Draft Addendum XXVII

Increasing Protection of Spawning Stock in the Gulf of Maine/Georges Bank

American Lobster Management Board
January 25, 2022

Outline

1. Background
2. Addendum Objective
3. Proposed Action Timeline
4. Proposed Management Options
5. Board Action
6. Next Steps

Background

- August 2017: Board initiated Draft Addendum XXVII to increase the resiliency of the GOM/GBK stock
  - Focus on standardizing measures across LCMAs
- Work on Atlantic Right Whale issues prioritized over Draft Addendum XXVII
- Following 2020 benchmark assessment, Board reinitiated work on Addendum XXVII
- February 2021 Board motion:

  "Move to re-initiate PDT and TC work on the Gulf of Maine resiliency addendum. The addendum should focus on a trigger mechanism such that, upon reaching of the trigger, measures would be automatically implemented to improve the biological resiliency of the GOM/GBK stock."

Background

- Settlement surveys over the past five years have consistently been below the 75th percentile of their time series
- Evidence of declines in recruit abundance in ventless trap survey and trawl surveys for the GOM/GBK stock since 2020 stock assessment
- These declines could indicate future declines in recruitment and landings

Addendum Objective

- Board provided additional guidance:
  - Change objective from increasing resiliency to “increasing protection of spawning stock”
  - Respond to continued signs of reduced settlement and recruit indices
  - increase the overall protection of SSB while also considering management options that are more consistent than status quo
- Addendum objective:
  - ***Given persistent low settlement indices and recent decreases in recruit indices, the addendum should consider a trigger mechanism such that, upon reaching the trigger, measures would be automatically implemented to increase the overall protection of spawning stock biomass of the GOM/GBK stock.***

Proposed Action Timeline

Date	Action
February 2021	Board reinitiated work on Draft Addendum XXVII
Feb-Dec 2021	PDT, TC, and Board meetings to discuss addendum development
January 2022	**Board meeting to consider Draft Addendum XXVII for Public Comment**
March 2022	Public hearings and comment period
May 2022	Board meeting to consider final approval of Draft Addendum XXIX

Proposed Management Options

Proposed Management Options

- Draft Addendum XXVII considers options that aim to:
  1. **Increase SSB by modifying gauge sizes**
  2. **Increase consistency of measures within/across LCMAs**

Proposed Management Options

- **Increase SSB by modifying gauge sizes**
  - Of existing biological measures, gauge sizes are most likely to have biological impacts on the GOM/GBK stock and fishery
  - Increasing min gauge size in Area 1 has greatest potential positive effect on SSB
    - Growth overfishing within the GOM/GBK stock at current minimum sizes
  - Decreasing max gauge sizes has larger effects for LCMA 3 relative to increasing the min size in LCMA 3, and to decreasing max size for other LCMAs
    - Less impact relative to increasing the min size in LCMA 1

Proposed Management Options

- **Increase consistency of measures within/across LCMAs**
  - disparities in the current measures creates challenges for stock assessment
    - LCMAs do not align with the biological boundaries of the stocks
  - Law Enforcement Committee recommends standardized management measures for lobster
  - Differing size limits hinders interstate commerce

Current Measures (GOM/GBK)

Mgmt. Measure	Area 1	Area 3	OCC
Min Gauge Size	3 1/4"	3 17/32"	3 3/8"
Vent Rect.	1 15/16 x 5 3/4"	2 1/16 x 5 3/4"	2 x 5 3/4"
Vent Cir.	2 7/16"	2 11/16"	2 5/8"
V-notch requirement	Mandatory for all eggers	Mandatory for all eggers above 42°30'	None
V-Notch Definition[1] (possession)	Zero Tolerance	1/8" with or w/out setal hairs[1]	State Permitted fisherman in state waters 1/4" without setal hairs; Federal Permit holders 1/8" with or w/out setal hairs[1]
Max. Gauge (male & female)	5"	6 3/4"	State Waters none; Federal Waters 6 3/4"
Season Closure			February 1-April 30

Proposed Management Options

- Proposed Options separated into two issues:

Issue 1: Measures to be standardized upon final approval of Addendum XXVII

Issue 2: Implementing management measures to increase protection of SSB

Issue 1 Options

Issue 1: Measures to be standardized upon final approval of Addendum XXVII

Option A	**Status Quo**
Option B*	**Standardized measures to be implemented upon final approval of addendum**
Sub-option B1	standardized measures within an LCMA
Sub-option B2	standard V-notch requirement across all LCMAs
Sub-option B3	standard V-notch possession definition of 1/8” with or without setal hairs for LCMAs 1, 3, and OCC
Sub-option B4	standardize regulations to limit the issuance of trap tags to equal the harvester trap tag allocation for LCMAs 1, 3, and OCC

***Board may select multiple sub-options**

Issue 1: Option B, Sub-Option B1

- **Sub-option B1**: Upon final approval of the addendum, implement standardized measures within an LCMA to the most conservative measure where there are inconsistencies between state and federal regulations within GOM/GBK stock LCMAs.
  - Maximum gauge standardized to 6-3/4” for state and federal permit holders;
  - V-notch possession definition standardized to $^{1}/_{8}$” with or without setal hairs in OCC. (Harvest prohibited for a female lobster with a V-shaped notch greater than $^{1}/_{8}$”).

Issue 1: Option B, Sub-Option B2

- **Sub-option B2**: Upon final approval of the addendum, implement a standard V-notch requirement across all LCMAs in the GOM/GBK stock. This would result in mandatory V-notching for all eggers in LCMA 1, 3, and OCC.

Issue 1: Option B, Sub-Option B3

- **Sub-option B3**: Upon final approval of the addendum, implement a standard V-notch possession definition of $^{1}/_{8}$" with or without setal hairs for LCMAs 1, 3, and OCC. Any jurisdiction could implement more conservative regulations.

Issue 1: Option B, Sub-Option B4

- **Sub-option B4:** Upon final approval of the addendum, standardize regulations across LCMAs 1, 3, and OCC to limit the issuance of trap tags to equal the harvester trap tag allocation. This would mean no surplus trap tags would be automatically issued until trap losses occur and are documented.

Issue 2

Issue 2: Implementing management measures to increase protection of SSB

- Consider changes to the minimum and maximum gauge sizes along with corresponding vent sizes
- Proposed measures are expected to
  - 1) increase SSB, and
  - 2) result in the minimum gauge size increasing to meet or exceed the size at 50% maturity (L50) for each LCMA
- Vent sizes change to match final minimum gauge size

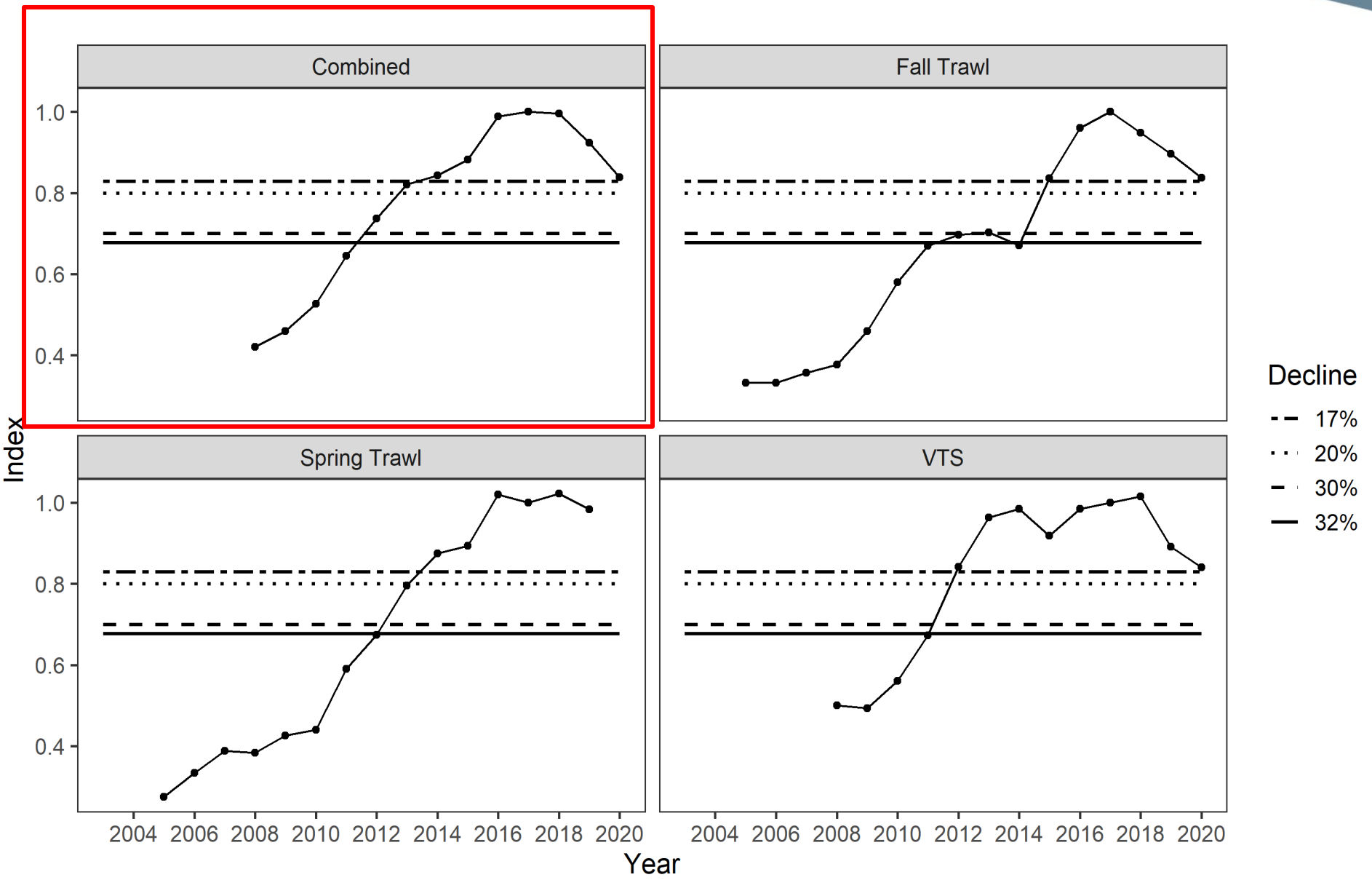
Issue 2

- Two approaches for implementing management changes:
  - 1) establish a trigger mechanism where pre-determined management changes would be triggered upon reaching a defined trigger level based on observed changes in recruit (71-80 mm carapace length) abundance indices
  - 2) establish a pre-determined schedule for future changes to the management measures

Trigger Mechanism

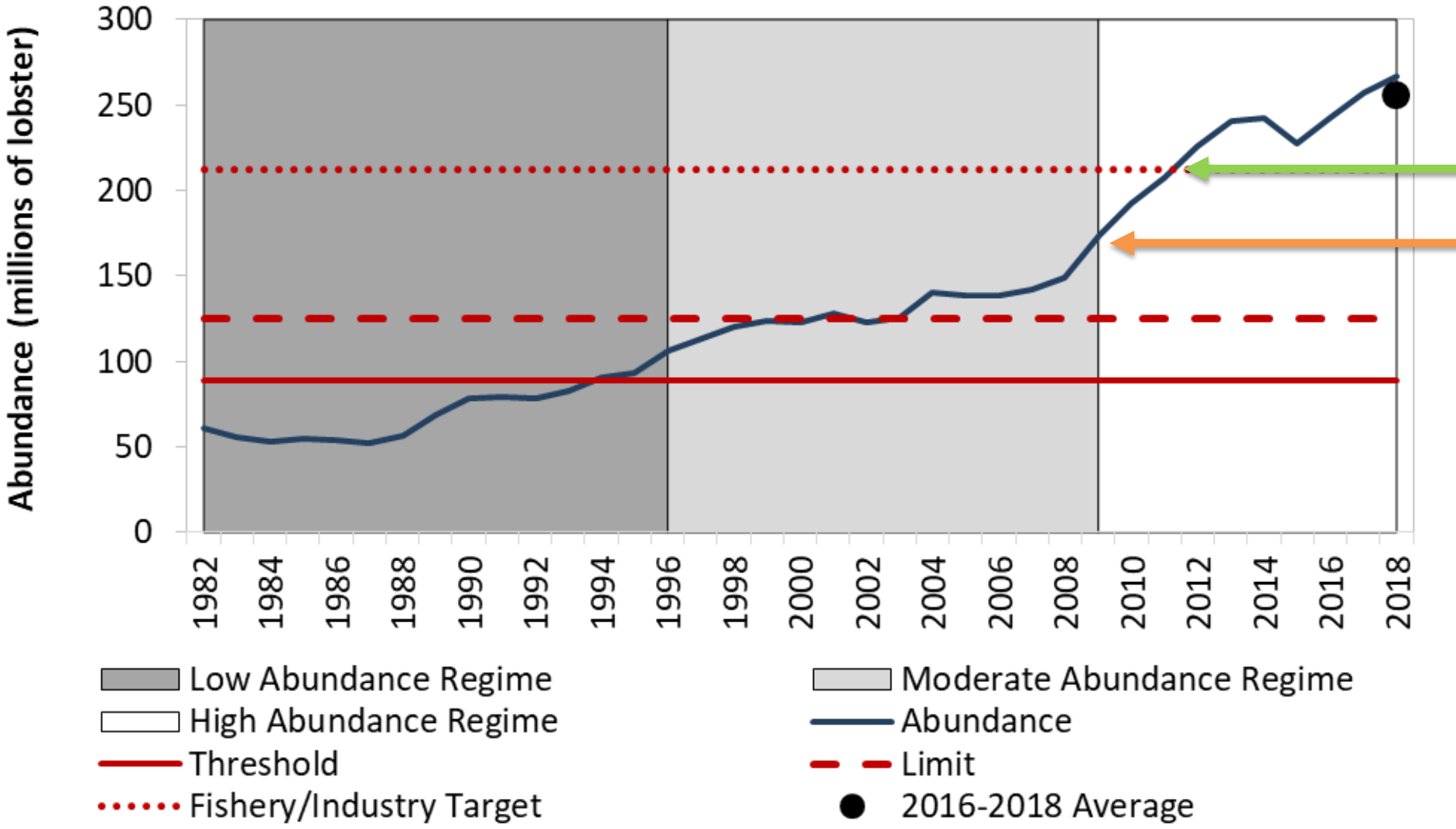
- The proposed mechanism establishes mgmt. triggers based on 3 recruit abundance indices:
  - combined ME/NH and MA spring trawl survey index
  - combined ME/NH and MA fall trawl survey index
  - model-based VTS index
- Triggers defined by a level of decline in the indices from an established reference period (average of the index values from 2016-2018) expected to approximate comparable declines in overall abundance of the stock
  - relate to the abundance reference points established by the Board.

Trigger Index



Stock Status: GOM/GBK

Figure 1. Abundance for GOM/GBK Relative to Reference Points



Issue 2 Options

Issue 2: Implementing management measures to increase protection of SSB

Option A	**Status Quo**
Option B	**Gauge size changes triggered by 17% decline, and 32% decline in trigger index**
Option C	**Gauge size changes triggered by 20% decline, and 30% decline in trigger index**
Option D	**Gradual change in gauge sizes triggered by 17% decline in trigger index**
Option E	**Scheduled changes to minimum gauge size in LCMA 1**

Issue 2: Option B

Option B	LCMA 1	LCMA 3	OCC
Trigger 1 (17% decline)	**Minimum gauge: 3 5/16" (84 mm)** Maximum gauge: status quo, 5" Vent size: status quo	Minimum gauge: status quo, 3 17/32" (90 mm) Maximum gauge: status quo, 6 ¾" (171 mm) Vent size: status quo	Minimum gauge: status quo, 3 3/8" (86 mm) Max: status quo, 6 ¾" (171 mm) Vent size: status quo
Trigger 2 (32% decline)	**Minimum gauge: 3 3/8" (86 mm)** Maximum gauge: status quo **Vent size: 2 x 5 3/4" rectangular; 2 5/8" circular**	Minimum gauge: status quo **Maximum gauge: 6"** Vent size: status quo	Minimum gauge: status quo **Maximum gauge: 6"** Vent size: status quo

Issue 2: Option C

Option C	LCMA 1	LCMA 3	OCC
Trigger 1 (20% decline)	**Minimum gauge: 3 5/16" (84 mm)** Maximum gauge: status quo, 5" Vent size: status quo	Minimum gauge: status quo, 3 17/32" (90 mm) Maximum gauge: status quo, 6 ¾" (171 mm) Vent size: status quo	Minimum gauge: status quo, 3 3/8" (86 mm) Max: status quo, 6 ¾" (171 mm) Vent size: status quo
Trigger 2 (30% decline)	**Minimum gauge: 3 3/8" (86 mm)** Maximum gauge: status quo **Vent size: 2 x 5 3/4" rectangular; 2 5/8" circular**	Minimum gauge: status quo **Maximum gauge: 6"** Vent size: status quo	Minimum gauge: status quo **Maximum gauge: 6"** Vent size: status quo

Issue 2: Option D

Option D	LCMA 1	LCMA 3	OCC
Current Measures (Year 0)	Min gauge: 3 ¼” Max gauge: 5” Vent size: status quo	Min gauge: $3^{17}/_{32}$” Max gauge: 6 ¾” Vent size: status quo	Min gauge: 3 $^{3}/_{8}$” Max gauge: 6 ¾” Vent size: status quo
Trigger 1 (17% decline) (Year 1)	**Min gauge:** **3 $^{5}/_{16}$” (84 mm)** Max gauge: status quo Vent size: status quo	Min gauge: status quo **Max gauge: 6 ½”** Vent size: status quo	Min gauge: status quo **Max gauge: 6 ½”** Vent size: status quo
Intermediate gauge sizes (Year 3)	**Min gauge:** **3 $^{3}/_{8}$” (86 mm)** Max gauge: status quo Vent size: status quo	Min gauge: status quo **Max gauge: 6 ¼”** Vent size: status quo	Min gauge: status quo **Max gauge: 6 ¼”** Vent size: status quo
Final gauge and vent sizes (Year 5)	Min gauge: 3 $^{3}/_{8}$” Max gauge: status quo **Vent size: 2 x 5 $^{3}/_{4}$” rect.; 2 $^{5}/_{8}$” circ.**	Min gauge: status quo **Max gauge: 6”** Vent size: status quo	Min gauge: status quo **Max gauge: 6”** Vent size: status quo

Issue 2: Option E

Option E	LCMA 1	LCMA 3	OCC
2023 fishing year measures	**Min: 3 $^{5}/_{16}$" (84 mm)** Max: status quo Vent size: status quo	Min: status quo Max: status quo	Min: status quo Max: status quo
2025 fishing year measures	**Min: 3-3/8 (86 mm)** Max: status quo **Vent size: 2 x 5 $^{3}/_{4}$" rectangular; 2 $^{5}/_{8}$" circular**	Min: status quo Max: status quo	Min: status quo Max: status quo

Management Measures in LCMA 3

- Measures selected by the Board pertaining to LCMA 3 would apply to all LCMA 3 permit holders, including those that fish in the SNE stock.
  - Dividing LCMA 3 so selected measures apply only to GOM/GBK stock area would create a significant administrative burden
  - Previous addenda implemented measures to address SNE stock decline; measures were also applied to the GOM/GBK portion of LCMA 3

Board Action and Next Steps

Board Action for Consideration

1. Make modifications to proposed management options as desired
2. Consider approval of addendum for public comment

Next Steps

- If approved for public comment today, next steps are:
  - Finalize and publish addendum for public comment; schedule public hearings (**February**)
  - Conduct state public hearings (**March**)
  - Convene Advisory Panel (**March/April**)
  - Board meeting to consider final action (**May**)

Questions?

2023 Jonah Crab Stock Assessment TORs and Timeline

American Lobster Management Board

January 25, 2022

Materials

- Terms of Reference for the Jonah Crab Assessment
- Terms of Reference for the Jonah Crab Peer Review
- Assessment Timeline

TOR 1

Characterize precision and accuracy of fishery-dependent and fishery-independent data used in the assessment.

TOR 2

- Discuss the effects of data strengths and weaknesses on model inputs and outputs.

TOR 3

- Develop simple, empirical indicators of stock abundance, stock characteristics, and fishery characteristics that can be monitored annually between stock assessments.

TOR 4

- Develop models used to estimate population parameters and biological reference points, and analyze model performance.

TOR 5

- State assumptions made for all models and explain the likely effects of assumption violations on synthesis of input data and model outputs.

TOR 6

- Characterize uncertainty of model estimates and biological or empirical reference points.

TOR 7

- Recommend stock status as related to reference points.

TOR 8

- Other potential scientific issues:
  - Compare reference points derived in this assessment with what is known about the general life history of the exploited stock. Explain any inconsistencies.
  - Explore, identify, describe, and, if possible, quantify environmental/climatic drivers.

TOR 9

- If a minority report has been filed, explain majority reasoning against adopting approach suggested in that report.

TOR 10

- Develop detailed short and long-term prioritized lists of recommendations for future research, data collection, and assessment methodology. Highlight improvements to be made by next benchmark review.

TOR 11

- Recommend timing of next benchmark assessment and intermediate updates, if necessary.

Timeline

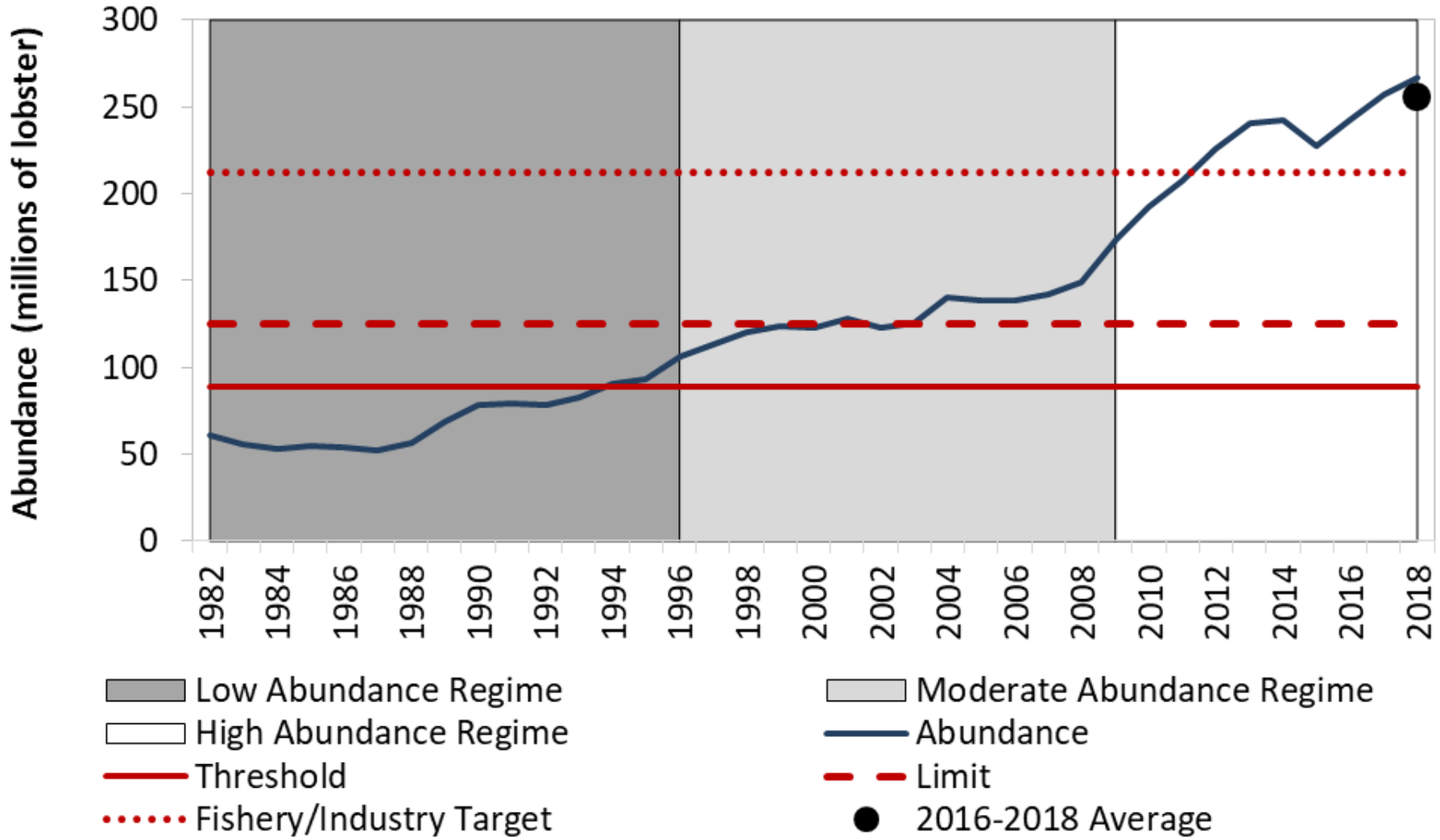
Milestone	Participants	Purpose	Date(s)
Data Submission Deadline	TC, public data holders	Provide data for assessment	April 29, 2022
Data Workshop	TC, SAS, Staff	Review data	3 days, June 2022
Methods Workshop	TC, SAS, Staff	Identify assessment methods to pursue	3 days, September 2022
Assessment Workshop	SAS, Staff	Review results of assessment methods	4 days, February 2023
Peer Review Workshop	SAS Subgroup, Peer Reviewers, Staff	Review assessment	July 2023
ASMFC Annual Meeting	Board, SAS Chair, Peer Review Chair	Present final reports for Board consideration	October 2023

Questions?

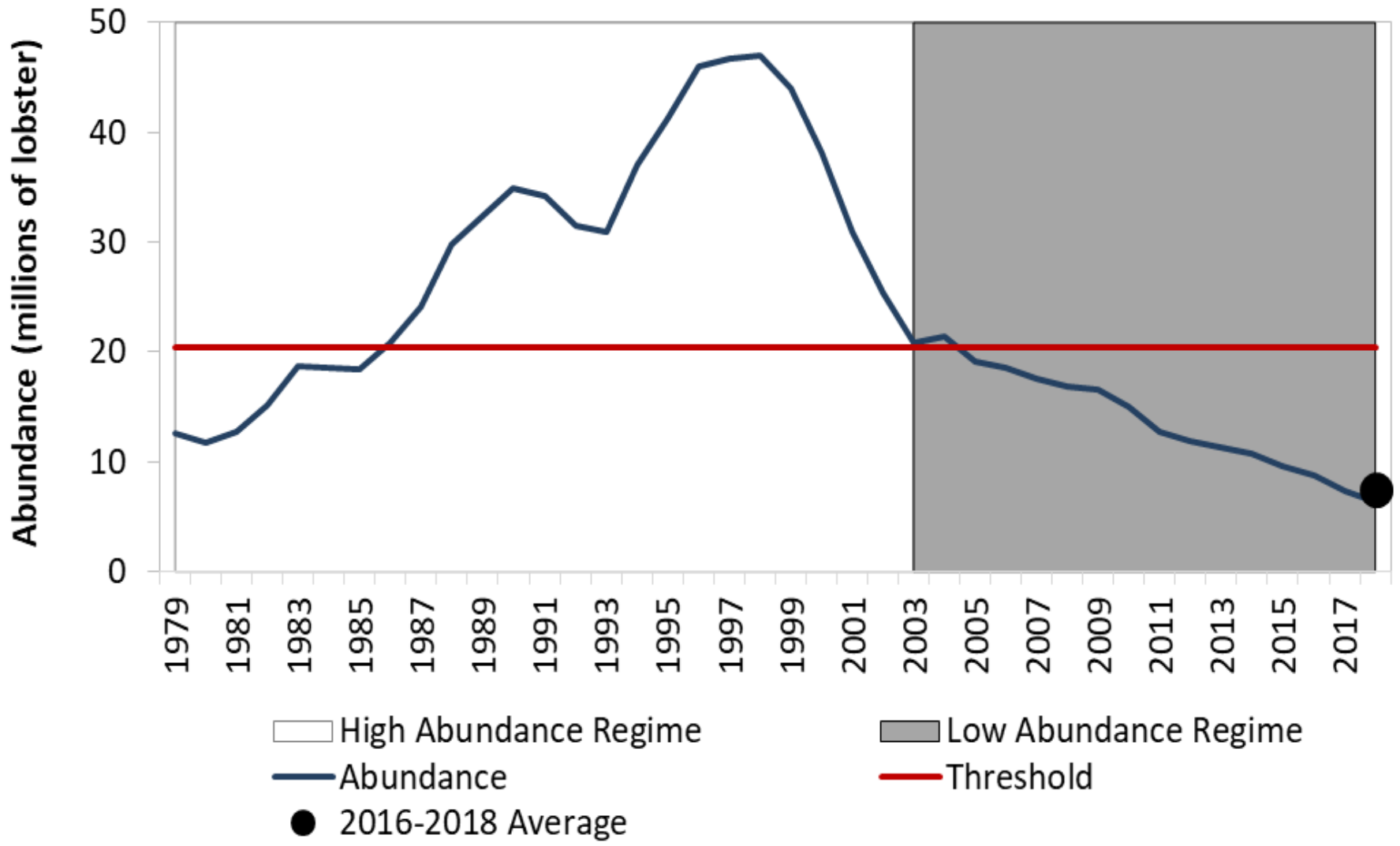
American Lobster
FMP Review for the 2020 Fishing Year

American Lobster Management Board
January 25, 2022

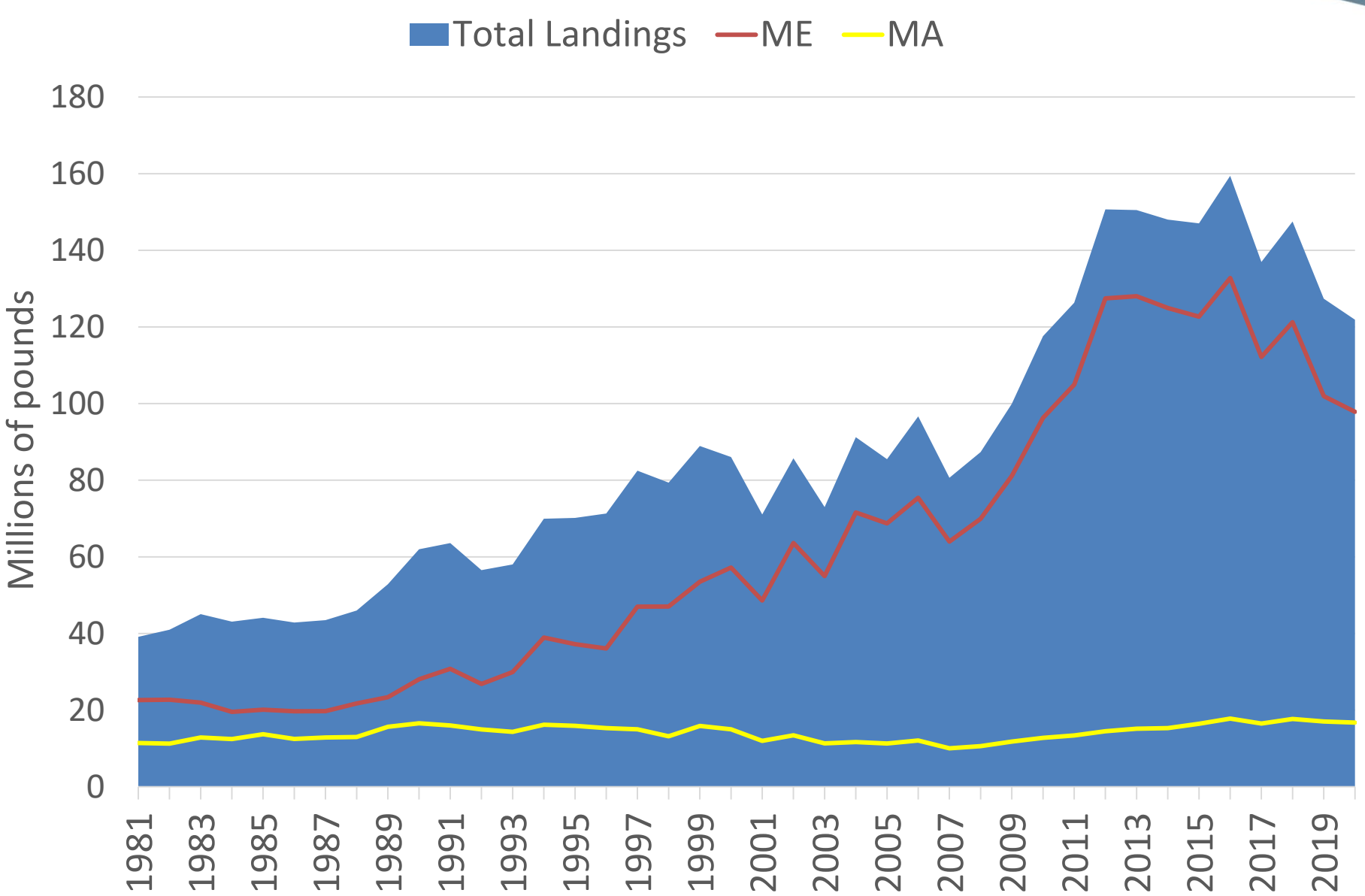
Stock Status – GOM/GBK



Stock Status – SNE



Commercial Landings



Status of Management

Addendum XXVI

- January 1, 2021: Implemented of *Section 3.1.4. Spatial Resolution of Harvester Data*
  - 10 minute squares
- Implement 100% harvester reporting by 2023

Addendum XVIII

- Required trap reductions for Area 2 and 3
  - Area 3 reductions completed in 2020
  - Area 2 reductions completed in 2021

COVID-19 Impacts

Required surveys not completed in 2020:

- Spring ME-NH trawl survey
- Spring/fall MA trawl surveys
- Spring/fall LIS trawl surveys
- NJ ocean trawl surveys

State Compliance

Compliance

- Rhode Island completed 9 port sampling trips and no sea sampling trips.
- Due to the COVID-19 pandemic, at sea observer trips were suspended in New Jersey for 2020.
- No fishery-dependent sampling has been conducted by Connecticut since 2014 due to reductions in funding and staffing levels.
- Otherwise, states in compliance with FMP

De Minimis

De Minimis

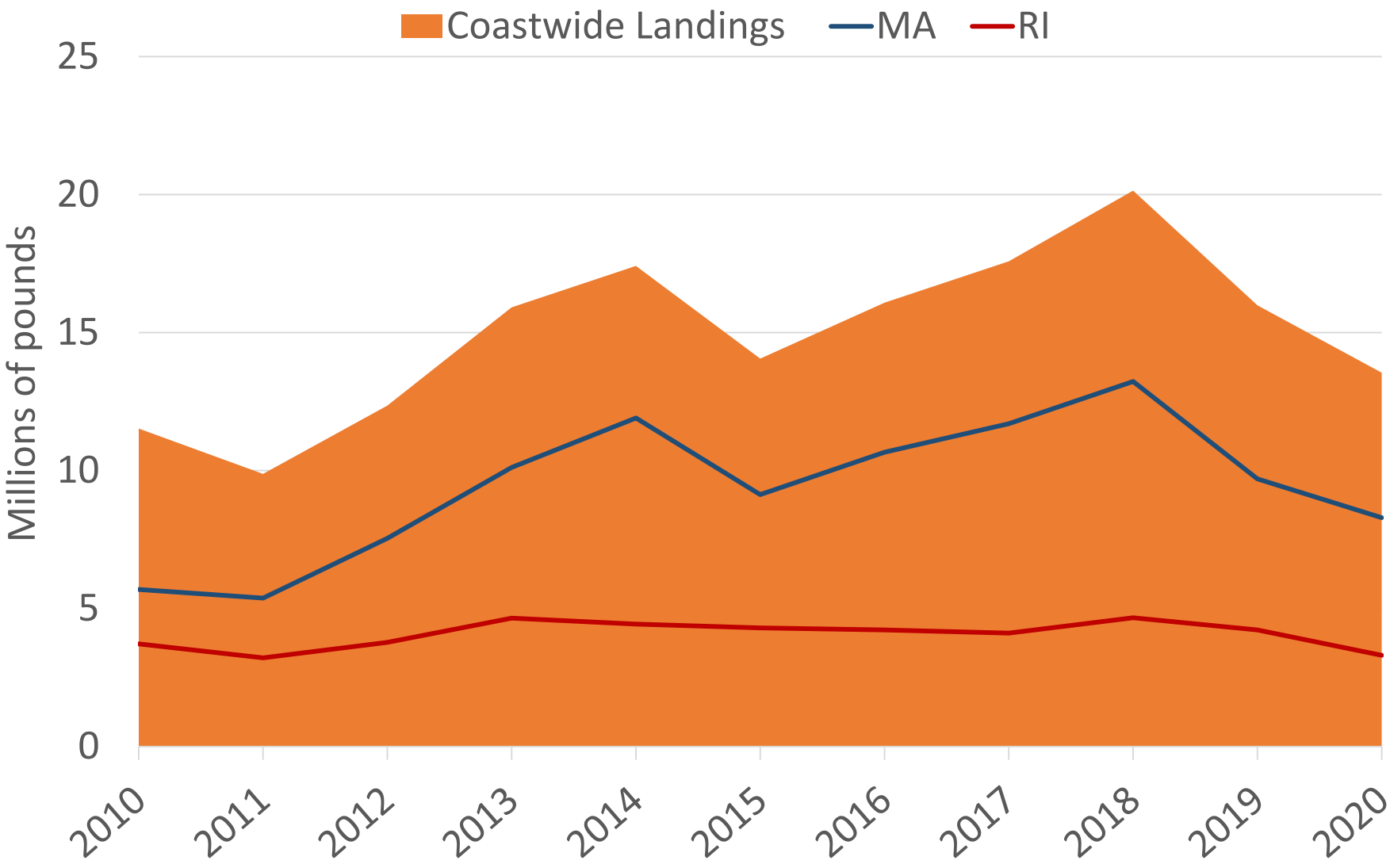
- Most recent 2 year average of commercial landings under 40,000 lbs
- Requests: DE, MD, VA
- All three states qualify

PRT Recommendations

- Consider reviewing the monitoring requirements in SNE
  - TC has discussed the need for additional sampling trips in federal waters as the fishery has shifted offshore.
- TC discuss presentation of state index information in the annual compliance reports to provide more detailed resolution of adult and juvenile abundance and size composition of the stock.
- Engage with the Committee on Economic and Social Sciences (CESS) to consider available socioeconomic data to develop metrics that could be used to characterize changes in the fishery.

Jonah Crab
FMP Review for the 2020 Fishing Year

Commercial Landings



Status of Stock

- Status of Jonah crab resource is relatively unknown and no coastwide stock assessment has been conducted
- Board initiated stock assessment for completion in October 2023

COVID-19 impacts

Surveys not completed:

- Spring 2020 ME/NH Inshore Trawl Survey
- Spring/fall 2020 MA DMF bottom trawl surveys
- Spring/fall Long Island Sound Trawl Survey
- Spring/fall NJ ocean trawl survey
- Spring/fall NEFSC bottom trawl survey

State Compliance

- New York has not yet implemented the full suite of measures in FMP and Addenda.
- Regulations to limit the directed trap fishery to lobster permit holders only, and the 1,000 crab bycatch limit have not been implemented.
  - NY has indicated that it is unclear how long it will take to change the legislation
- The PRT notes that MA has been unable to meet the August 1 deadline for compliance reports for the last three years.

De Minimis

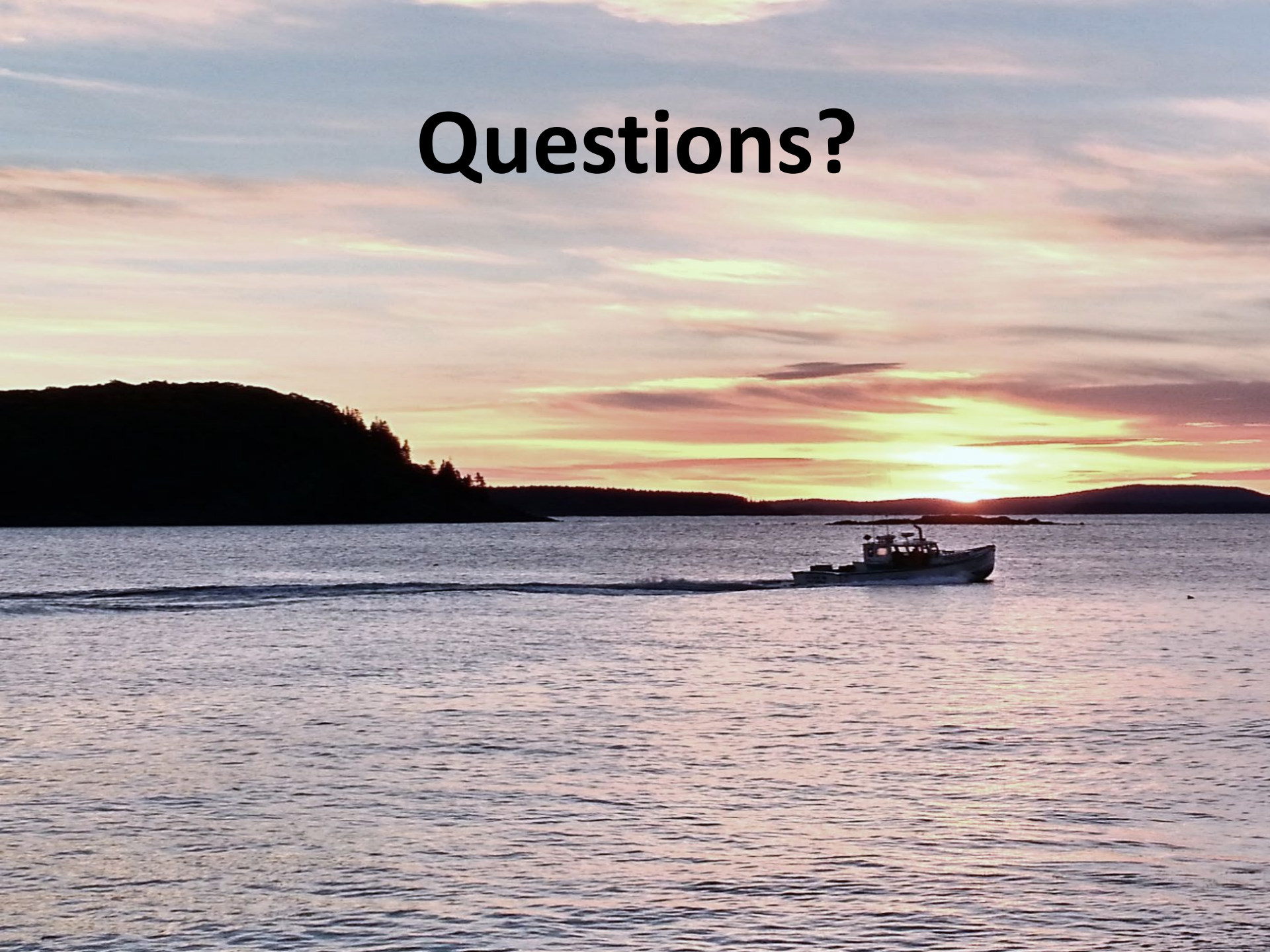
- States may qualify if, for the 3 preceding years, their average commercial landings constitute less than 1% of average coastwide commercial catch
- DE, MD, and VA apply and meet *de minimis* requirement
- The PRT recommends the Board approve the *de minimis* requests

PRT Recommendations

- The PRT raises concerns about the lack of Jonah crab regulations in NY. These issues were first raised in the 2017 compliance reports and have not been addressed.
  - Regulations to limit the directed trap fishery to lobster permit holders
  - 1,000 crab bycatch limit
- Jurisdictions with crab-only fishermen should report on their collective effort.
- LEC should review compliance in the Jonah crab fishery, given it is a fairly new FMP

Board Action:

- **Consider approval of the Lobster FMP Review for the 2020 fishing year, state compliance reports, and *de minimis* status for DE, MD, and VA.**
- **Consider approval of the Jonah Crab FMP Review for the 2020 fishing year, state compliance reports, and *de minimis* status for DE, MD, and VA**


Questions?