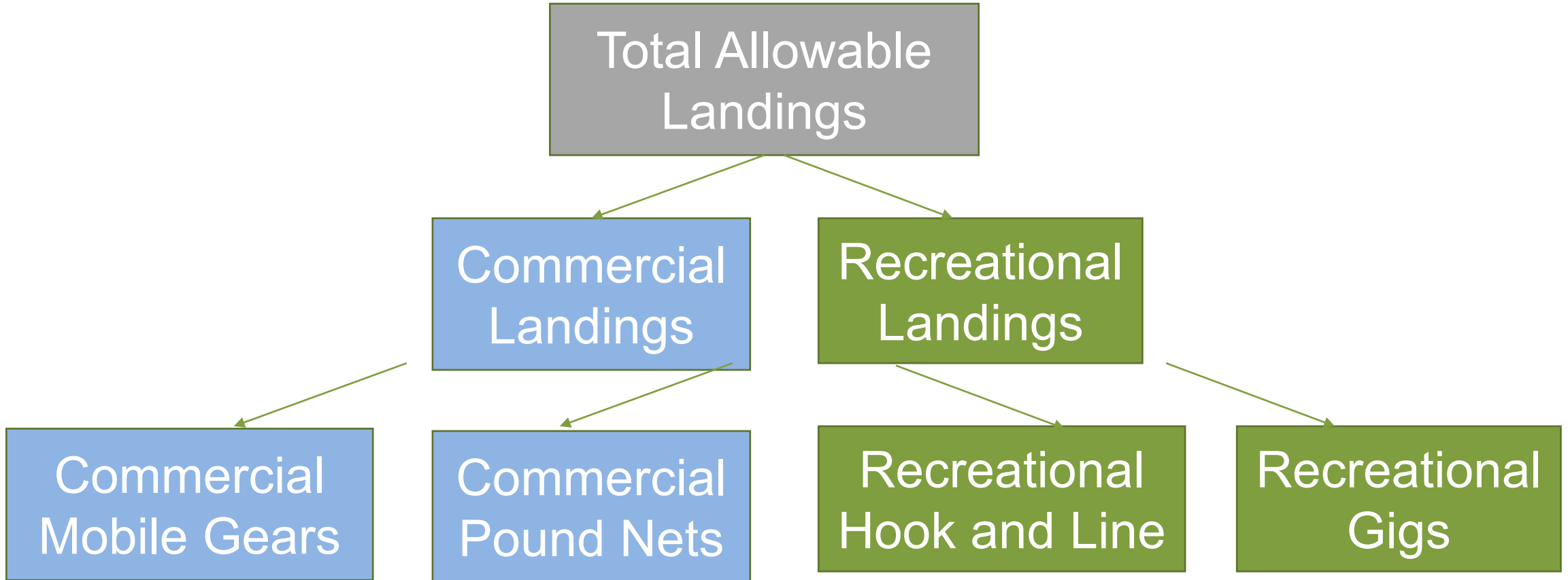
• Division and Marine Fisheries Commission implement management strategies

## *November 2020 MFC Meeting*

Motion to consider commercial/recreational allocations in the Southern Flounder FMP Amendment 3 of 70/30, 65/35, 60/30 with 10% allotment for gigging, 60/40, and 50/50.

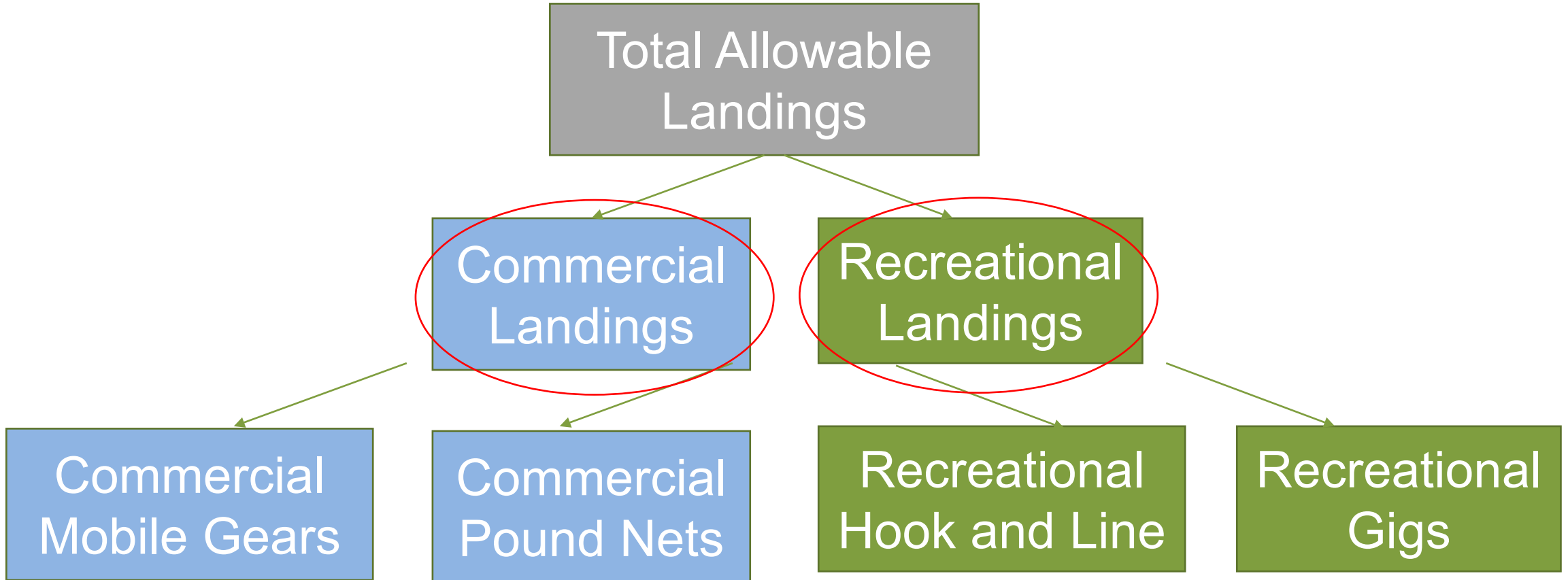


# *What is allocation?*





# *What is allocation?*



# *Allocation Background*

- Mid-Atlantic and South Atlantic Councils, ASMFC
  - Development of quota
  - Historical harvest
  
- MFC/WRC ASMA Striped Bass
  - Development of quota
  - Historical harvest (62.5/37.5)
  - Updated harvest after stock recovered (50/50)





# *Allocation Background*

- Factors to consider
  - Historical landings
  - Economic
  - Social
  - Behavior
- Revisions to allocations can occur
  - Change in quota
  - Stock status changes
  - Changes among user groups



# *Southern Flounder Commercial and Recreational Allocation*

## Options

- 1) 73/27 (Status quo or historical harvest based on 2017)
- 2) 70/30
- 3) 65/35
- 4) 60/30 with 10% allotment for gigging
- 5) 60/40
- 6) 50/50



# Commercial and Recreational Allocation

## Total Allowable Landings (TAL) in Pounds

	Commercial		Recreational		Change in TAL	
	% Allocation (Comm./Rec.)	TAL	% Reduction	TAL		% Reduction
<b>Historical Harvest</b>	73/27	390,493	72%	141,859	72%	0
	70/30	372,646	73%	159,706	68%	+/- 17,847
<b>MFC</b>	65/35	346,029	75%	186,323	63%	+/- 44,464
<b>Requested Options</b>	60/30/10*	358,459	74%	173,893	66%	+/- 32,034
	60/40	319,411	77%	212,941	58%	+/- 71,082
	50/50	266,176	81%	266,176	47%	+/- 124,317

\* This denotes a 10% allocation for gigs that was further divided out to each sector based on historically based allocation landings (73/27).



# *Economic Impacts Associated with Commercial Southern Flounder Fishing in North Carolina*

<b>Year</b>	<b>Pounds Landed</b>	<b>Ex-vessel Value</b>	<b>Participants</b>	<b>Estimated Sales Impact</b>	<b>Estimated Income Impacts</b>	<b>Estimated Employment Impact</b>	<b>Estimated Value Added Impact</b>
					\$		
2008	2,602,390	\$ 5,650,295	1,235	\$ 25,473,137	10,483,954	1,544	\$ 19,654,727
2009	2,396,240	\$ 4,609,932	1,299	\$ 20,547,716	\$ 8,550,927	1,545	\$ 16,161,407
2010	1,689,557	\$ 3,695,889	1,182	\$ 15,743,327	\$ 6,531,811	1,380	\$ 12,223,365
2011	1,247,450	\$ 2,753,128	1,039	\$ 11,771,643	\$ 4,884,958	1,186	\$ 9,140,235
2012	1,646,137	\$ 4,451,482	1,202	\$ 18,795,084	\$ 7,827,308	1,440	\$ 14,613,360
2013	2,186,391	\$ 5,673,190	1,286	\$ 23,172,478	\$ 9,654,261	1,591	\$ 17,977,144
2014	1,673,511	\$ 4,839,672	1,222	\$ 19,547,618	\$ 8,134,986	1,482	\$ 15,109,459
2015	1,202,885	\$ 3,823,567	1,029	\$ 15,852,258	\$ 6,621,987	1,235	\$ 12,379,619
2016	897,765	\$ 3,610,533	945	\$ 10,724,064	\$ 6,301,409	1,129	\$ 11,716,727
2017	1,394,617	\$ 5,655,751	1,048	\$ 20,489,984	\$ 9,494,322	1,335	\$ 17,676,161
<b>Average</b>	<b>1,693,694</b>	<b>\$ 4,476,342</b>	<b>1,149</b>	<b>\$ 18,211,731</b>	<b>\$ 7,848,592</b>	<b>1,387</b>	<b>\$ 14,665,220</b>



## *Ex-vessel Value of the Commercial Southern Flounder Fishery by Year and Gear*

Year	Gear				Total
	Gigs	Gill Net	Other	Pound Net	
2008	\$ 173,360.40	\$ 3,798,463.23	\$ 132,612.99	\$ 1,545,858.19	\$ 5,650,294.81
2009	\$ 159,031.29	\$ 3,160,714.37	\$ 116,727.33	\$ 1,173,458.93	\$ 4,609,931.91
2010	\$ 267,481.76	\$ 2,067,067.19	\$ 66,800.66	\$ 1,294,539.05	\$ 3,695,888.65
2011	\$ 256,846.25	\$ 1,397,565.13	\$ 34,239.01	\$ 1,064,477.33	\$ 2,753,127.72
2012	\$ 388,313.40	\$ 2,343,199.01	\$ 126,800.50	\$ 1,593,169.23	\$ 4,451,482.14
2013	\$ 320,379.72	\$ 2,742,686.75	\$ 114,816.10	\$ 2,495,307.19	\$ 5,673,189.76
2014	\$ 414,205.88	\$ 1,884,626.34	\$ 53,262.79	\$ 2,487,576.97	\$ 4,839,671.98
2015	\$ 417,188.88	\$ 1,235,835.53	\$ 38,535.39	\$ 2,132,006.71	\$ 3,823,566.52
2016	\$ 506,533.39	\$ 1,442,921.16	\$ 42,422.91	\$ 1,618,655.33	\$ 3,610,532.80
2017	\$ 547,308.32	\$ 2,220,594.81	\$ 32,975.26	\$ 2,854,872.71	\$ 5,655,751.10
<b>Total</b>	<b>\$ 3,450,649.29</b>	<b>\$ 22,293,673.52</b>	<b>\$ 759,192.93</b>	<b>\$ 18,259,921.64</b>	<b>\$ 44,763,437.39</b>



# *Economic Impacts Associated with Recreational Southern Flounder Fishing in North Carolina*

<b>Year</b>	<b>Estimated Total Flounder Trips</b>	<b>Trip Expenditures</b>	<b>Estimated Sales Impact</b>	<b>Estimated Income Impact</b>	<b>Estimated Employment Impact</b>	<b>Estimated Value-Added Impact</b>
2008	2,701,930	\$ 403,612,123	\$ 376,417,686	\$ 135,957,566	3,292	\$ 205,722,681
2009	1,482,500	\$ 215,695,683	\$ 200,699,372	\$ 72,448,738	1,770	\$ 109,870,023
2010	1,877,504	\$ 280,546,465	\$ 262,481,379	\$ 95,039,325	2,312	\$ 143,569,612
2011	1,796,204	\$ 283,056,149	\$ 250,861,698	\$ 90,609,485	2,212	\$ 137,255,698
2012	1,744,458	\$ 277,772,559	\$ 244,156,371	\$ 88,393,860	2,159	\$ 133,589,470
2013	1,707,904	\$ 273,226,860	\$ 238,202,597	\$ 86,449,024	2,105	\$ 130,332,132
2014	1,639,593	\$ 269,763,604	\$ 229,373,566	\$ 83,466,334	2,027	\$ 125,444,042
2015	1,708,499	\$ 279,669,886	\$ 228,724,518	\$ 83,228,735	2,037	\$ 125,250,995
2016	1,714,200	\$ 279,905,674	\$ 232,116,853	\$ 84,789,195	2,079	\$ 127,093,283
2017	1,250,216	\$ 210,976,279	\$ 171,358,430	\$ 62,652,077	1,532	\$ 93,793,106
<b>Average</b>	<b>1,762,301</b>	<b>\$ 77,422,528</b>	<b>\$ 243,439,247</b>	<b>\$ 88,303,434</b>	<b>2,153</b>	<b>\$ 133,192,104</b>



## *What impact would shifting the allocation have?*

- Not based on biological need or rebuilding schedule
- Does not change the total amount of fish that can be removed annually
- Commercial fishery
  - Potentially shorter harvest window
- Recreational fishery
  - Buffer against overages
  - Season may not be extended
  - Bag limit concerns



# *What impact would shifting the allocation have?*

## *Recreational Hook and Line Fishery*

**Allocation Harvested based on 73/27 allocation  
Recreational Hook and Line fishery, Aug. 16- Sep. 30**

Year	4-Fish Bag	3-Fish Bag	2-Fish Bag	1-Fish Bag
2008	Green	Green	Green	Green
2009	Yellow	Yellow	Yellow	Green
2010	Red	Yellow	Yellow	Yellow
2011	Red★	Red★	Red★	Yellow
2012	Yellow	Yellow	Yellow	Yellow
2013	Red★	Red★	Red	Yellow
2014	Yellow	Yellow	Yellow	Green
2015	Yellow	Yellow	Yellow	Green
2016	Yellow	Yellow	Yellow	Yellow
2017	Green	Green	Green	Green

**Allocation Harvested based on 60/40 allocation  
Recreational Hook and Line fishery, Aug. 16- Sep. 30**

Year	4-Fish Bag	3-Fish Bag	2-Fish Bag	1-Fish Bag
2008	Green	Green	Green	Green
2009	Yellow	Green	Green	Green
2010	Yellow	Yellow	Yellow	Green
2011	Yellow	Yellow	Yellow	Yellow
2012	Yellow	Yellow	Green	Green
2013	Red	Yellow	Yellow	Yellow
2014	Green	Green	Green	Green
2015	Green	Green	Green	Green
2016	Green	Green	Green	Green
2017	Green	Green	Green	Green

No change next year    
  Reduction in TAL next year    
  No season next year  
★ Situation where may be multiple years without harvest

# *What impact would shifting the allocation have? Southern Region Commercial Fishery*

## Mobile Gears

Allocation						
Based on daily commercial landings beginning Oct. 1						
Year	73/27	70/30	65/35	60/30/10	60/40	50/50
2008	Green	Green	Yellow	Orange	Light Green	Red
2009	Green	Green	Light Green	Yellow	Green	Orange
2010	Green	Green	Yellow	Yellow	Yellow	Orange
2011	Green	Light Green	Orange	Red	Orange	Red
2012	Green	Green	Green	Green	Green	Red
2013	Green	Light Green	Light Green	Yellow	Light Green	Red
2014	Green	Green	Yellow	Orange	Green	Red
2015	Green	Green	Green	Green	Green	Green
2016	Green	Green	Green	Green	Green	Green
2017	Green	Green	Light Green	Orange	Green	Orange

## Pound Nets

Allocation						
Based on daily commercial landings beginning Oct. 1						
Year	73/27	70/30	65/35	60/30/10	60/40	50/50
2008	Green	Green	Green	Green	Green	Green
2009	Green	Yellow	Orange	Orange	Orange	Red
2010	Green	Light Green	Orange	Yellow	Orange	Orange
2011	Green	Light Green	Yellow	Yellow	Yellow	Yellow
2012	Green	Orange	Orange	Orange	Orange	Orange
2013	Green	Yellow	Orange	Light Green	Red	Red
2014	Green	Light Green	Yellow	Yellow	Yellow	Orange
2015	Green	Light Green	Light Green	Green	Light Green	Light Green
2016	Green	Light Green	Light Green	Light Green	Yellow	Orange
2017	Green	Light Green	Orange	Orange	Orange	Orange

- No change in number of fishing days based on allocation
- Less than 25% reduction in fishing days based on allocation
- Greater than 25% reduction in fishing days based on allocation

# Commercial and Recreational Sub-Allocations

NCMFC Option	Commercial (lb)		Recreational (lb)	
	Mobile Gear	Pound Net	Hook-and-Line	Gig
Historical Harvest				
73/27	195,105	195,388	126,315	15,544
70/30	186,188	186,458	142,206	17,500
65/35	172,889	173,140	165,907	20,416
60/30/10*	180,228	178,231	159,706	14,187
60/40	159,590	159,821	189,608	23,333
50/50	132,992	133,184	237,010	29,166

\*This denotes a 10% allocation for gigs that was further divided out to each sector based on historically based allocation (73/27).



# *Pros and Cons of Allocation Shift*

- + Mitigates some economic impact to the recreational fishery.
- + May buffer against recreational overages.
- +/- Allocation not based on biological need.
- +/- Allocation other than historical harvest not based on historical landings.
- +/- May not impact the season dates, season lengths, or bag limits for the recreational fishery.



# *Pros and Cons of Allocation Shift*

- May exacerbate economic impact of the commercial fishery.
- Provides additional harvest to the sector with the least precise estimates.
- Changes in allocation may alter rebuilding schedule
- May be significant impacts to the commercial seasons.
- May be necessary to adjust allocations within a sector to maintain specific gear-based fisheries.
- May increase the chance of the commercial sector exceeding their allocation.



# *Final Considerations*

- Limited southern flounder TAL.
- Unintended social and economic consequences noticeable at the finer level of specific fisheries within each sector.
- Consider allocating future quota increases towards one sector over the other as SSB expands.
  - This can be achieved in future amendments with methodic increases until the preferred allocation is achieved.



# Questions?

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