

# Fishery Monitoring and Research Division Update

Mid-Atlantic Fishery Management Council Meeting  
October 5, 2022

KB McArdle, Fisheries Monitoring Operations Branch Chief



# Outline

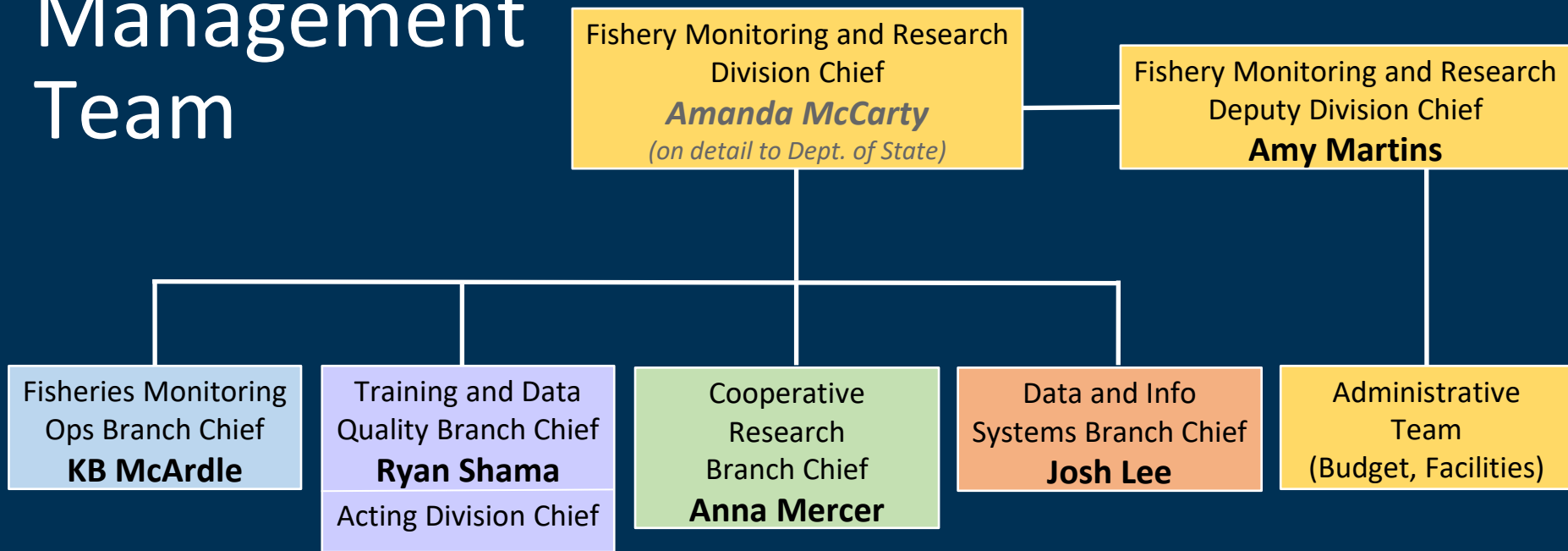
- Introduction: Mission and Organization
- Data Review Process
- Standardized Bycatch Reporting Methodology
- Summary of Coverage Accomplishments
- Cooperative Research Update

# Introduction: Mission and Organization

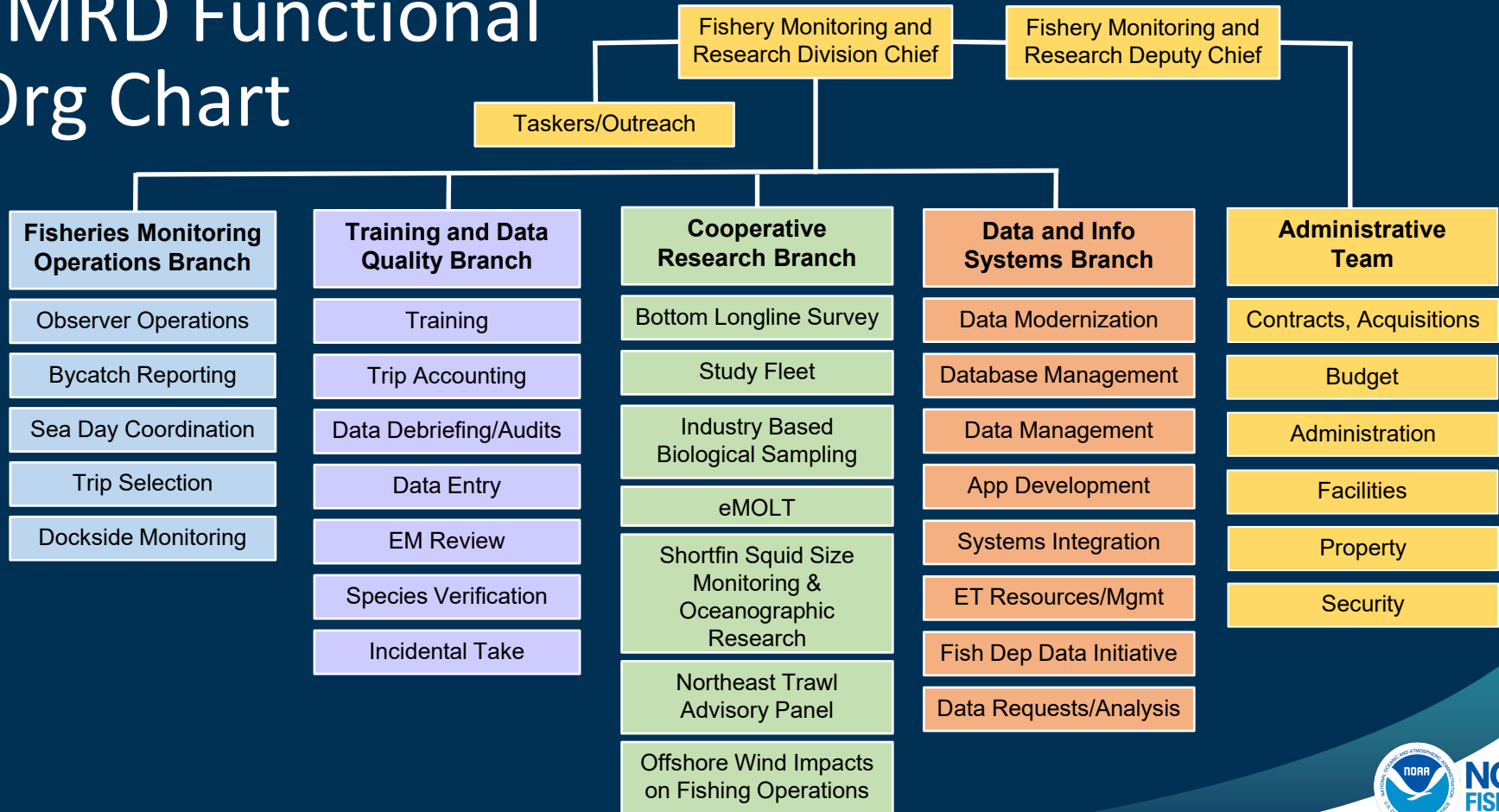
# Our Division's Mission

- We collect information from commercial fisheries and support the use of that information to inform fisheries science and management.
- We bring the fisherman's perspective into the Federal process through collaboratively producing scientific information.
- We strive to be a trusted presence among the fishing, scientific, and management communities.

# Management Team



# FMRD Functional Org Chart



# Data Review Process

# Optimized Review Process

## Purpose

- Redistribute effort by focusing limited resources on trips that need the most attention
- Clear the current data backlog
- Puts TDQ in a good position to keep up with the impacts of Amendment 23
- Flexible process that is adaptable to changes in the data landscape or unexpected challenges

## Tiered process (Tier 1 / Tier 2)

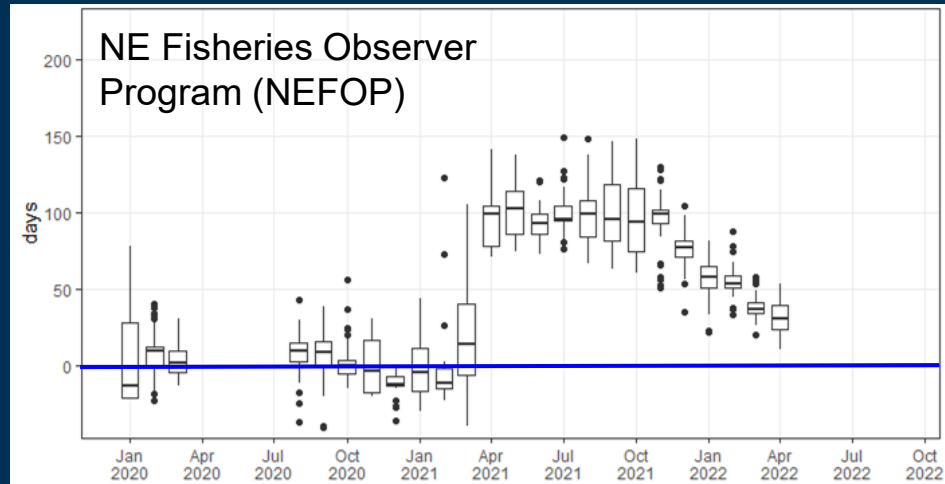
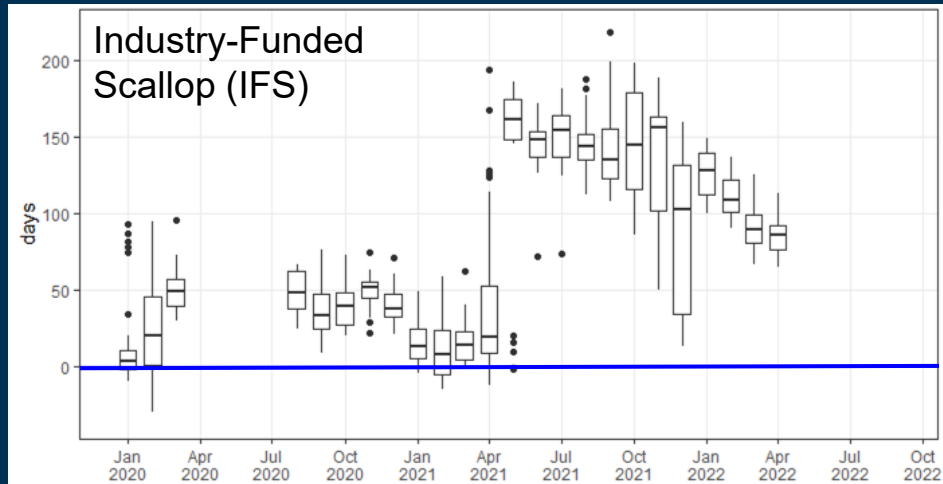
- Tier 1 & Tier 2: Review of Incidental Takes, observer comments, age structures, and automated audits (~1700 automated checks)
- Tier 2: status quo review, i.e., deeper level of review by data debriefers

## Selection criteria for Tier 2 Trips

- Certification trips
- Priority / Probation status
- First time on a gear type
- <120 days since certified
- >30 days since last trip on gear type
- Percentage of remaining trips & each observer

Selection rates are flexible, with the goal of maximizing Tier 2 review





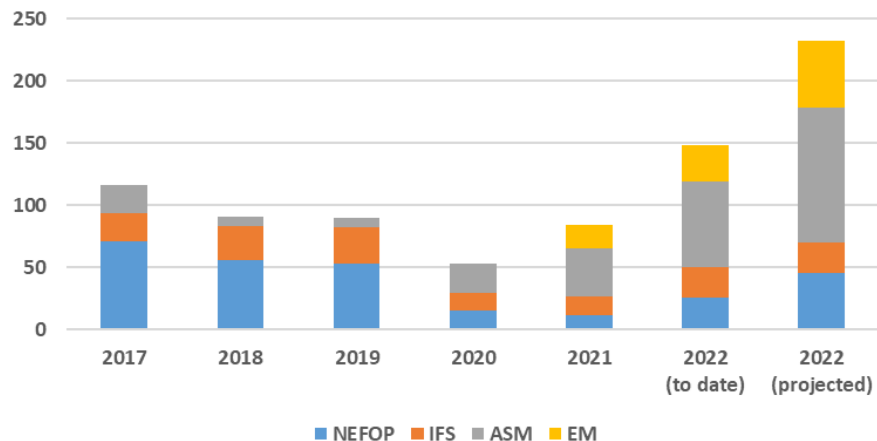
Figures show number of days past program targets to finalize data for all trips from January 2020 through April 2022

# Training Update

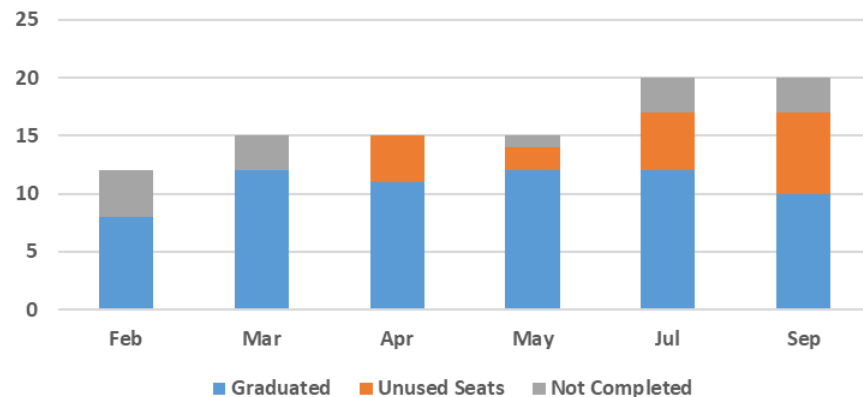
- Return to on-site instruction & full class sizes
  - Utilizing remote training opportunities where appropriate (e.g., electronic monitoring)
- Coonamessett Farm Foundation At-Sea Monitoring (ASM) Training Program
  - Partnership with Coonamessett Farm Foundation to increase our training capacity
  - Currently holding 6th ASM training
- Training Request/Scheduling Process Updated
  - Projecting offerings further out to aid recruitment/planning
- Electronic Monitoring (EM) Reviewer Trainings Developed/Operational

# Training Update

## Initial Trainings Output



## Coonamessett Farm Foundation ASM Trainings 2022



Total certifications: **140 (almost half are new)**

- ASM-certified: **54**
- IFS-certified: **29**
- NEFOP-certified: **35**
- EM-certified: **22**

# Standardized Bycatch Reporting Methodology (SBRM)

# Overview

- A revised SBRM Omnibus Amendment was implemented in July 2015.
- The SBRM amendment requires an annual discard report utilizing information obtained from the NEFOP and IFS Programs for 14 federally managed species groups and sea turtles.
- Each year, discard estimates and variability are derived from the prior year data to inform observer coverage needs for the upcoming year.

# SBRM 2022 Recap

- Because of impacts from the COVID-19 pandemic, no statistical analysis was conducted for SBRM year 2022.
- Instead, a decision was made to use the 2020 SBRM statistical analysis, incorporating the 2022 budget and the 2022 scallop compensation rate for the observer sea day allocation for April 2022–March 2023.
- Annual discard report and sea day schedule can be found at: <https://www.fisheries.noaa.gov/resource/data/annual-discard-reports-northeast>

# SBRM Sea Days (Apr 2022 - Mar 2023)

- Total sea days needed: **7,803**
  - Sea days for agency-funded fleets (NEFOP): **6,481**
  - Sea days for industry-funded scallop fleets (IFS): **1,322**
  
- Total sea days available (based on funding): **5,907**
  - Agency-funded sea days: **3,844**
  - Industry-funded sea days: **2,063**

# NEFOP Coverage Summary 2022

Coverage Type	SBRM Q1 (April 1 – June 30)			SBRM Mid-Q2 (July 1 – Aug 15)		
	Tasked	Accomp.	Percent Accomp.	Tasked	Accomp.	Percent Accomp.
SBRM (NE)	289	324	112%	366	181	49%
SBRM (MA)	446	338	76%	418	185	44%
SBRM (PTNS NE)	195	154	79%	247	54	22%
SBRM (PTNS MA)	25	25	100%	21	4	19%
<b>SBRM</b>	<b>955</b>	<b>841</b>	<b>88%</b>	<b>1052</b>	<b>424</b>	<b>40%</b>
MMPA (NE)	44	45	102%	38	12	32%
MMPA (MID)	33	10	30%	30	5	17%
MMPA (PTNS)	10	20	200%	22	18	82%
<b>MMPA</b>	<b>87</b>	<b>75</b>	<b>86%</b>	<b>90</b>	<b>35</b>	<b>39%</b>
<b>Total</b>	<b>1042</b>	<b>916</b>	<b>88%</b>	<b>1142</b>	<b>459</b>	<b>40%</b>



# Upcoming SBRM Work

- SBRM 2023 kickoff: Sept 6, 2022
- Analyses:
  - 2023 Discard Estimation, Precision, and Sample Size Analysis for Fish
  - 2017-2021 Estimated Bycatch of Sea Turtles in Sink Gillnet Gear
  - 2021-2023 Three-Year Review of SBRM
- Additional deliverables:
  - 2023 SBRM Annual Discard Report with Observer Sea Day Allocation
  - 2023 Sea Day Schedule
  - 2023 Trip Selection Report

# 2018-2022 Coverage Accomplishments

*Note: All fishing year 2022 accomplishments are partial, running from the beginning of the fishing year to August 15, 2022.*

# SBRM 2018-2021 (Fishing year: Apr 1 – Mar 31)

## 2018

Coverage Type	Tasked	Accomplished	% Accomplished
SBRM	6284	4552	72.4%
MMPA	393	312	79.4%
SBRM PTNS	999	1104	110.5%
MMPA PTNS	171	155	90.6%
<b>Total Days</b>	<b>7847</b>	<b>6123</b>	<b>78.0%</b>

## 2019

Coverage Type	Tasked	Accomplished	% Accomplished
SBRM	5213	4812	92.3%
MMPA	370	259	70.0%
SBRM PTNS	1855	1546	83.3%
MMPA PTNS	176	172	97.7%
<b>Total Days</b>	<b>7614</b>	<b>6789</b>	<b>89.2%</b>

## 2020

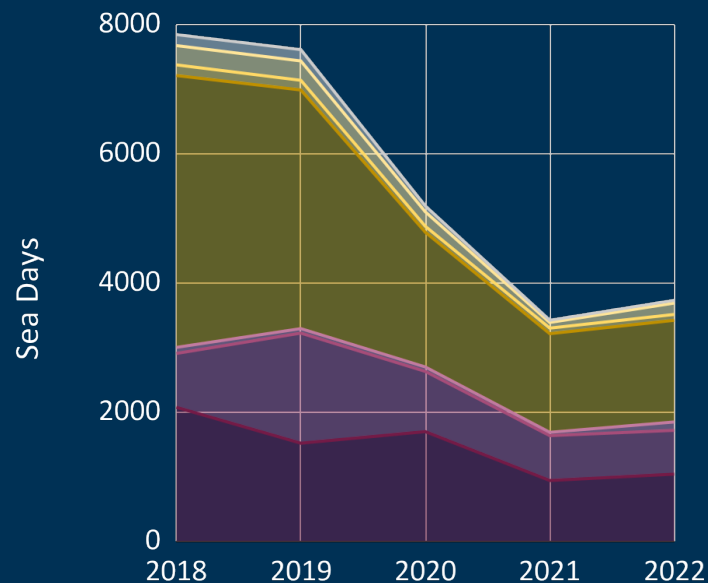
Coverage Type	Tasked	Accomplished	% Accomplished
SBRM	3784	650	17.2%
MMPA	294	11	3.7%
SBRM PTNS	1024	504	49.2%
MMPA PTNS	91	29	31.9%
<b>Total Days</b>	<b>5193</b>	<b>1194</b>	<b>23.0%</b>

## 2021

Coverage Type	Tasked	Accomplished	% Accomplished
SBRM	2467	1904	77.2%
MMPA	140	78	55.7%
SBRM PTNS	781	755	96.7%
MMPA PTNS	35	45	128.6%
<b>Total Days</b>	<b>3423</b>	<b>2782</b>	<b>81.3%</b>

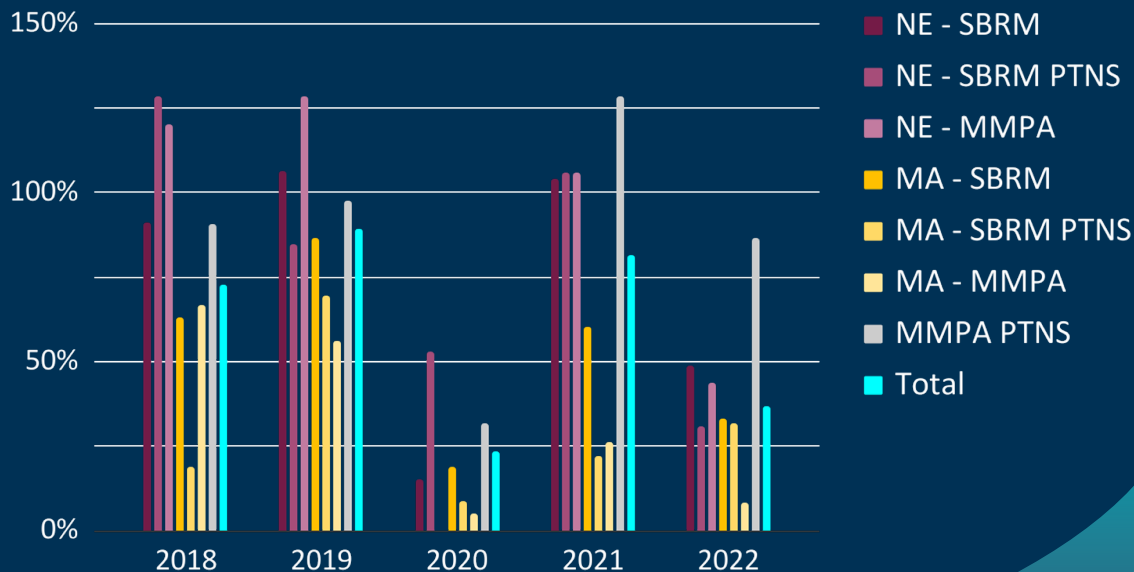
# SBRM 2018-2022 (Fishing year: Apr 1 – Mar 31)

## Tasked Sea Days by Category



Fishing Year

## Percent Accomplished by Category



Fishing Year

# Industry-Funded Scallop 2018-2022

(Fishing year: Apr 1 – Mar 31)

## Limited Access

Fishing Year	VMS Trips	Observed Trips	Realized Coverage	Percent of Target Achieved
2018	3403	372	7.8%	68.7%
2019	3908	316	9.2%	78.8%
2020	3445	104	3.6%	48.9%
2021	3187	189	5.4%	69.0%
2022	1316	86	5.1%	51.2%

## General Category

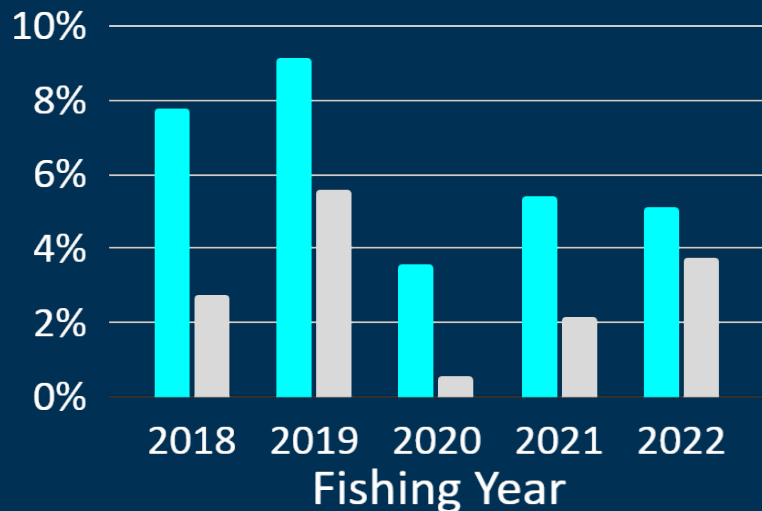
Fishing Year	VMS Trips	Observed Trips	Realized Coverage	Percent of Target Achieved
2018	5304	202	2.7%	48.8%
2019	5168	223	5.6%	108.9%
2020	4960	45	0.6%	11.7%
2021	4249	139	2.2%	54.7%
2022	4699	129	3.8%	65.0%

*Note: IFS realized coverage rates and percent of target achieved are calculated as averages of each area's realized coverage and percent of target achieved.*

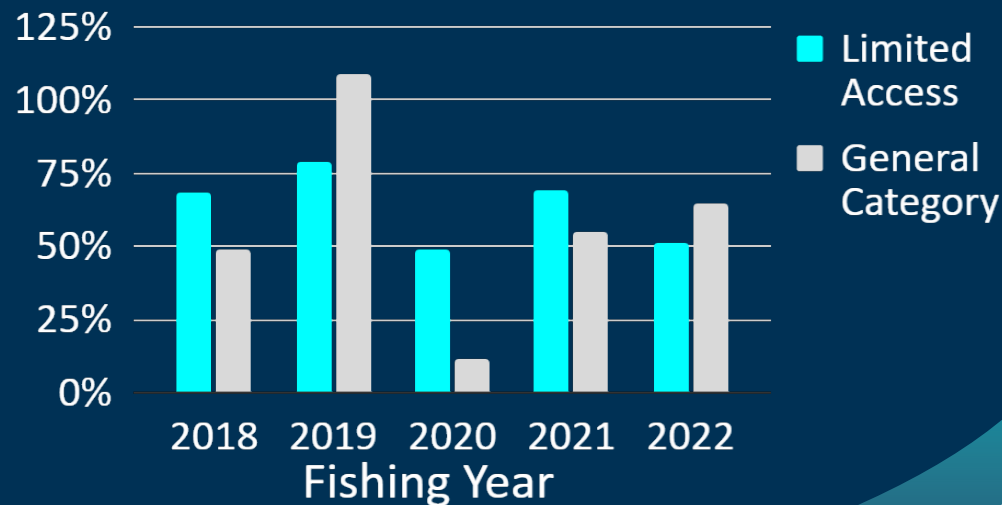
# Industry-Funded Scallop 2018-2022

(Fishing year: Apr 1 – Mar 31)

## Realized Coverage



## Percent of Target Coverage Realized



# Herring Industry Funded Monitoring

## Jul 2021 – Aug 2022

Fishing Year	Total Vessels	Active Vessels	Total Trips	Eligible Trips	Observed Trips	Average Coverage
2021	43	13	89	25	6	14%
2022	40	5	23	9	7	48%

*Note: IFM average realized coverage rates are calculated as an average of realized coverage for each vessel.*

# Cooperative Research Update





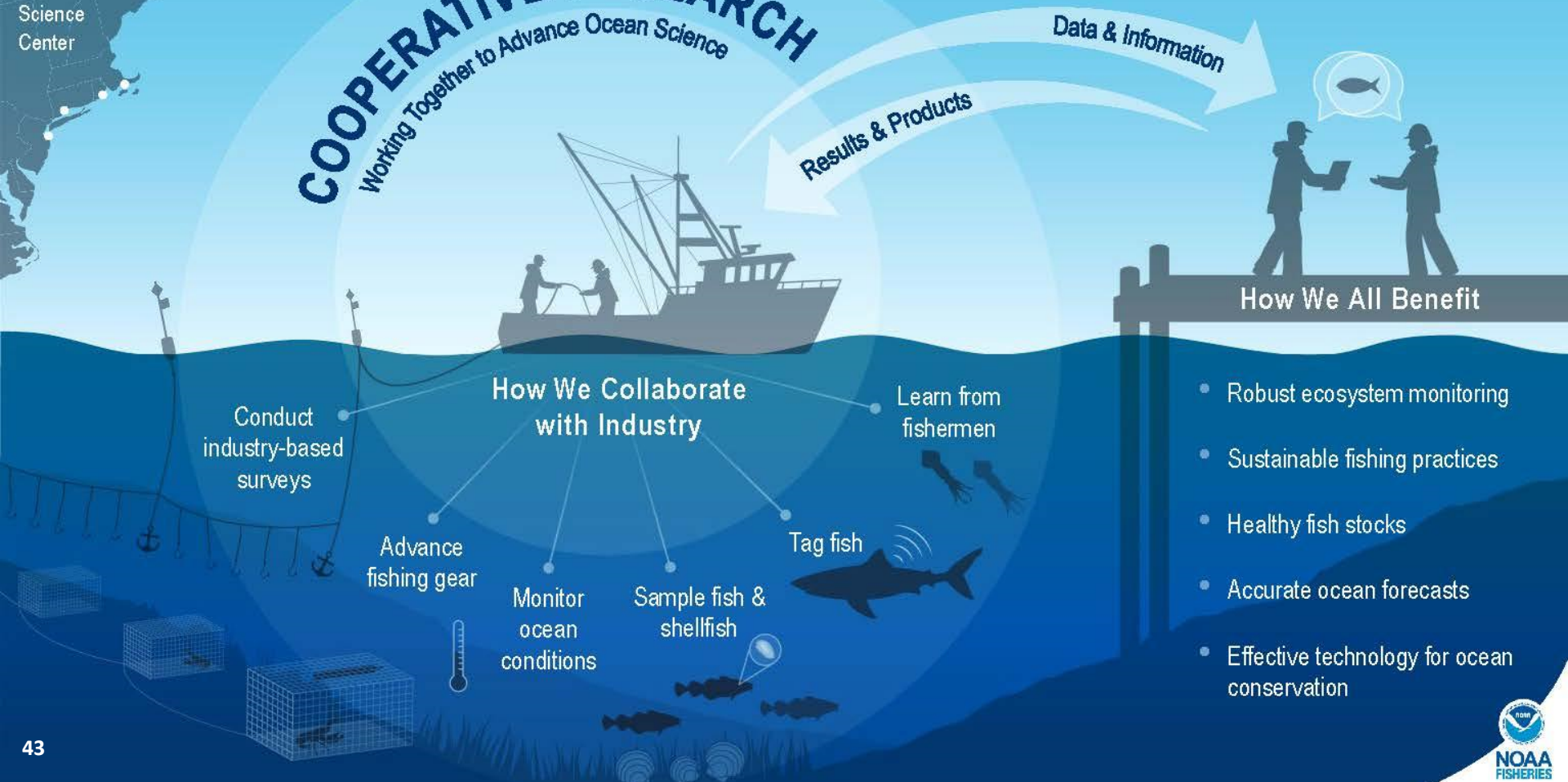
# Cooperative Research Overview

Cooperative research is the partnership between the fishing industry and the science community. We work together to improve our understanding of ocean ecosystems and support sustainable fisheries management.



# COOPERATIVE RESEARCH

Working Together to Advance Ocean Science



## How We All Benefit

- Robust ecosystem monitoring
- Sustainable fishing practices
- Healthy fish stocks
- Accurate ocean forecasts
- Effective technology for ocean conservation

# Active Programs in CRB

- Gulf of Maine Bottom Longline Survey
- Study Fleet
- Environmental Monitors on Lobster Traps (eMOLT)
- Industry-Based Biological Sampling Program
- Collaborative Shortfin Squid Research
- Special Projects:
  - Northeast Trawl Advisory Panel (NTAP) Restrictor Rope Research
  - Shortfin Squid Electronic Size Monitoring
  - Evaluating Impacts from Offshore Wind Energy on Fishing Operations
  - Testing RFID Systems for Haul Tracking in Electronic Data Collection
  - Assessing BLLS Hook Disposition Using Electronic Monitoring Cameras



# NE Cooperative Research across the U.S.

- National Cooperative Research Program Meeting (invitational)
  - September 13-15, 2022
  - Narragansett Lab, RI
- Mid-Atlantic Cooperative Research Summit (public)
  - January 31, 2023
  - The Mariner's Museum and Park, VA
  - <https://www.fisheries.noaa.gov/event/mid-atlantic-cooperative-research-summit>
- New England Cooperative Research Summit (public)
  - February 15, 2023
  - RI School of Design, RI
  - <https://www.fisheries.noaa.gov/event/new-england-cooperative-research-summit>



# Questions?

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Anna.Mercer@noaa.gov

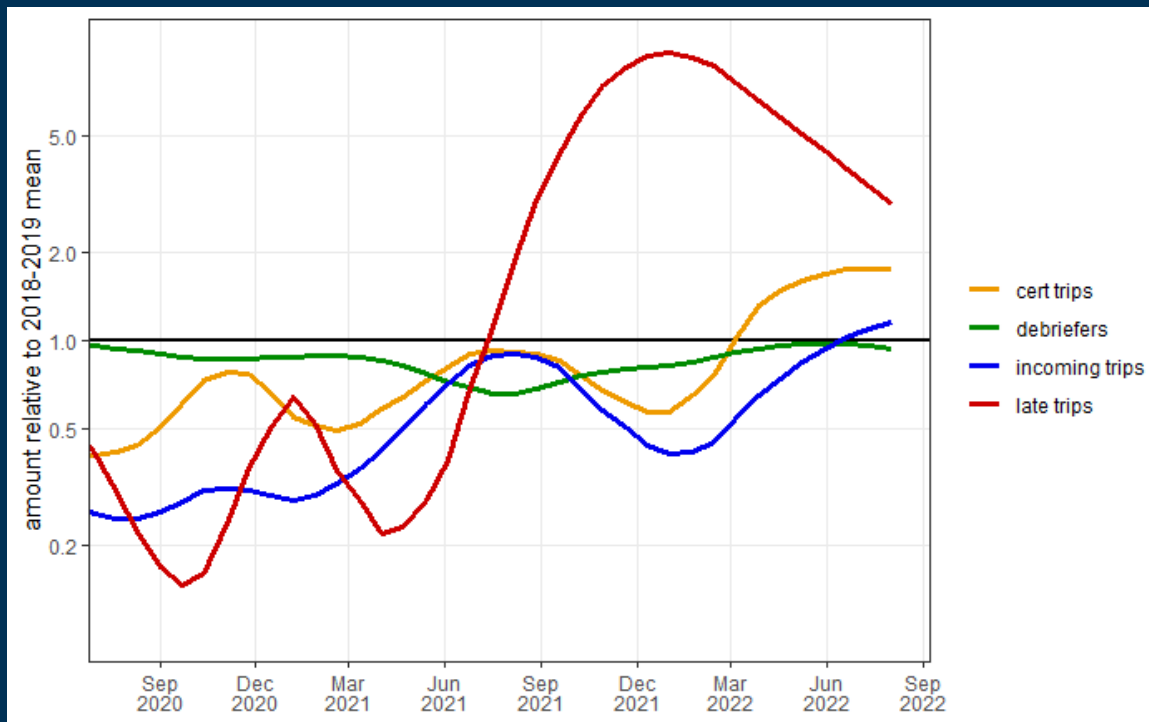


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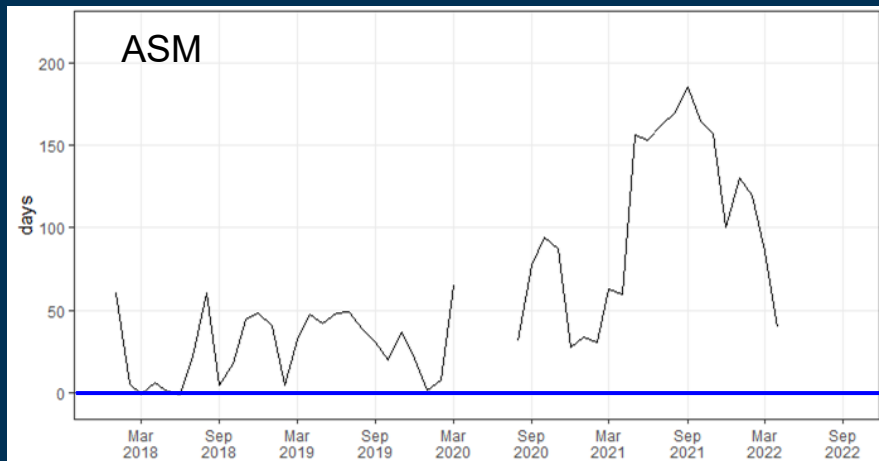
# Supplementary Slides



# Data Review Progress



- Late trips ↑ with the departure of several debriefers following an increase of incoming trips and new observers (i.e., cert trips)
- Late trips ↓ with the implementation of Optimized Review Process in Feb 2022 and hiring of additional debriefers



Figures show number of days past program targets to complete finalization of each month's trip data from January 2020 through April 2022