

### Generic Amendment 3 to the Puerto Rico, St. Thomas and St. John, and St. Croix Fishery Management Plans: Management Measures for Pelagic Species



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# Review Management Measures for Pelagic Species under the Fishery Management Plans

- All finfish, including Pelagics, must be maintained with head and fins intact<sup>1</sup>
- Currently no gear restrictions for Pelagics<sup>2</sup>;
- Currently no size limits, commercial trip limits, recreational bag limits, or seasonal closures<sup>3</sup> for Pelagics
- Management reference points Sustainable Yield Level (Overfishing Limit proxy), Acceptable Biological Catch, Annual Catch Limits (=Optimum Yield), Annual Catch Targets (next slide)
- Accountability Measures The Council established the ACT as 90% of the ACL to serve as the AM trigger. If landings<sup>4</sup> exceed the ACT, the Council in consultation with the SEFSC would assess whether corrective action is needed. For Puerto Rico, ACLs and ACTs are set for both the commercial and recreational sector.<sup>5</sup>
- Described Essential Fish Habitat for Pelagics

<sup>&</sup>lt;sup>1</sup> exceptions for bait and consumption at sea

<sup>&</sup>lt;sup>2</sup> under the Trawl and Net Gear Amendment, any gear restrictions selected would apply to the Pelagic species managed in the FMPs

<sup>&</sup>lt;sup>3</sup> exceptions for seasonal closures that prohibit <u>all fishing</u>: PR – Abrir La Sierra and Tourmaline Bank in federal waters Dec 1 – last day of Feb; STT/STJ - Grammanik Bank Feb 1-Apr 30 and Hind Bank MCD year round; STX – Lang Bank Dec 1 – last day of Feb and Mutton Snapper Spawning Aggregation area Mar 1 – June 30

<sup>&</sup>lt;sup>4</sup> following implementation of the FMPs, the landings compared to the ACLs and ACTs would start with the most recent single year and then progress up to a 3-year average

<sup>&</sup>lt;sup>5</sup> if landings for one sector are not available, the ACL for the sector with available data would be the ACL for the stock/stock complex

### Management Reference Points in the FMPs

SYL (OFL proxy), ABC, ACL (=OY), ACT in pounds whole weight

PR FMP	SYL	ABC	Com. ACL	Rec. ACL	Com. ACT	Rec. ACT
Dolphinfish – dolphin,* pompano dolphin	3,675,886	1,837,943	232,173	1,513,873	208,956	1,362,486
Wahoo	498,207	249,104	25,911	210,737	23,320	189,663
Tunas – little tunny, blackfin tuna	254,937	123,435	82,779	34,485	74,501	31,037
Mackerels -king and cero mackerel	761,268	380,634	232,422	129,180	209,180	116,262
Great barracuda	354,080	177,040	495	167,693	445	150,924
Tripletail	82,684	41,342	270	39,005	243	35,105

<sup>\*</sup> Dolphin *Coryphaena hippurus* is indicator for complex

STT/STJ FMP	SYL	ABC	ACL	ACT
Dolphin	20,585	10,293	9,778	8,800
Wahoo	14,482	7,241	6,879	6,191

STX FMP	SYL	ABC	ACL	ACT
Dolphin	182,386	91,193	86,633	77,970
Wahoo	57,390	28,695	27,260	24,534



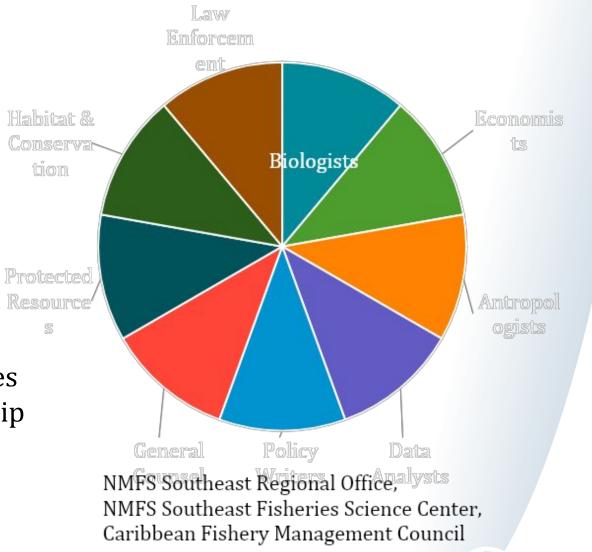
# Guidance during the August 2022 Caribbean Council Meeting

- Motion The Council requests staff to move forward with the preparation of an amendment to each of the island-based FMPs to develop recreational bag limits, commercial trip limits, recreational and commercial size limits for pelagic stocks as specified during the August 2022 meeting.
  - For Puerto Rico, species selected = dolphin, pompano dolphin, wahoo, little tunny, blackfin tuna, king mackerel and cero mackerel
  - For St. Thomas and St. John and St. Croix, species selected = dolphin and wahoo
- Rationale = prevent overharvest through bag and trip limits and protect undersized individuals through size limits



### Interdisciplinary Planning Team

- IPT met in October 2022 and reviewed information included in the white paper (April 2022) and scoping document (August 2022).
- Recommended organizing Actions by management area, then by management measure.
- Identified a list of information and data needs to be considered before alternatives for recreational bag limits, commercial trip limits, and size limits could be developed (next slide).





### Information and Data Needs Identified by IPT

- What species are landed together per trip?
- Are the species targeted or incidental catch in commercial landings?
- What gear types are used to catch the pelagics?
- What is the seasonality in commercial landings; do fishermen only target these species select months during the year; does price vary per year?
- Are there any social or economic records to explain the jump in recreational landings in 2016 (e.g., gas prices)?
- What percentage of dolphin are caught in U.S. Caribbean waters versus throughout it's range?

- Are they caught in long-line data, HMS data (e.g., targeted or as bycatch)? If so, where is that reported?
- What input was used (e.g. public comments) in developing the joint Council Dolphin Wahoo FMP (February 2001)?
- Is there rationale from the DNER regulations for 30 dolphin per vessel recreational bag limit?
- Is there any recruitment/population information available?
- What are the timing and rules of engagement for Tournaments?
- Is there any new or emerging work regarding consumptive use of seafood in the region?



### Data and Information Sources Identified by IPT

- Commercial landings data use the longest time series available; use adjusted landings for Puerto Rico
- Recreational landings information from Marine Recreational Information Program
   -Puerto Rico (2000-2016)
- Additional commercial charter information
- Trip Intercept data look for fish sizes, number landed, gear types used, etc.
- 2006 MRAG report that reviewed USVI recreational fishing regulations
- Tournament data
- Dolphinfish Research Program
- Council and it's Advisory Panels
- Constituents



## Seasonality



# Dolphin and Wahoo average commercial landings per month:

Puerto Rico 1988-2019

Adjusted Landings (lbs)

For dolphin, the highest landings are in December and January

For wahoo, the highest landings are in November and December



# Estimated Landings (lbs)

### Dolphin and Wahoo average recreational landings per 2-month wave: Puerto Rico 2000-2016



# Cero and King Mackerel average commercial landings per month:

Puerto Rico 1988-2019

Adjusted Landings (lbs)

For cero, the highest landings are in May

For king mackerel, the highest landings are in May



# Estimated Landings (lbs)

### Cero and King Mackerel average recreational landings per 2-month wave: Puerto Rico 2000-2016



# Blackfin tuna and Little tunny average commercial landings per month: Puerto Rico 1988-2019

Adjusted Landings (lbs)

For blackfin tuna, the highest landings are in May and June

For little tunny, the highest landings are in May



### Blackfin tuna and Little tunny average recreational landings per 2-month wave: Puerto Rico 2000-2016

Estimated Landings (lbs)



# Dolphin and Wahoo average commercial landings per month:

St. Thomas and St. John 2000-2021

Landings (lbs)

For dolphin, the highest landings are in April

For wahoo, the highest landings are in November through January



# Dolphin and Wahoo average commercial landings per month:

St. Croix 2000-2021

Landings (lbs)

For dolphin, the highest landings are in April

For wahoo, the highest landings are in November



## Spatial Distribution



### Dolphin and Wahoo proportion of commercial landings per coast: Puerto Rico 1988-2019

Proportion of Landings



## Cero and King Mackerel proportion of commercial landings per coast: Puerto Rico 1988-2019

Proportion of Landings



# Proportion of Landings

### Blackfin tuna and Little tunny proportion of commercial landings per coast: Puerto Rico 1988-2019



### Dolphin and Wahoo proportion of commercial landings by jurisdiction: Puerto Rico 2012-2019

Proportion of Landings



# Proportion of Landings

### Dolphin and Wahoo proportion of recreational landings by jurisdiction: Puerto Rico 2000-2016



# Cero and King Mackerel proportion of commercial landings by jurisdiction: Puerto Rico 2012-2019

Proportion of Landings



# Proportion of Landings

### Cero and King Mackerel proportion of recreational landings by jurisdiction: Puerto Rico 2000-2016



# Proportion of Landings

### Blackfin tuna and little tunny proportion of commercial landings by jurisdiction: Puerto Rico 2012-2019



### Blackfin tuna and little tunny proportion of recreational landings by jurisdiction: Puerto Rico 2000-2016

Proportion of Landings



# Dolphin and Wahoo proportion of commercial landings by jurisdiction: St. Thomas/St. John 2000-2021

Dolphin Wahoo

Adjusted Landings (lbs)



# Dolphin and Wahoo proportion of commercial landings by jurisdiction: St. Croix 2000-2021

Dolphin

Wahoo

Adjusted Landings (lbs)



## Gear Use



## Percent Commercial Landings by Gear: Puerto Rico 1988-2019

Gear Type	Dolphinfish	Wahoo	Cero	King Mackerel	Blackfin tuna	Little tunny
BEACH SEINE	0.06	0.03	3.62	2.98	1.76	26.81
BOTTOM LINE	19.55	20.36	43.71	49.34	21.26	23.86
BY HAND	0.00	0.02	0.00	0.01	0.00-	
CAST NET	0.01	0.07	0.36	0.15	0.01	0.15
FISH POT	0.69	0.29	1.05	2.14	0.53	1.41
GILL NET	0.27	2.24	13.24	8.63	1.55	3.69
HAND LINE	4.01	3.39	8.08	4.11	1.55	0.84
HAND TROLL L			0.01	0.03-		0.00
LAND CRAB TRA	0.00-	-		0.00	0.01-	
LOBSTER POT	0.02-		0.01	0.04	0.00	0.03
LONG LINE	0.40-		0.27	0.30	0.02	0.07
OTHER GEAR		-		0.01-	-	
ROD AND REEL	10.09	12.98	2.95	1.67	5.64	4.81
SCUBA DIVING	0.00	0.19	0.44	0.39	0.03	0.10
SILK HAUL	0.01-		0.00	0.01	0.01-	
SKIN DIVING	-	0.09	0.16	0.07-		0.00
SNARE	0.01-		0.00	0.01-		0.48
SPEAR FISHING	0.08	0.09	0.29	0.35	0.00	0.06
TRAMMEL NET	0.18	0.03	0.58	0.26	0.00	0.16
TROLL LINE	64.61	60.23	25.23	29.50	67.63	37.54



# Percent Commercial Landings by Gear: St. Thomas/St. John and St. Croix 2000-2021

St. Thomas and St. John			St. Croix	St. Croix			
Gear Type	Dolphin	Wahoo	Gear Type D	olphin V	Wahoo		
BY HAND	-	0.07	BOTTOM FISHING HOOK AND LINE -		0.03		
CASTNET	0.03	-	BUOY (YO-YO)	0.00-	-		
COMBINED GEARS	0.40	0.82	CASTNET	0.06	0.12		
DIVING	0.04	0.49	COMBINED GEARS	0.14	0.12		
FISH TRAP	0.38	0.30	DIVING	0.11	0.02		
HANDLINE	7.38	2.76	DIVING WITH NETS	0.03	0.00		
HOOK AND LINE WITH POWER WINCH	1.50	5.09	DRIFT LONGLINE	0.01	0.04		
HOOK AND LINE-UNKNOWN TYPE	7.51	5.97	GILLNET	0.02	0.02		
LINE FISHING	48.55	59.66	HANDLINE	34.50	49.17		
LOBSTER TRAP	0.00	_	HOOK AND LINE WITH POWER WINCH	0.13	0.73		
LONGLINE	0.00	0.02	HOOK AND LINE-UNKNOWN TYPE	0.47	0.54		
ROD AND REEL	29.58	23.66	LINE FISHING	62.78	46.44		
SEINE NET	2.47	-	LONGLINE	0.64	0.54		
TRAMMEL NET	0.01	-	ROD AND REEL	0.60	1.78		
TRAP-UNKNOWN TYPE	0.05	-	SEINE NET	0.16	0.19		
TRAPS	1.68	0.20	SPEARFISHING WITH SCUBA	0.02	0.06		
TROLLED HOOK AND LINE	0.40	0.70	TRAPS	0.15	0.04		
UNKNOWN	0.01	0.27	UNKNOWN	0.18	0.16		



## Amendment Actions and Options



### Puerto Rico

Potential Action	Rec bag limit/day	Com trip limit/day	Min Size limit	Information/ Considerations
1 – Establish mgmt. measures for Dolphinfish	<ul> <li>- 10 dolphin/person/day or 30 dolphin/vessel/day, whichever is less.</li> <li>- 5 dolphin/person/day or 15 dolphin/vessel/day, whichever is less.</li> </ul>	- 100 lb (rounding up from 67.3 trip average)	- 20" (SA)	<ul><li>What was DNER rationale for 10/30 bag limit?</li><li>Include/exclude pompano dolphin?</li></ul>
2 – Establish mgmt. measures for Wahoo	- 2 wahoo/person/day (SA)	- 50 lb (rounding up from 34.5 trip average)		<ul> <li>- combined limit for wahoo and mackerels 5 of each species/person/day and 10 total/vessel per day (DNER).</li> <li>- combined limit of 10 dolphin/2 wahoo per day (SA).</li> </ul>
3 – Establish mgmt. measures for Tunas		- 60 lb (rounding up from 27.2 + 28.9 trip averages)		Most landings are from state waters.
4 – Establish mgmt. measures for Mackerels	<ul><li>- 3 king mackerel/person/day (SA: GA-NY and GOM)</li><li>- 2 king mackerel/person/day (SA: FL)</li></ul>	- 100 lb (rounding up from 34.6 + 40.1 trip averages)	20" king mackerel (DNER) 16" cero (DNER) 24" king mackerel (SA, GOM)	Most landings are from state waters.



### St. Thomas and St. John

Potential Action	Rec bag limit/day	Com trip limit/day	Min Size limit	Information/ Considerations
5 – Establish measures for Dolphin	- 10 dolphin/person/day or 60 dolphin/vessel/day, whichever is less (STT FAC)	- 100 lb (rounding up from 80.6 trip average)	- 24" (STT FAC) - 20" (SA)	- 10 dolphin or wahoo, per person/day, not to exceed 32 per vessel/day, and not to exceed 4 wahoo per person/day, or 20 wahoo per vessel/day (DPNR)
6 – Establish measures for Wahoo	- 2 wahoo/person/day or 6 wahoo/vessel/day, whichever is less (STT FAC)	- 100 lb (rounding up from 79.5 trip average)	- 36" (STT FAC)	



### St. Croix

Potential Action	Rec bag limit/day	Com trip limit/day	Min Size limit	Information/ Considerations
7 – Establish measures for Dolphin		- 150 lb (rounding up from 136.7 trip average)	- 20" (SA) - 32" (STX stakeholder)	- 10 dolphin or wahoo, per person/day, not to exceed 32 per vessel/day, and not to exceed 4 wahoo per person/day, or 20 wahoo per vessel/day (DPNR)
8 – Establish measures for Wahoo		- 100 lb (rounding up from 89.9 trip average)		



### Action Items or Next Steps

- Council to provide additional guidance to further refine the management options that would be developed under the draft amendment
- Staff continue data mining exercise to answer the list of IPT questions to include in the description of the fisheries and to help draft the action alternatives.
- IPT develop the Background and Actions and Alternatives sections of the draft amendment for Council consideration at April meeting.



