



American Lobster Draft Addendum XXV



American Lobster Management Board
October 2016

Timeline



May 2016	Board initiates Addendum XXV
August 2016	Board defines goal and management options for Addendum XXV
October 2016	Board reviews Addendum XXV for public comment
November 2016 – January 2017	Public comment period including public hearings
February 2017	Board reviews public comment and selects final option
TBD	Implementation

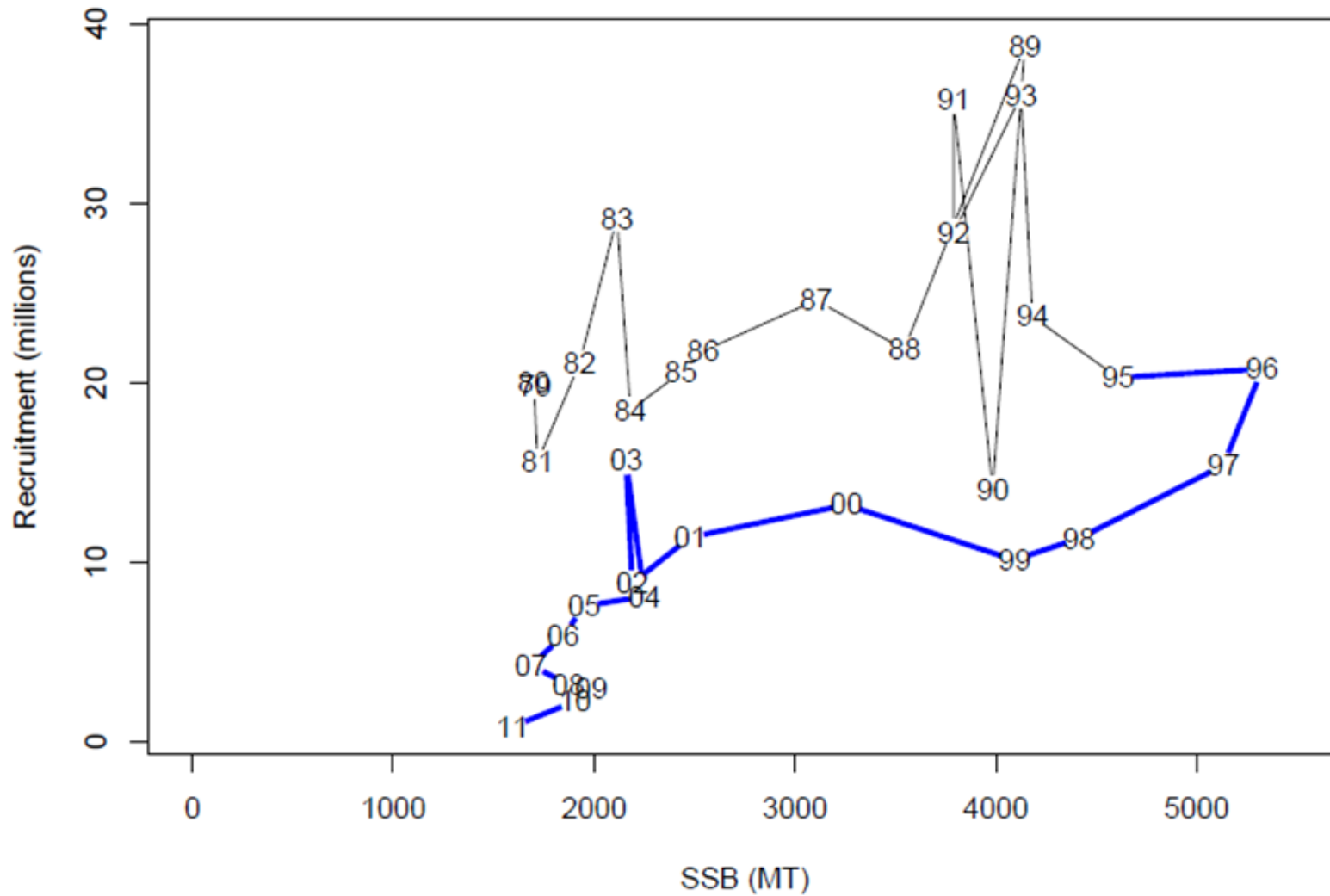
SNE Resource Issues



- 2015 Stock Assessment found SNE stock is depleted
 - Abundance, SSB, and recruitment all at historic lows
 - Model-free indicators corroborate findings
 - Contraction of inshore population

		GOM/GBK	SNE
Abundance (millions)	2011-2013 Reference	248	10
	Threshold	66	24
	Target	107	32
Effective Exploitation	2011-2013 Reference	0.48	0.27
	Threshold	0.50	0.41
	Target	0.46	0.37

SNE Recruitment Trend

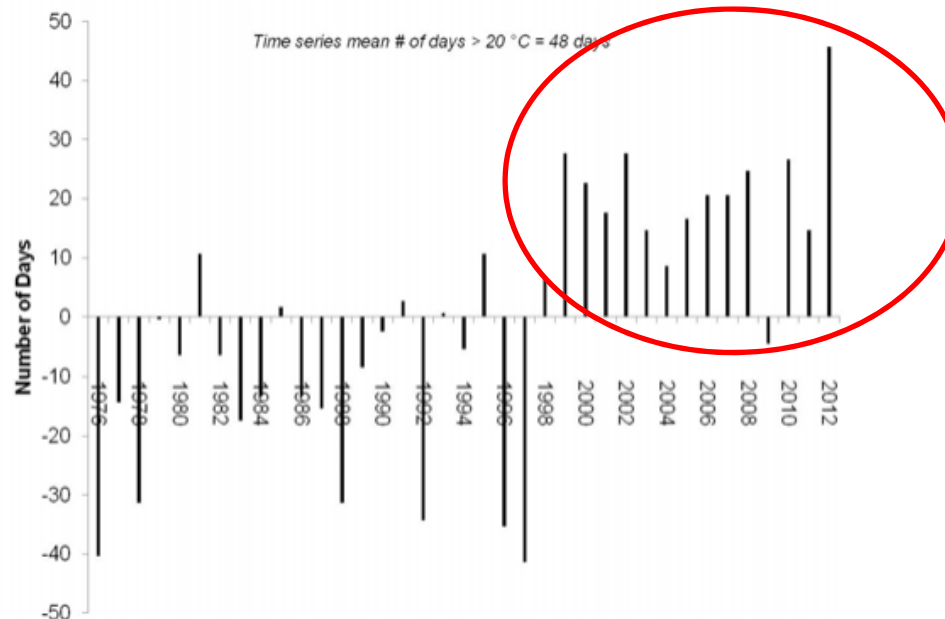


Causes of Stock Decline



- Increase in natural mortality
 - Warming waters
 - Predation
- Continued fishing pressure

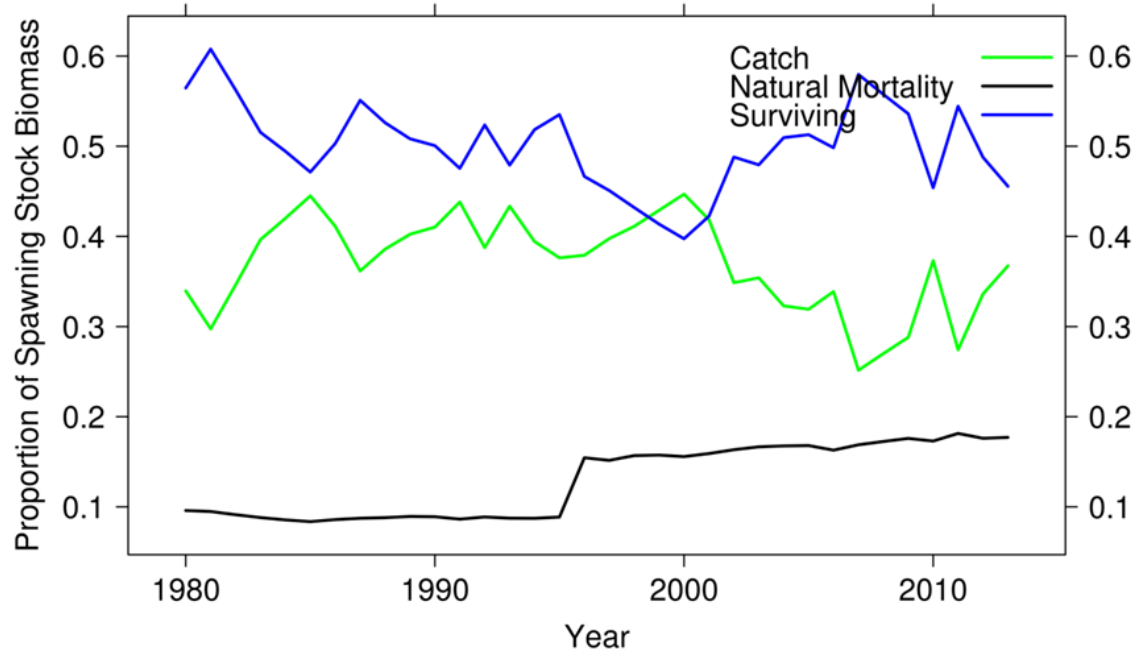
Bottom water temp from eastern Long Island Sound, CT



Causes of Stock Decline



- Increase in natural mortality
 - Warming waters
 - Predation
- Continued fishing pressure



Management Goal



“Recognizing the impact of climate change on the stock, the goal of Addendum XXV is to respond to the decline of the SNE stock and its decline in recruitment while preserving a functional portion of the lobster fishery in this area.”

Management Tools Considered



- Gauge size changes
- Trap reductions
- Accelerated trap reductions
- Closed seasons
- Trip limits
- V-notching
- Culls

Gauge Size Changes



- Gauge size changes are an effective management tool to increase egg production and decrease fishing mortality
 - Enforceable
 - Direct benefit of keeping lobsters in the water longer
 - Intricately tied to biology of lobsters
- Achieve up to 60% increase in egg production
 - Increases in min size result in larger increases in egg production
- Potential impacts to interstate commerce

Recommended for management use

Trap Reductions



- Relationship between traps fished and F is unclear
- Current trap allocation reductions in LCMAs 2 and 3 include both actively fished traps and latent effort
- TC attempted to model relationship between actively fished traps and exploitation rate
 - 25% active trap reduction may result in, at most, 13.1% increase in egg production
- TC noted several caveats with analysis
 - Fishermen don't maintain constant soak time
 - Trap allocation vs. active traps fished
 - Trap transferability in LCMAs 2 and 3

Recommended for management use in conjunction with gauge size changes

Accelerated Trap Reductions



- PDT considered potential impact of accelerating current trap reductions
- TC has low confidence in ability of trap reductions to create meaningful reductions in fishing mortality
- Place greater conservation burden on LCMA 2 and 3 fishermen

Not recommended for management use

Closed Seasons



- Reduce pressure on stock at vulnerable times
 - Removes stress on lobsters as they are caught, hauled, and handled
- Quarterly closures achieve up to a 21.6% increase in egg production
 - Largest increase from summer closure
 - Assumes fishermen don't increase effort during open season
- Important to consider impact on Jonah crab fishery

Recommended for management use in conjunction with gauge size changes

Trip Limits



- Maintain catch over harvestable year and potentially reduce exploitation
- Allow for both lobster and Jonah crab fisheries
- TC noted concerns with effectiveness
 - Disproportionately impact offshore fleet
 - Fishermen respond by increase number of trips
 - Encourage those below the limit to increase harvest
 - Increased discards and stress
- TC recommend trip limits be considered in conjunction with quotas

Recommend trip limits and quotas not recommended for inclusion in this addendum due to their complexity

V-Notching



- Used to protect reproductive females in pop
- LCMAs 2, 5, and federal waters of LCMA 4 require mandatory v-notching
- Effectiveness predicated on high encounter and harvest rates
 - Significant reductions in SNE landings
- Hindered by compliance issues in SNE

Not recommended for management use

Culls



- Culls can be legally landed in the fishery
- A prohibition on culls may reduce fishing mortality
- It could also encourage better handling practices, reducing its effectiveness
- If prohibited, tolerances would have to be established and need a clear definition

Not recommended for management use

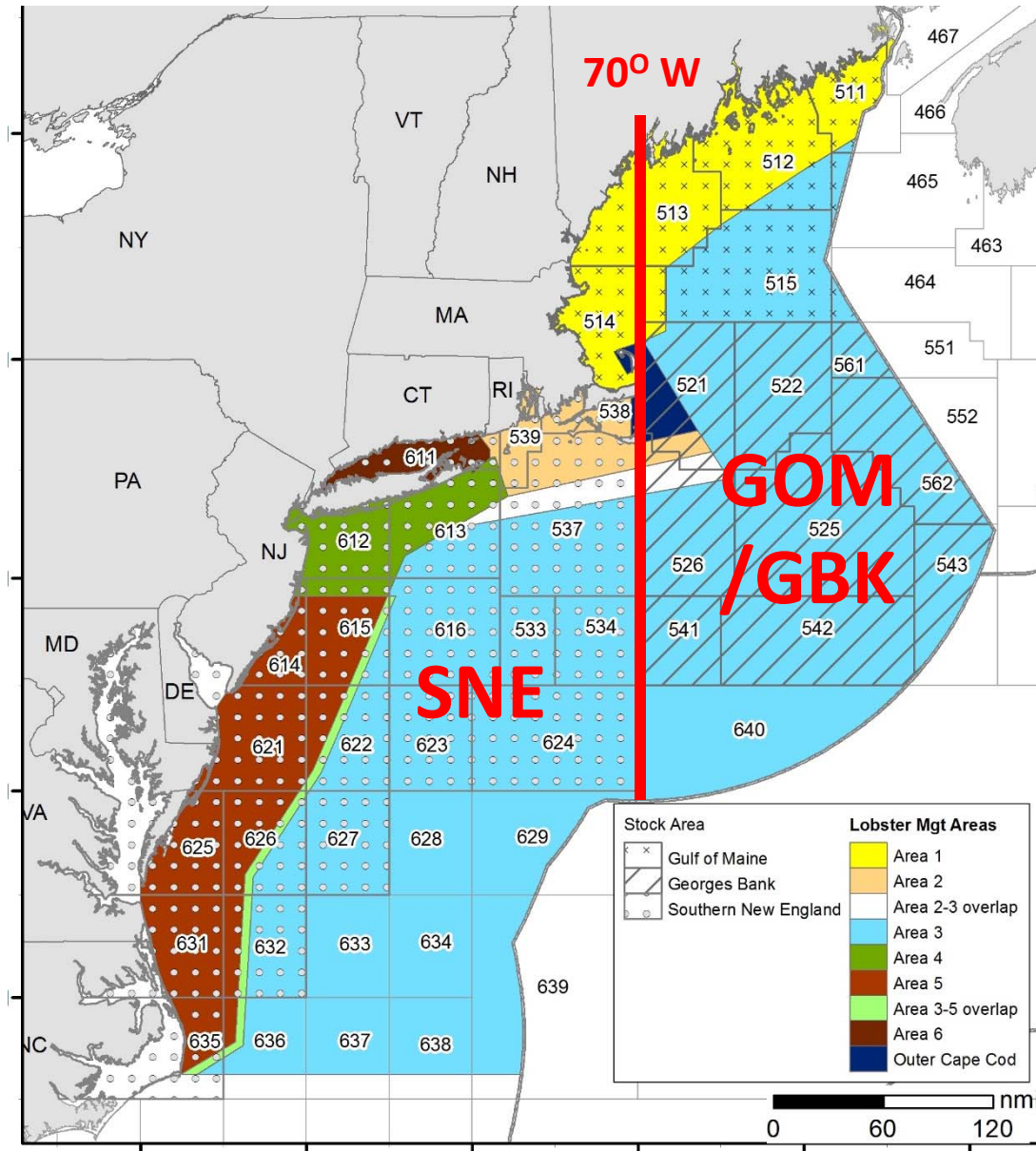
Standardize Regulations



- TC outlined costs and benefits of standard regs
 - Improve enforcement and stock assessment process
 - Create clear winners and losers in the fishery
- LCMAs established to reflect different conditions in different areas of fishery
 - Supported by industry through LCMTs

Supports standard regs in inshore fishery but not between inshore and offshore fishery

Stock Boundaries



Issue 1: Increases in Egg Production



Option 1: Status Quo

- No changes to management in SNE

Option 2: 20% Increase in Egg Production

- Gauge size changes, trap reductions, season closures
- Gauge size changes can be used on their own
- Trap reductions and season closures must be used in conjunction with gauge size changes
- Together, season closures and trap reductions cannot account for more than a 10% increase in egg production

Issue 1: Increases in Egg Production



Option 3: 40% Increase in Egg Production

- Gauge size changes, trap reductions, season closures
- Gauge size changes can be used on their own
- Trap reductions and season closures must be used in conjunction with gauge size changes
- Together, season closures and trap reductions cannot account for more than a 20% increase in egg production

Option 4: 60% Increase in Egg Production

- Gauge size changes, trap reductions, season closures
- Gauge size changes can be used on their own
- Trap reductions and season closures must be used in conjunction with gauge size changes
- Together, season closures and trap reductions cannot account for more than a 30% increase in egg production

Table 9. Gauge Size Changes



		Min	Max	Harvest Window (mm)	Egg Production	Exploitation	Spawning Stock Biomass	Reference Abundance	Catch
20%	Inshore	88mm (3-15/32")	105mm (4-1/8")	17 (0.7")	20%	-18%	20%	9%	-11%
		91mm (3-9/16")	115mm (4 1/2")	24 (0.9")	18%	-22%	22%	11%	-14%
		92mm (3-5/8")	165mm (6 1/2")	73 (2.9")	20%	-27%	25%	13%	-17%
	Offshore	91mm (3-9/16")	105mm (4-1/8")	14 (0.6")	22%	-21%	22%	9%	-13%
		94mm (3-11/16")	115mm (4 1/2")	21 (0.8")	20%	-26%	24%	12%	-17%
		95mm (3 3/4")	165mm (6 1/2")	70 (2.8")	21%	-28%	26%	13%	-19%
40%	Inshore	96mm (3-25/32")	115mm (4 1/2")	19 (0.7")	40%	-43%	49%	23%	-30%
		96mm (3-25/32")	165mm (6 1/2")	69 (2.7")	37%	-42%	46%	22%	-29%
		97mm (3-4/5")	165mm (6 1/2")	68 (2.7")	43%	-46%	53%	25%	-33%
	Offshore	98mm (3-27/32")	165mm (6 1/2")	67 (2.6")	39%	-45%	46%	22%	-33%
		99mm (3-7/8")	165mm (6 1/2")	66 (2.6")	41%	-47%	49%	23%	-35%
60%	Inshore	99 mm (3-7/8")	115mm (4 1/2")	16 (0.6")	60%	-56%	71%	32%	-42%
		101mm (3-29/32")	165mm (6 1/2")	64 (2.5")	59%	-59%	76%	35%	-45%
	Offshore	102mm (4")	115mm (4 1/2")	13 (0.5")	62%	-60%	71%	31%	-47%
		103mm (4-1/16")	165mm (6 1/2")	62 (2.4")	63%	-63%	75%	34%	-50%

Table 10. Closed Seasons



Season Closure	Egg Production	Exploitation	Spawning Stock Biomass	Catch Weight
Winter (Jan-March)	3.0%	-2.1%	2.3%	-0.7%
Spring (April-June)	15.0%	-10.8%	16.0%	-1.7%
Summer (July-Sept)	21.6%	-26.0%	15.5%	-12.3%
Fall (Oct-Dec)	8.1%	-13.6%	8.4%	-4.2%

Issue 2: Mgmt Measures in LCMA 3



Option 1: Maintain LCMA 3 as a Single Area

- Current boundaries of LCMA 3 maintained
- Management measures in this Addendum apply to all LCMA 3 permit holders

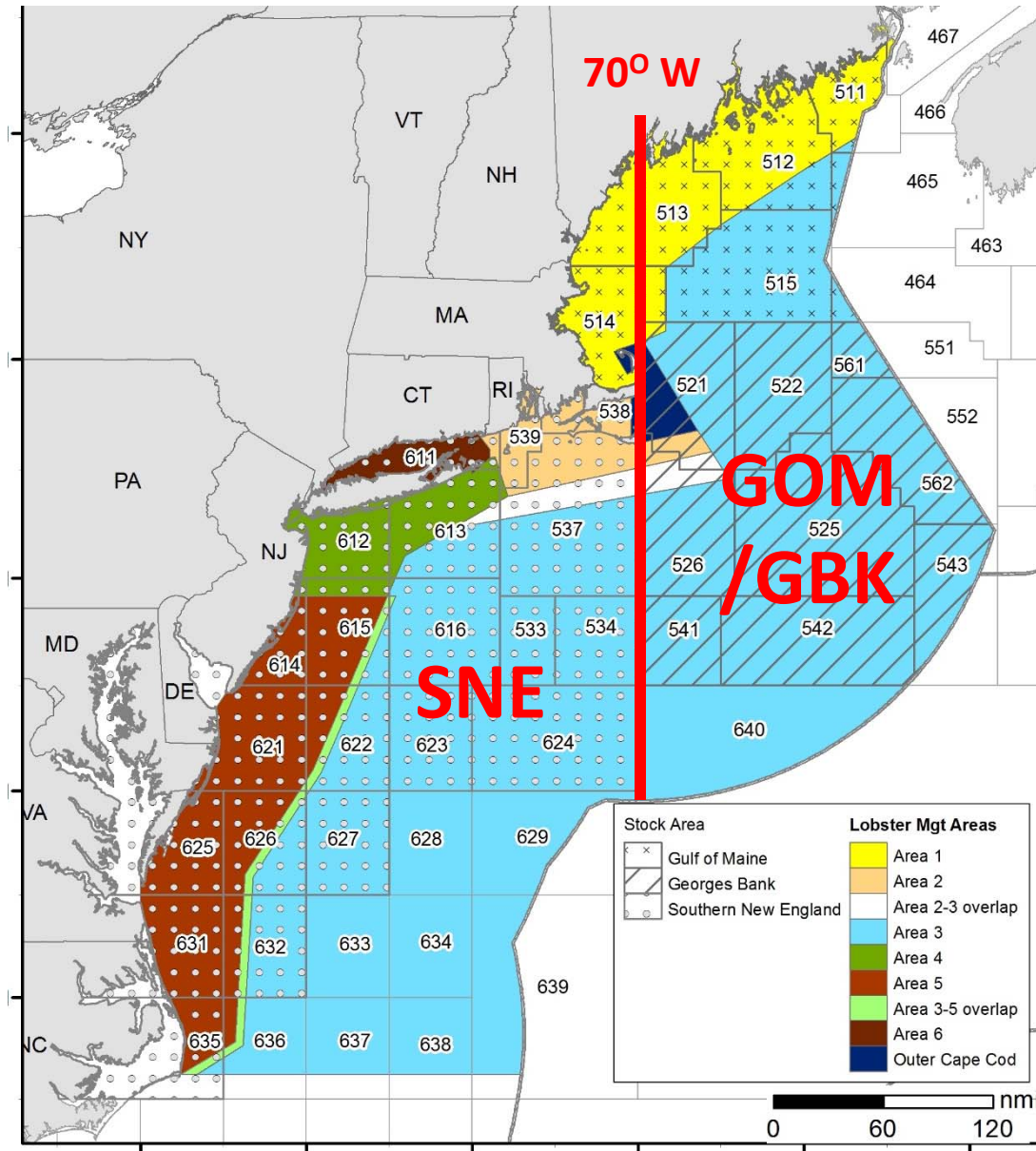
Issue 2: Mgmt Measures in LCMA 3



Option 2: Split LCMA 3 along 70°W Longitude Line

- 70°W dividing line between eastern (GBK) and western (SNE) sections of LCMA 3
- Annually, LCMA 3 fishermen can elect to fish exclusively in eastern section (GBK)
- Others can fish throughout entire LCMA 3 but they are held to the stricter mgmt. measures of the two sections
- Trap tags amended to include “3E” and they can only be fished in eastern section (GBK)
- LCMA 3 permits can still be transferred
- **Management measures in this addendum only apply to western portion of LCMA 3 (SNE)**

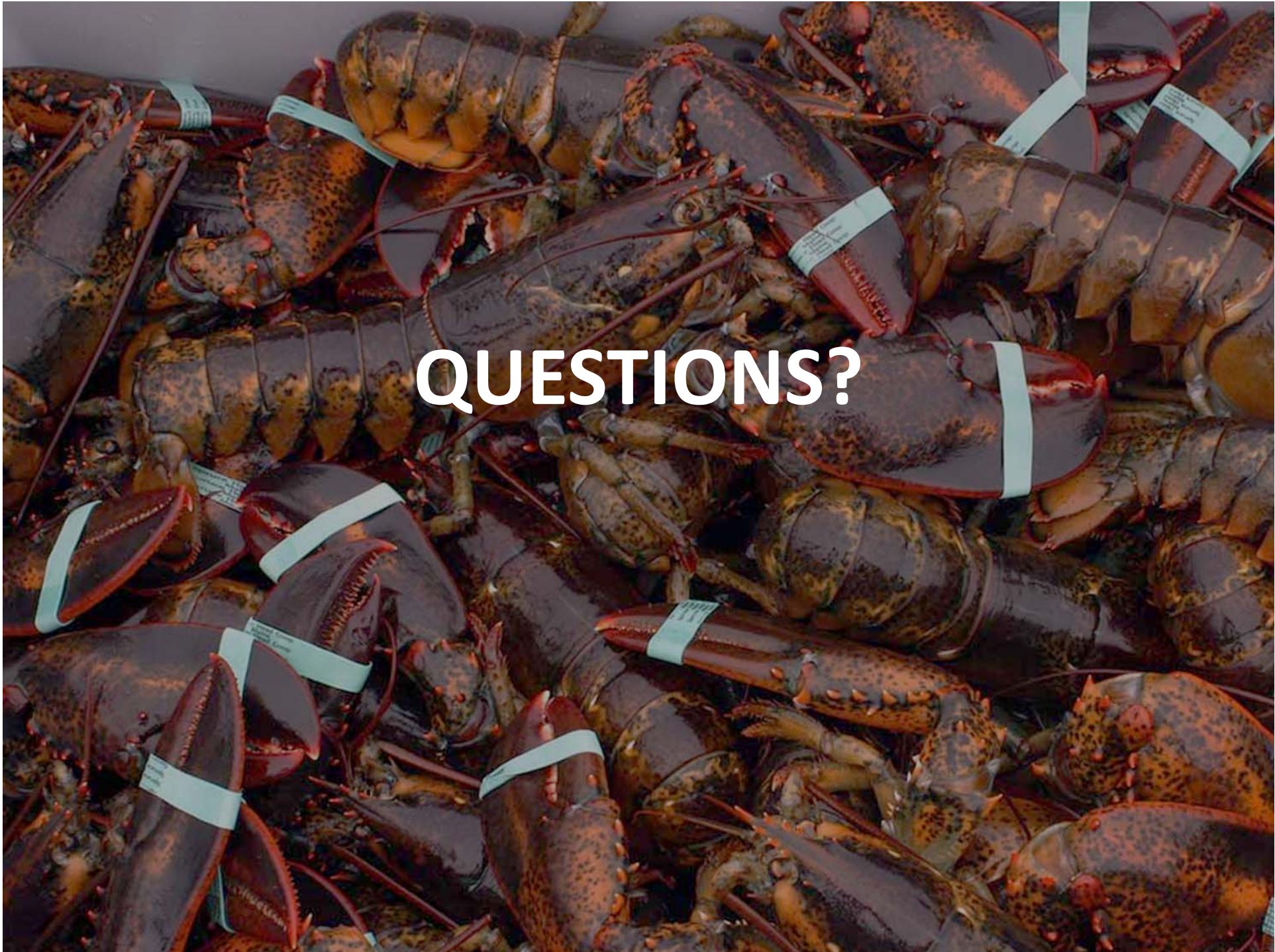
Stock Boundaries



Monitoring



- Monitoring necessary to determine if Addendum meets goals as well as need and extent of future management action
- Monitor exploitation rate and associated egg production of SNE stock
- Recommend model-free abundance indicators updated each year as part of FMP review



QUESTIONS?



Trap Caps Included in Addenda XXI and XXII



American Lobster Management Board
October 2016

Background



of traps you can fish



of traps you can own
"trap banking"



		Active Trap Cap	Individual Ownership Cap
LCMA 2	All Years	800	1600
LCMA 3	Year 0	2000 (1945=NOAA)	2333
	Year 1	1900	2216
	Year 2	1805	2105
	Year 3	1715	2000
	Year 4	1629	1900
	Year 5	1548	1800

Background



- NOAA has suspended their rule-making process for federal trap caps and banking
 - Uncertainty surrounding Board's management response to poor condition of SNE stock
 - Trap caps and banking could encourage fishermen to invest significant funds in a fishery which could be severely restricted in the future

Trap Cap Call



- Industry members supported federal implementation of trap caps and banking
 - Conservation benefit of having traps which can't be fished tied to a permit
 - Implementation delay affects industry's ability to make future business decisions
- NOAA reiterated concern that trap banking encourages fishermen to invest in a fishery in poor condition
 - Greater concern with implementing individual ownership caps than annual reductions in LCMA 3 active trap cap
- Participants highlighted concern over growing disconnect between state and federal regs

Moving Forward



- Board could recommend NOAA implement active trap cap for LCMA 3
 - Align state and federal regs for active trap cap in LCMA 3
 - Reduce fishing effort commensurate with annual trap reductions in place
- Board could revisit this issue in Spring 2017 when management response in SNE is better known



Lobster Reporting Work Group



American Lobster Management Board

October 2016

Problem Statement



- TC highlighted data deficiencies in lobster fishery
- Board requested NOAA implement 100% trip level reporting for all federally licensed fishermen
 - NOAA recommend the Board follow the addendum process to address data concerns
- **Improved harvester data with a greater spatial resolution is needed to respond to mgmt. issues**
 - Marine monuments, coral protection, offshore wind

Background



- Meeting on September 26th in Gloucester, MA
- Work Group attendees included Commissioners, TC members, GARFO representatives, state data specialists, industry members, and ACCSP Data Coordinator
- Discussed aspects of harvester and dealer reporting
 - Temporal and spatial deficiencies
 - Prevalence of electronic reporting
 - Percentage of harvester reporting
 - Collection of biological data

Goals



1. Improve spatial resolution of harvester reporting
2. Utilize the latest technology to improve and increase reporting
3. Collect greater effort data in harvester reports
4. Define inshore vs. offshore areas
5. Proactively address data concerns of ALWTRT

Short-Term Recommendations



- ME's 10% harvester reporting only include commercial license holders who have actively fished in the past two years
- Define:
 - Inshore (0-3 miles offshore)
 - Nearshore (3-12 miles offshore)
 - Offshore (>12 miles offshore)

Intermediate Recommendations



- Require 100% active harvester reporting for all state and federally permitted fishermen
 - Resource limited states should, at a minimum, require reporting from a statistically valid sample (30%)
- Add data components to harvester reporting
 - Number of trap hauls, soak time, catch disposition, gear configuration, number of vertical lines, LCMA, depth
- Further delineate NMFS stat areas on harvester reports
 - At a minimum, inshore vs. nearshore vs. offshore

Long-Term Recommendations



- Establish electronic swipe-card system for harvest and dealer reports
- Incorporate VMS or other locator beacon to all lobster vessels
- Establish an electronic fixed-gear VTR for all federal permit holders

LEC Recommendation



- LEC discussed reporting recommendations as they pertain to enforcement
- Support recommendation that all lobster vessels have VMS
- Encourage adoption of VMS as a short-term or intermediate goal rather than long-term goal



Questions?





Jonah Crab Draft Addendum II for Public Comment



American Lobster Management Board
October 2016

August 2016 Meeting



- Request for an additional management option in the document
- Issue raised over the lack of definition of “bycatch” in the fishery
- Established the Jonah Crab Working Group



Timeline



May 2016	Board initiated Draft Addendum II to consider a coastwide standard for claw harvest
October 2016	Board reviews Draft Addendum II for public comment
November 2016- January 2017	Public comment period
February 2017	Board reviews public comment and selects final option
Implementation	TBD

Current Claw Provision



Jonah Crab FMP establishes

- A whole crab fishery
- Exception for individuals from NJ, DE, MD, and VA who can prove a history of claw landings before June 2, 2015
- Historic Delmarva claw fishery by small boat fishermen



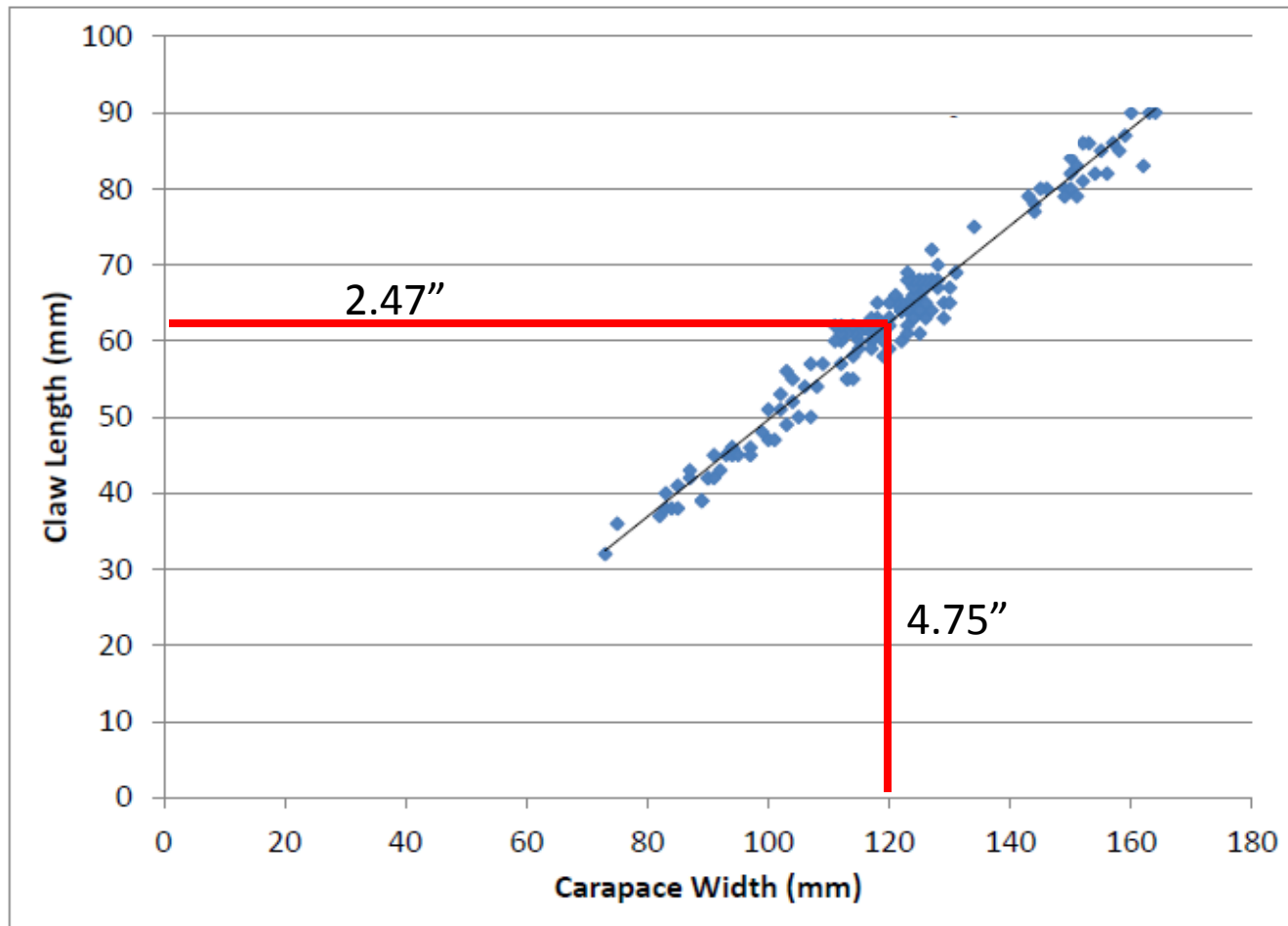
Statement of Problem



- **Claw fishermen from NY and ME identified following approval of FMP.**
 - These fishermen limited to whole crabs
 - Concerns about equity
- **Potential challenges implementing the regulation in federal waters.**
 - National Standard 4 requires management measures not discriminate between residents of different states

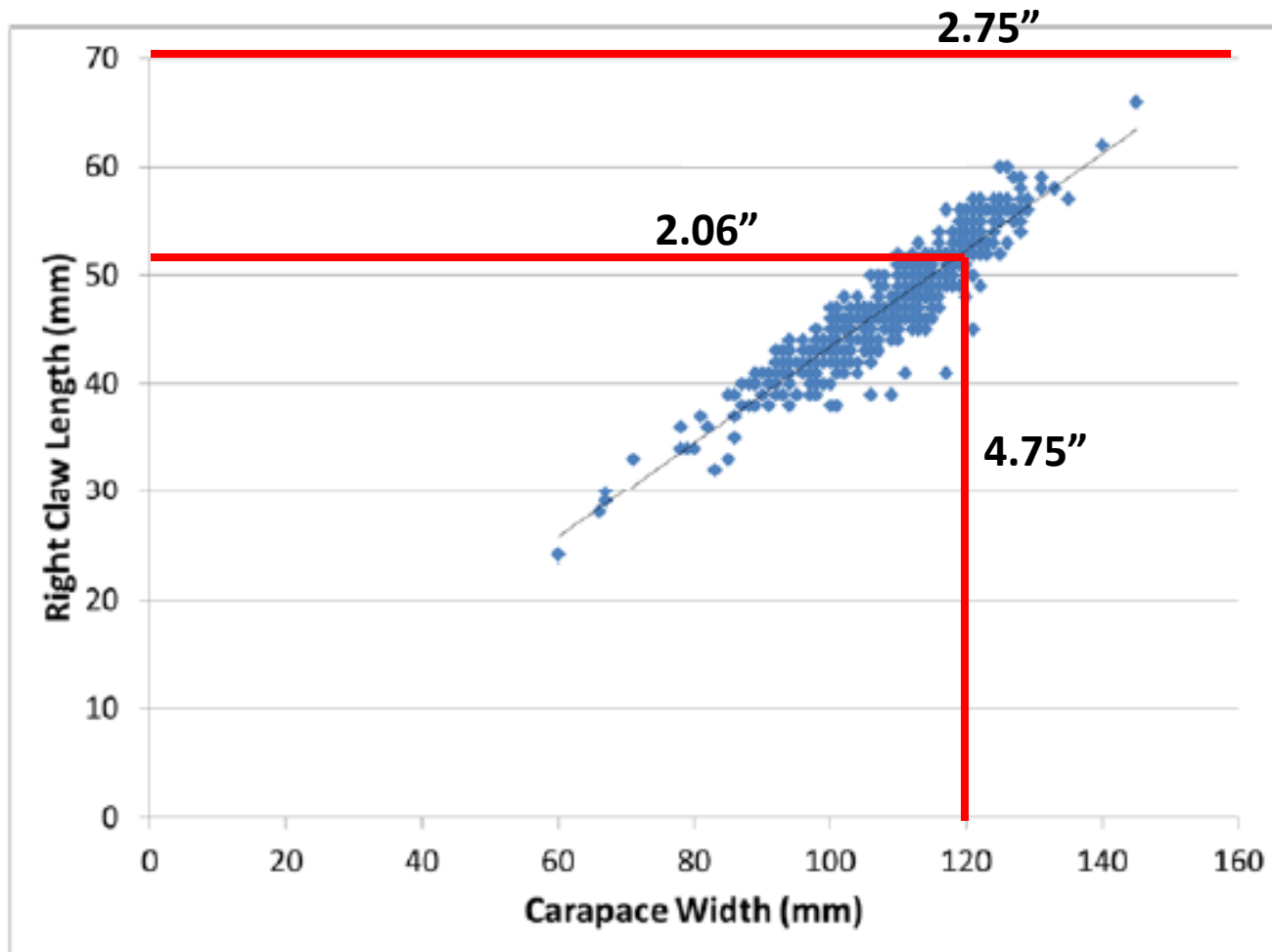


Male Morphometric Data



A male crab whose carapace width meets the minimum size of 4.75" would have an expected claw length of 2.47".

Female Morphometric Data



100% of female crabs sampled had claw lengths less than 2.75\".

Jonah Crab Work Group



- Concern that claw fishery undermines management measures in FMP
 - Minimum size, prohibition on egg bearing females
- By increasing min claw length to 2.75”, protect berried crabs and ensure minimum size
- Higher standard of harvest if claws are detached at sea



Management Options



Option A: Status Quo

- Only whole crabs may be retained and sold with the exception of individuals who can prove a history of claw landings before June 2, 2015 in the states of NJ, DE, MD, and VA
- PDT notes that it may be necessary to specify the size and volume of claws which may be harvested



Management Options



Option B: Coastwide Whole Crab Fishery

- Only whole crabs may be retained and sold coastwide.
- Once landed claws may be detached from the whole crab and sold. There is no minimum size for claws detached at the dock.



Management Options



Option C: Claw Harvest Permitted Coastwide

- Claws may be detached and harvested at sea if they meet the minimum claw length of 2.75”.
- Two claws may be harvested from same crab
- Bycatch limits remain per Addendum I
 - 1000 crabs = 2000 claws
- Fishermen can also harvest whole crabs which meet the 4.75” minimum size
 - Once landed claws can be detached from whole crabs and sold
 - No minimum size for claws detached at the dock



Bycatch Definition



- Original FMP established 200 crab per day, 500 crab per trip bycatch limit for non-trap gear
- Addendum I increased this to 1000 crab per trip and expanded it to include non-lobster trap gear
- Limits intended for incidental catch but no definition of bycatch provided
- Potential for small-scale fishery to develop
- Does not reflect intention of bycatch limit



Proposed Issue 2



Issue 2: Bycatch Definition

Option A: Status Quo

Under this option, there would be no definition of bycatch in the Jonah crab fishery. Fishermen using non-trap gear and non-lobster trap gear could land Jonah crab up to the bycatch limit without having another species on board.

Option B: Bycatch Defined as Percent Composition

Under this option, Jonah crab caught under the incidental bycatch limit must comprise at all times during a fishing trip an amount lower, in pounds, than the species the deployed gear is targeting.



LEC Report



- LEC supports a whole crab fishery
 - Some LEC members expressed interest in adding a 5-gallon bucket claw allowance for harvesters
 - Concern in potentially having two minimum claw lengths since claws can be harvested from whole crabs once landed
- LEC does not support a percent composition definition
 - Difficult for harvesters and enforcement



American Lobster 2016 FMP Review



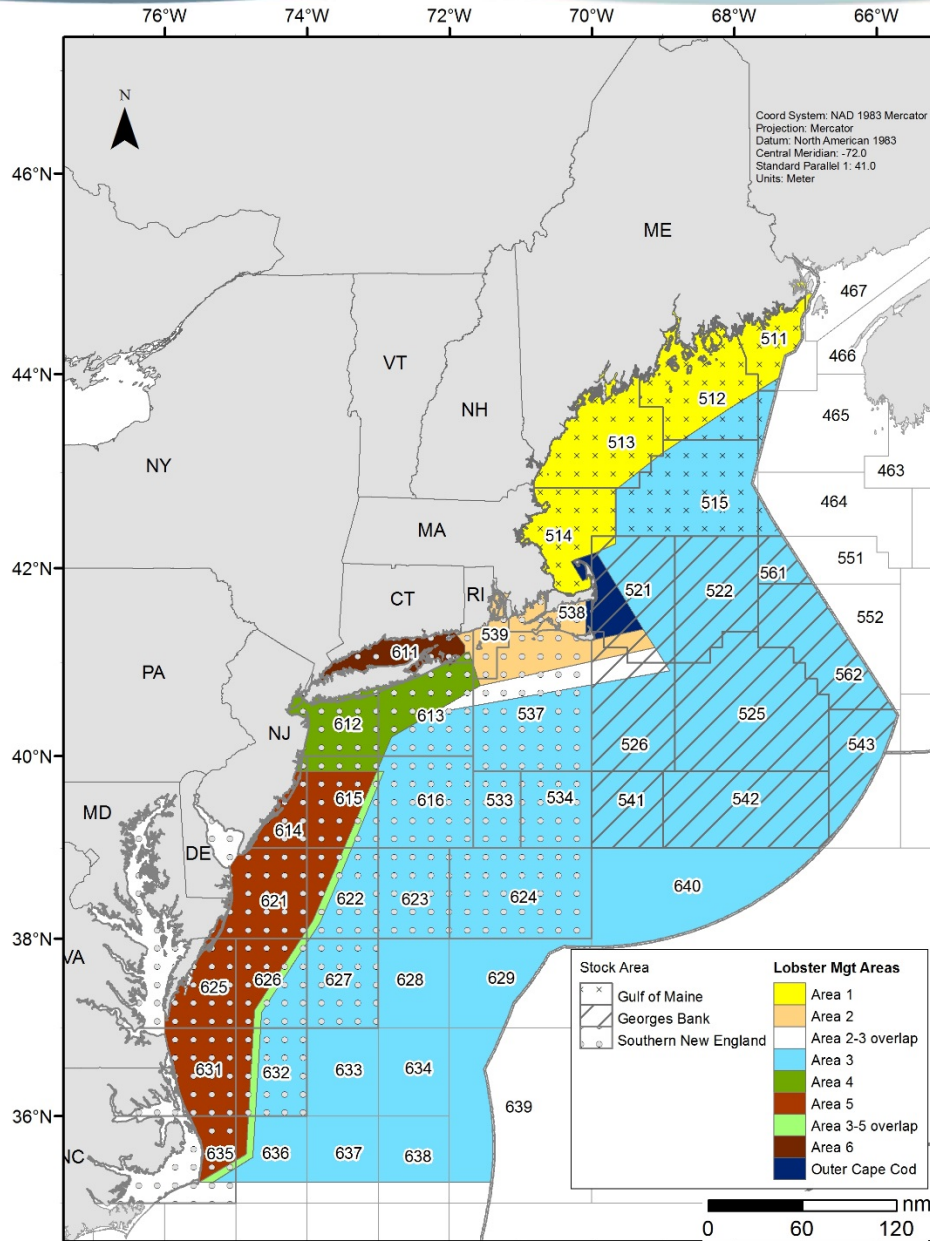
American Lobster Management Board
October 2016

Status of Stock



	GOM/GBK	SNE
Effective Exploitation		
Effective exploitation threshold	0.5	0.41
Recent effective exploitation (2011-2013)	0.48	0.27
Effective exploitation below threshold?	YES	YES
Reference Abundance (millions)		
Abundance threshold	66	24
Recent abundance (2011-2013)	248	10
Abundance above threshold?	YES	NO

Status of Management



Trap Reductions



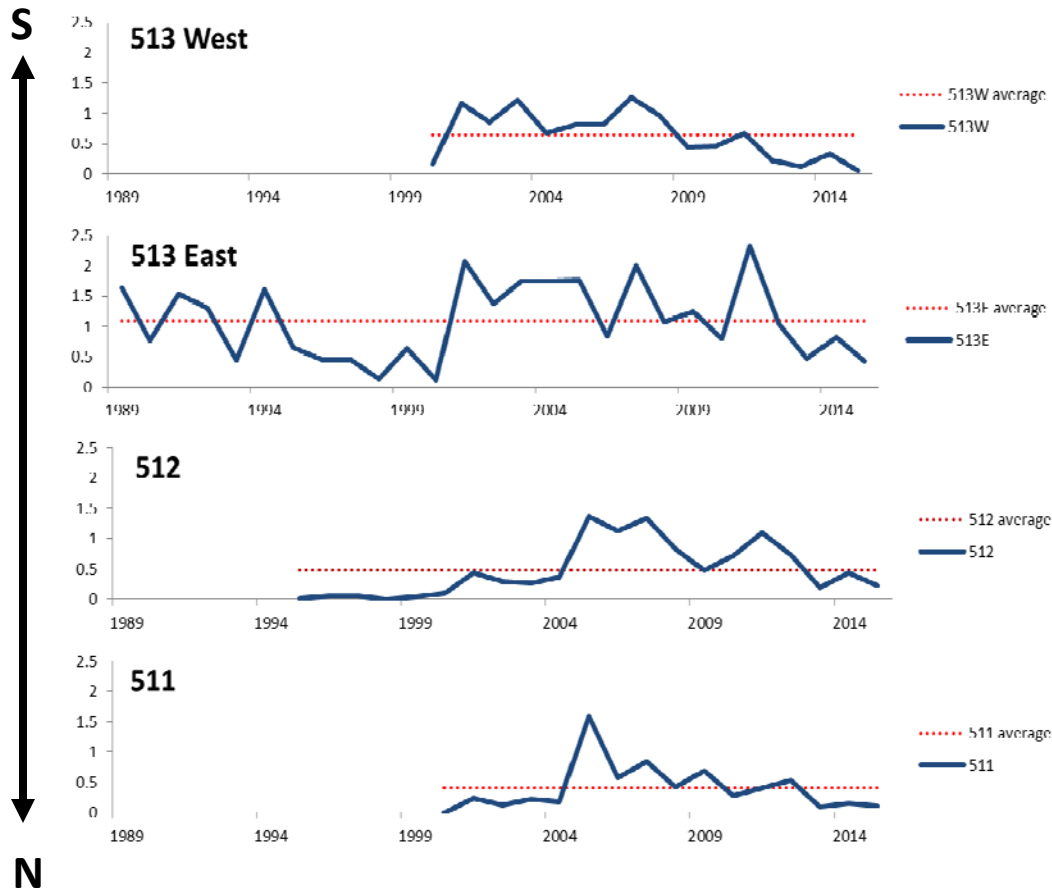
	Jurisdiction	# of Trap Allocated (2015)	# of Traps Retired due to Reductions
LCMA 2	MA	44,798	11,158
	RI	80,065	20,146
	CT	5,550	1,387
	NOAA (ME, NH, NY, NJ)	4757	1,189*
LCMA 3	NOAA	145,433	8,663*

* Includes traps retired due to the partial trap transfer conservation tax.

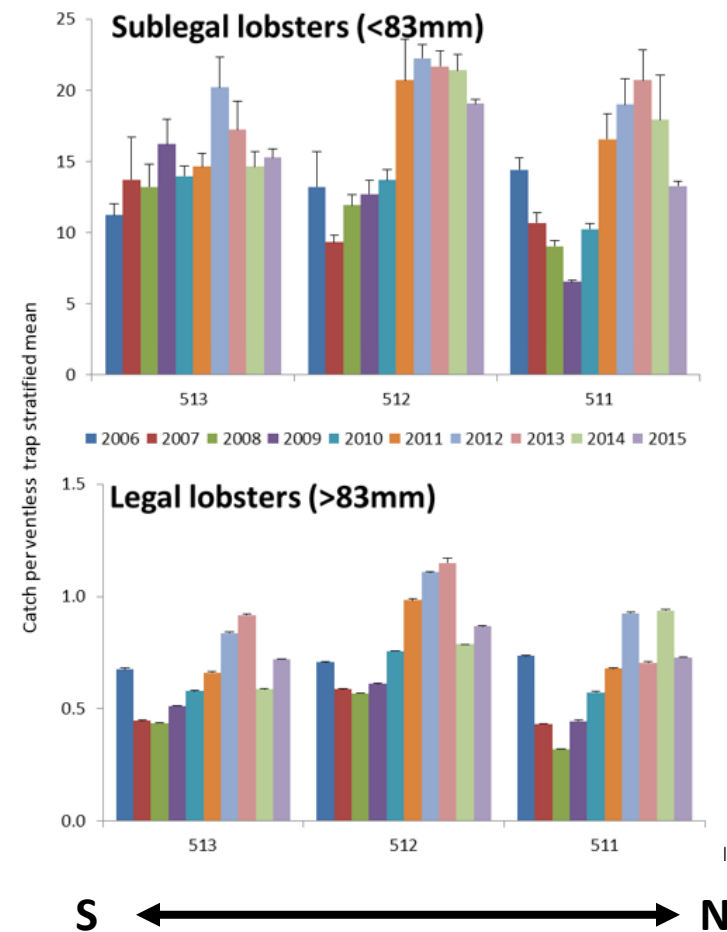
Fishery Monitoring



ME YOY Survey



ME Ventless Trap Survey



State Compliance



Compliance

- All states found to be in compliance with Amendment 3, Addenda I-XXIV

De Minimis

- Commercial landings, 2 year average, under 40,000 lbs
- Requests: DE, MD, VA
- VA and DE qualify
- MD's two year average is slightly above 40,000 lbs

PRT Recommendations



- Increase harvester reporting and create a fixed-gear VTR form
- Investigate stock connectivity and larval transport between inshore and offshore areas
- Address inconsistent regulations
 - OCC: v-notch definition
 - GOM/GBK: now a single stock area
 - SNE: gauge sizes and seasonal closures
- Improve enforcement of management measures



QUESTIONS?

Northeast Canyons and Seamounts Marine National Monument

