

# Amendment 22

## Alternatives and Analysis of Impacts

**Andrew Applegate**  
**NEFMC Staff**

**Whiting PDT Chair**

**Council meeting**  
**December 7, 2017**

12/7/2017



# Amendment 22 document organization and alternatives

- No Action (preferred)
- Southern whiting possession limit alternatives (no limited access)
- Limited access actions
  - Action 1 – Qualification criteria (5 alternatives)
  - Action 2 – Whiting possession limits for Category I, Category II, and Incidental permits
    - Includes triggered possession limit reductions for Category II and Incidental permits (placeholders; no impact analyses yet)
  - Action 3 – Permit conditions
    - Alternative 5 - incidental possession limit exemption for vessels fishing in areas that require a raised footrope trawl

# Amendment 22

- Preferred alternatives identified and discussed
  - No action
  - Possession limits for a limited access program
  - Permit allowances (one history, one qualifier; incidental limit exemption for squid and herring fisheries)
- Additional alternatives added with rationale and impact analyses
  - ~~Triggered possession limit reductions for Category II and Incidental permitted vessels~~
  - Exemption from Incidental permit possession limits when fishing in areas that require vessels to use a raised footrope trawl
- Executive summary
  - Document organization
  - Rationale for No Action as preferred
  - Decision matrix

# Amendment 22 analysis

- Bycatch analysis by gear configuration and qualification status
- Protected species impacts
- Habitat impacts (incomplete)
- Economic analysis
  - Dependence on landings of small-mesh multispecies by qualification category
  - Community impacts
- Cumulative effects analysis
- IRFA/RIR sections (incomplete)

## Bycatch analysis

Trips landing 2000 lbs. whiting or 400 lbs. red hake

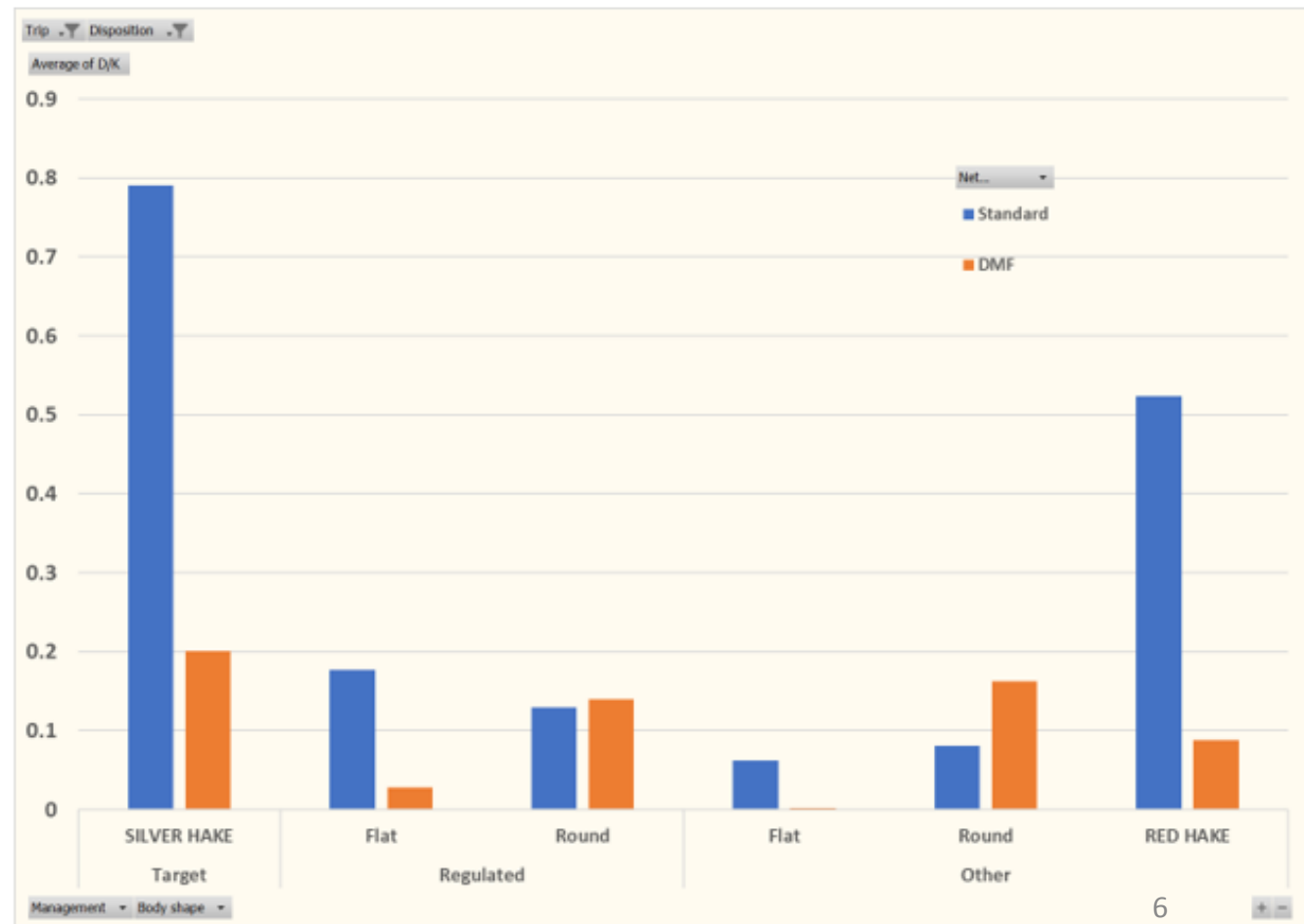
- Few differences in bycatch rates between qualifying and non-qualifying vessels
- Qualifiers account for 85-95% of total bycatch during 2014-2016.

# Bycatch analysis

## Raised footrope trawl

- Initial gear trials on six trips
  - Flatfish bycatch reduced
  - Silver hake and red hake catch reduced
  - Roundfish bycatch increased

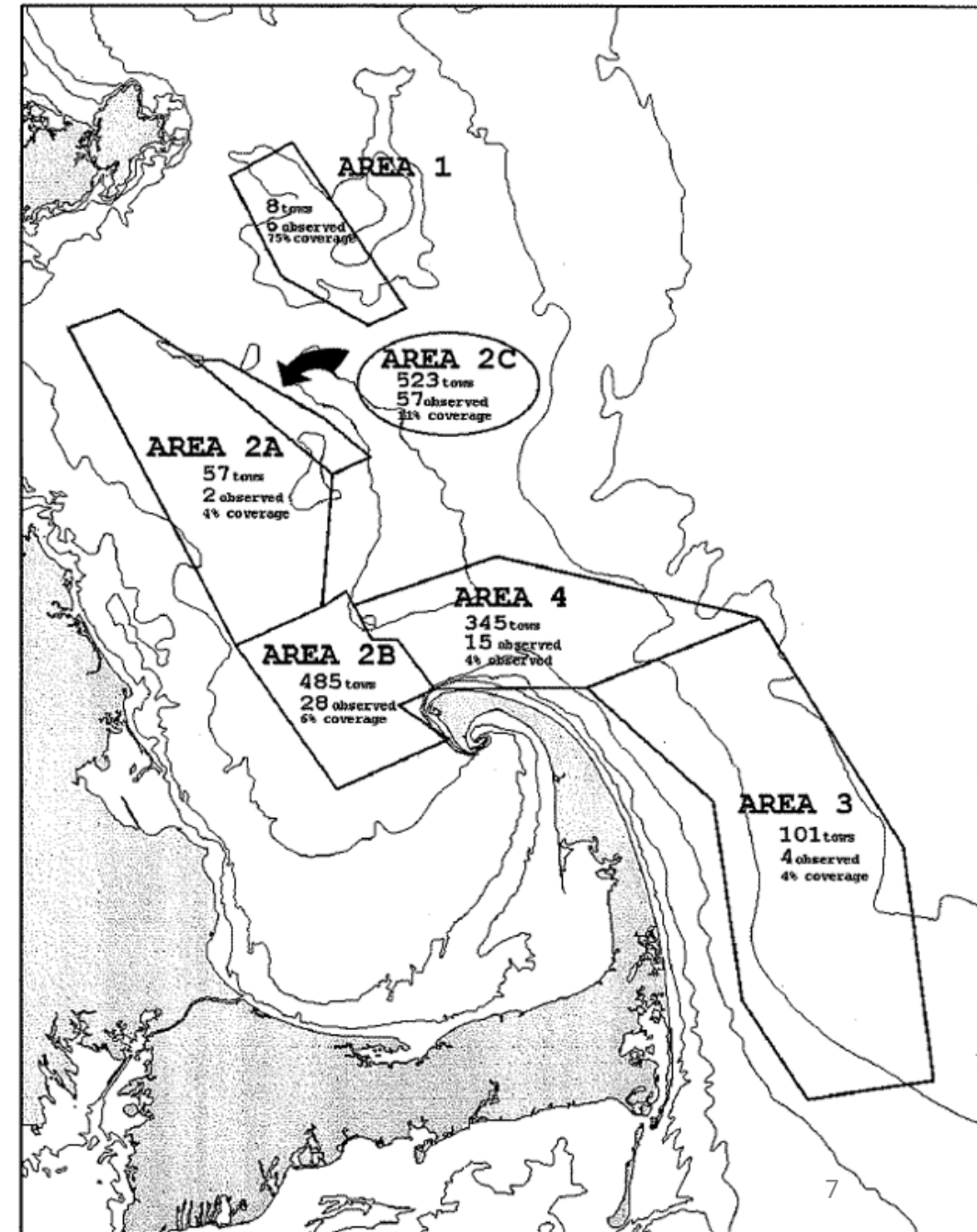
Figure 15. Comparable catches of silver hake (target), red hake, regulated multispecies, and other species by body shape for six raised footrope trawl/control trials in 1994. Data from Carr 1996, used with permission of MA DMF.



# Bycatch analysis

## Raised footrope trawl

- Experimental fisheries in 1997/1998
  - Bycatch regulated species < 5% of catch
  - No standard control net
  - Concerns and elevated bycatch of cod west of Stellwagen Bank



2014-2016 regulated multispecies bycatch higher in Cultivator Shoals Area and Georges Bank than in areas that require a raised footrope trawl (RFT)

Figure 20. Regulated multispecies discard vs. kept by sub-area for observed hauls (each point represents a haul) during 2014-2016. Solid reference line = 5% ratio; dashed reference line = 25% ratio. Sub-area as in Figure 19.

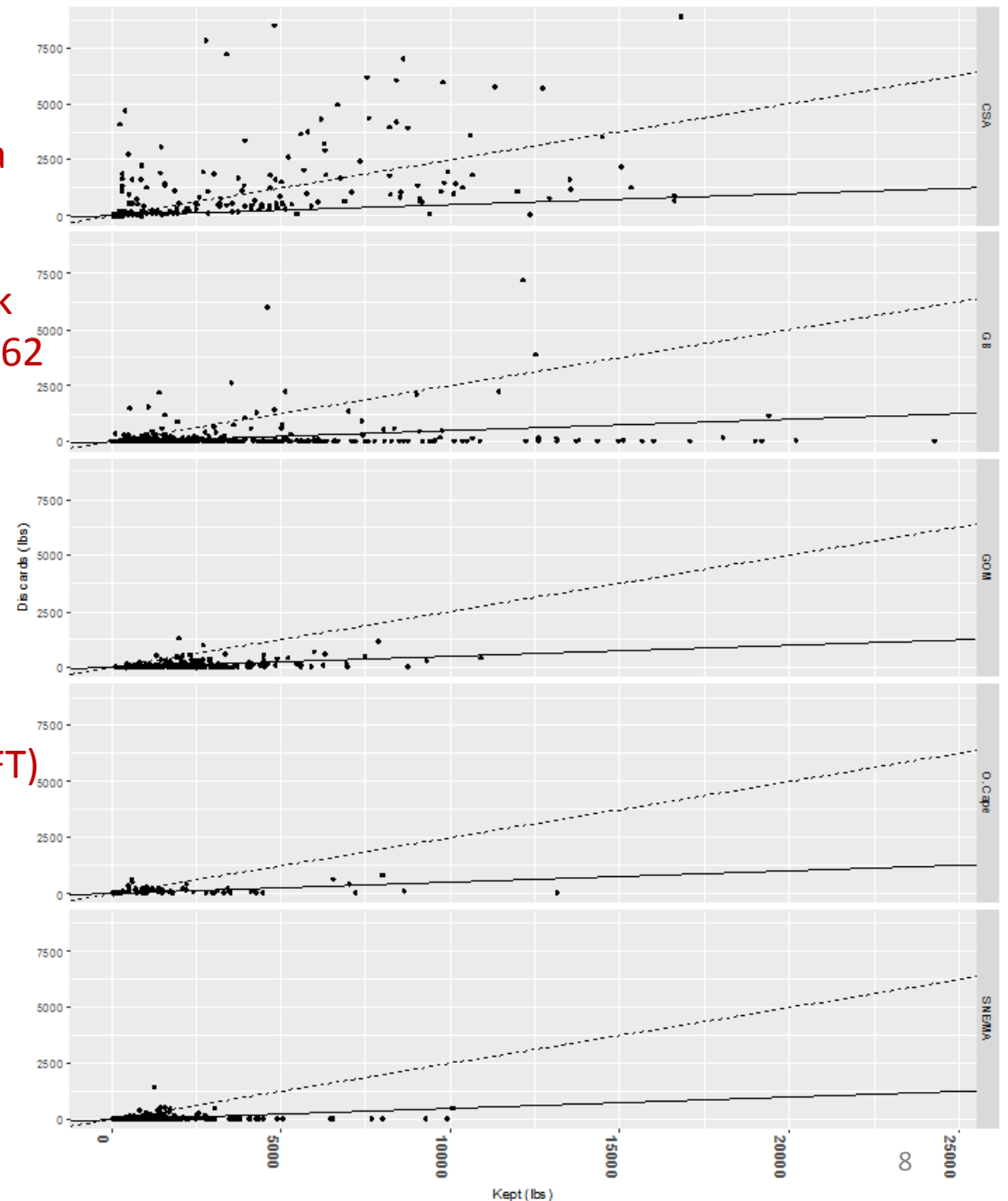
Cultivator  
Shoals Area  
SA 522

Georges Bank  
SA 525,526,562

GOM (RFT)

O. Cape (RFT)  
SA521

SNE/MA  
SA >= 537





# Community participation in the fishery

- Maine = large decrease in # of active permits (81%) and ports (78%) since 1996. Mostly just Portland now.
- New Hampshire = large decrease in # of active permits (73%). Portsmouth has declined, but Seabrook remains active.
- Massachusetts = decrease in # of active permits (39%). It is the state with the greatest # of active permits across time. # of active ports has fluctuated. Declines in Gloucester and Provincetown, increase in New Bedford and Boston.
- Rhode Island = decrease in # of active permits (36%). # of active ports has fluctuated. Moderate decline in Point Judith, major decline in Newport.
- Connecticut = steady increase in # of active permits (in contrast to all other states). # of active ports has fluctuated. Stonington and New London have increased activity.
- New York = decrease (48%) in # of active permits. # of active ports has fluctuated. Stable in Montauk, declines in Hampton Bays.
- New Jersey = decrease in # of active permits (41%). # of active ports has fluctuated. Declines in Belford and Cape May. Steady in Barnegat and Pt. Pleasant.

# Community participation in the fishery

Table 1. *Communities of Interest* in the small mesh multispecies fishery.

State	Community	Landings				
		≥5M lbs., 1996-2016	≥200K lbs., 2016	≥500K lbs., 2016	≥1M lbs., 2016	≥3M lbs., 2016
ME	Portland	√				
NH	Seabrook	√	√			
MA	Gloucester	√	√	√	√	√
	Boston		√			
	Provincetown	√	√			
	New Bedford	√	√	√	√	√
RI	Newport	√				
	Point Judith	√	√	√	√	√
CT	Stonington	√				
	New London	√	√	√		
NY	Greenport	√				
	Montauk	√	√	√	√	
	Shinnecock	√				
	Hampton Bay	√				
	Point Lookout	√				
	New York City	√	√			
NJ	Belford	√				
	Point Pleasant	√				

# Dependence

Table 58. Home ports of small-mesh multispecies directed vessels, by limited access alternatives in 2014-2016

Communities by Alternatives			Total Fish		Qualifiers (Cat I & II)			Non-qualifiers (NH+NQ)			Qualifier's SMS Revenue	
	Home States	Home Ports	Fish lbs.	Fish Revenue \$	SMS lbs.	SMS Revenue \$	No. of Vessels	SMS lbs.	SMS Revenue \$	No. of Vessels	as % of Total Fish \$	as % of Total SMS \$
			a	b	c	d	e	f	g	h	d/b	d/(d+g)
Alternative 1	CT	New London	7,449,955	\$5,732,389	3,892,784	\$2,880,660	3	-	-	-	50%	100%
		Other Ports	2,637,261	\$2,943,556	316,609	\$234,291	3	██████	██████	█	█	█
	MA	Gloucester	3,312,523	\$12,821,039	5,796,413	\$4,289,346	6	619,827	\$458,672	12	33%	90%
		Other Ports	5,219,805	\$16,152,740	453,068	\$335,270	4	1,007,659	\$745,668	20	2%	31%
	ME/NH/ NJ	Portland, Seabrook, etc.	13,762,322	\$11,271,439	1,423,856	\$1,053,653	10	414,665	\$306,852	9	9%	77%
	NY	Montauk	30,462,676	\$28,139,327	12,553,520	\$9,289,605	12	140,163	\$103,721	3	33%	99%
		Other Ports	4,654,091	\$3,809,683	455,543	\$337,102	6	57,151	\$42,292	4	9%	89%
	RI	Point Judith	58,814,562	\$46,614,328	14,648,249	\$10,839,704	30	254,992	\$188,694	4	23%	98%
Other Ports		1,145,202	\$528,356	29,410	\$21,763	2	-	-	-	4%	100%	
Alternative 2	CT	New London	7,449,955	\$5,732,389	3,892,784	\$2,880,660	3	-	-	-	50%	100%
		Other Ports	2,637,261	\$2,943,556	316,609	\$234,291	3	██████	██████	█	█	█
	MA	Gloucester	33,312,523	\$12,821,039	5,873,753	\$4,346,577	7	542,487	\$401,440	11	34%	92%
		Other Ports	15,219,805	\$16,152,740	720,202	\$532,949	9	740,525	\$547,989	15	3%	49%
	ME/NH/ NJ	Portland, Seabrook, etc.	13,762,322	\$11,271,439	1,711,217	\$1,266,301	16	127,304	\$94,205	3	11%	93%
	NY	Montauk	30,462,676	\$28,139,327	12,593,938	\$9,319,514	13	██████	██████	█	█	█
		Other Ports	4,654,091	\$3,809,683	497,799	\$368,371	9	██████	██████	█	█	█
	RI	Point Judith	58,814,562	\$46,614,328	14,692,240	\$10,872,258	32	██████	██████	█	█	█
Other Ports		██████	██████	██████	██████	█	-	-	-	4%	100%	

12/7/2017

# Dependence

Communities by Alternatives			Total Fish		Qualifiers (Cat I & II)			Non-qualifiers (NH+NQ)			Qualifier's SMS Revenue	
	Home States	Home Ports	Fish lbs.	Fish Revenue \$	SMS lbs.	SMS Revenue \$	No. of Vessels	SMS lbs.	SMS Revenue \$	No. of Vessels	as % of Total Fish \$	as % of Total SMS \$
			A	B	C	D	E	F	G	H	D/B	D/(D+G)
Alternative 3	CT	New London	7,449,955	\$5,732,389	3,892,784	\$2,880,660	3	-	-	-	50%	100%
		Other Ports	2,637,261	\$2,943,556	316,609	\$234,291	3					
	MA	Gloucester	33,312,523	\$12,821,039	6,253,686	\$4,627,728	10	162,554	\$120,290	8	36%	97%
		Other Ports	15,219,805	\$16,152,740	1,126,268	\$833,438	9	334,459	\$247,500	15	5%	77%
	ME/NH/NJ	Portland, Seabrook,	13,762,322	\$11,271,439	1,817,777	\$1,345,155	15	20,744	\$15,351	4	12%	99%
	NY	Montauk	30,462,676	\$28,139,327	2,674,433	\$9,379,080	14					
		Other Ports	4,654,091	\$3,809,683	477,044	\$353,013	8					
	RI	Point Judith	58,814,562	\$46,614,328	14,843,520	\$10,984,205	32					
Other Ports							-	-	-	4%	100%	
Alternative 4	CT	New London	7,449,955	\$5,732,389	3,892,784	\$2,880,660	3	-	-	-	50%	100%
		Other Ports	2,637,261	\$2,943,556	316,609	\$234,291	3					
	MA	Gloucester	33,312,523	\$12,821,039	5,809,819	\$4,299,266	7	606,421	\$448,752	11	34%	91%
		Other Ports	15,219,805	\$16,152,740	1,065,788	\$788,683	8	394,939	\$292,255	16	5%	73%
	ME/NH/NJ	Portland, Seabrook	13,762,322	\$11,271,439	1,568,783	\$1,160,899	11	269,738	\$199,606	8	10%	85%
	NY	Montauk	30,462,676	\$28,139,327	12,593,938	\$9,319,514	13					
		Other Ports	4,654,091	\$3,809,683	470,974	\$348,521	7	41,720	\$30,873	3	9%	92%
	RI	Point Judith	58,814,562	\$46,614,328	14,843,520	\$10,984,205	32	59,721	\$44,194	2	24%	100%
Other Ports										4%	100%	
Alternative 5	CT	New London									49%	97%
		Other Ports	2,637,261	\$2,943,556	316,609	\$234,291	3					
	MA	Gloucester	33,312,523	\$12,821,039	5,649,517	\$4,180,643	6	766,723	\$567,375	12	33%	88%
		Other Ports	15,219,805	\$16,152,740	529,218	\$391,621	5	931,509	\$689,317	19	2%	36%
	ME/NH/NJ	Portland, Seabrook,	13,762,322	\$11,271,439	1,527,631	\$1,130,447	11	310,890	\$230,059	8	10%	83%
	NY	Montauk	0,462,676	\$28,139,327	12,593,938	\$9,319,514	13					
		Other Ports	4,654,091	\$3,809,683	470,974	\$348,521	7	41,720	\$30,873	3	9%	92%
	RI	Pt. Judith	58,814,562	\$46,614,328	4,681,790	\$10,864,525	31	221,451	\$163,874	3	23%	99%
Other Ports										3%	71%	

# Community impacts

Table 56. Number of vessels landing ≥ 2000 lbs. small-mesh multispecies by home port, 2014-2016

State	Home Port	Category I					Category II					No history					Non-qualifier				
		Alternatives					Alternatives					Alternatives					Alternatives				
		1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
CT	Mystic, New London, Stonington	3	c	3	3	4	3	4	3	3	c						c	c	c	c	c
MA	Gloucester	c	c	5	c	3	4	6	5	5	3	c	c				10	9	8	11	12
	New Bedford, Fairhaven				c	c		4	4	c		6	6			5	6	c	8	9	6
	Provincetown, Boston			c	c	c	4	5	3	4	3	3	3			c	5	4	7	7	6
ME/ NH	Portland, Rockland, Hampton, Portsmouth, Rye, Seabrook	c	c	c	c	c	4	6	4	3	3	c	c				c		c	3	3
NJ	Belford, Cape May, Pt. Pleasant, Tom's River	c	c	3	c	3	3	8	6	4	3	c	c			c	4		c	5	4
NY	Montauk	10	6	10	11	11	c	7	4	c	c						3	c	c	c	c
	Greenport, Hampton Bays, Islip, New York, Pt. Lookout, Shinnecock	c		c	c		4	7	4	4	5						3	c	c	3	3
RI	Point Judith	15	9	18	19	18	15	23	14	13	13	c	c			c	3	c	c	c	c
	Narragansett and Newport			c	c	c	c	c	c	c											c

# Community impacts

Table 57. Balance sheet or flow of small-mesh multispecies (SMS) landing in major landing and home ports, 2014-16

State	Ports (Landing or Home)	SMS lbs. in Landing Ports			SMS lbs. by vessels with different Home Ports		Differences between landing port and home port SMS lbs.	Remarks-- SMS flows or landing balance
		on landings ≥ 1 lb.	on landings ≥ 2,000 lbs.	on landings ≥ 2,000 lbs.	on landings ≥ 2,000 lbs.	on landings ≥ 2,000 lbs.		
		3-yr total	3-yr total	Annual avg.	3-yr total	Annual avg.	Annual	
		A	B	C	D	E	C-E	
CT	New London	4,112,455	4,104,218	1,368,073	3,892,784	1,297,595	70,478	<b>Inflow</b> -- home port vessels mostly land in the same port, but the home port receives some SMS lbs. from elsewhere.
MA	New Bedford	17,347,000	7,328,613	5,776,204	1,460,727	486,909	5,289,295	<b>Inflow</b> -- home port vessels mostly land in the same port plus the port receives huge SMS lbs. from Montauk and Point Judith.
	Gloucester	6,102,637	6,023,060	2,007,687	6,416,240	2,138,747	(131,060)	<b>Outflow</b> -- home port vessels land mostly land in the same port, but a small volume is landed elsewhere.
NY/RI	Montauk and Point Judith	13,205,454	13,111,867	4,370,622	27,596,924	9,198,975	(4,828,352)	<b>Outflow</b> -- home port vessels land significant volume of SMS catches in New Bedford.

# No Action and Possession Limit Adjustments

Alternative	Measures	Target species	Non-target species	Protected Resources	Physical Environment and EFH	Economy and Fishery-dependent Communities
No Action (preferred) (Section 4.1)	Retains open access fishery	Low negative	Negative	Low negative	Low negative	Positive
<b>Action alternatives</b>						
<b>Whiting possession limits (Section 4.2)</b>		<b>Adjustments to whiting possession limits in the southern management area</b>				
Alternative 1	Status quo	Low negative	Low negative	Low negative	Low negative	Positive
Alternative 2	Raise to 50,000 lbs.	Low negative	Low negative	Neutral to low negative	Neutral to low positive	Low positive
Alternative 3	Lower to 30,000 lbs.	Low positive	Low positive	Neutral to low positive	Neutral to low negative	Low negative

# Limited Access Qualification

Alternative	Measures	Target species	Non-target species	Protected Resources	Physical Environment and EFH	Economy and Fishery-dependent Communities
<b>Action alternatives</b>						
<b>Action 1: Limited access alternatives (Section 4.3.1 )</b>						
Action 1: Qualification (Section 4.3.1)	Five alternatives to qualify vessels for Category I or Category II permits	Low positive	Low positive	Low positive	Low positive	Low positive for qualifying vessels Negative for non-qualifying vessels



# Limited Access and Incidental Possession Limits

Alternative	Measures	Target species	Non-target species	Protected Resources	Physical Environment and EFH	Economy and Fishery-dependent Communities
<b>Action alternatives</b>						
Action 2: Possession limits (Section 4.3.2)	Whiting and red hake possession limits for Category I, Category II, and Incidental permits	Low positive	Low positive	Low positive	Low positive	Low positive for qualifying vessels Negative for non-qualifying vessels
<b>Action 2: Whiting possession limits for Category I (Section 4.3.2.1)</b>						
Alternative 1	Status quo	Low negative	Low negative	Low negative	Low negative	Positive
Alternative 2	Raise to 50,000 lbs.	Low negative	Low negative	Neutral to low negative	Neutral to low positive	Low positive
Alternative 3	Lower to 30,000 lbs.	Low positive	Low positive	Neutral to low positive	Neutral to low negative	Low negative
<b>Action 2: Whiting possession limits for Category II (Section 4.3.2.2)</b>						
Alternative 1	Status quo	Low negative	Low negative	Low negative	Low negative	Positive
Alternative 2	Lower to 15,000 lbs. whiting	Low positive	Low positive	Neutral to low negative	Neutral to low positive	Low negative
<b>Action 2: Whiting possession limits for Incidental permits (Section 4.3.2.3)</b>						
Alternative 1	Status quo	Low negative	Low negative	Low negative	Low negative	Positive
Alternative 2 <small>12/7/2017</small>	2000 lbs. whiting and 400 lbs. red hake	Positive	Positive	Neutral to low positive	Neutral to low positive	Low negative <small>17</small>

# Limited Access Permit Characteristics

Alternative	Measures	Target species	Non-target species	Protected Resources	Physical Environment and EFH	Economy and Fishery-dependent Communities
<b>Action 3: Permit allowances (Section 4.3.3)</b>						
Limited access permits						
Alternative 1	Groundfish permit conditions	Depends on choice of Action 1 alternative	Same as impacts associated with the selected Action 1 alternative	Low positive	Low positive	Neutral
Alternative 2	No accumulation limit	Neutral or no meaningful impact	Neutral	Neutral	Neutral	Low positive
Alternative 3	Construction eligibility	Positive	Low positive	Low positive	Low positive	Low negative
Alternative 4	Qualification restriction	Positive	Low positive	Low positive	Low positive	Low positive
Alternative 5	Upgrading vessels	Neutral to low negative	Low negative	Neutral	Neutral	Low negative

# Incidental Permit Characteristics

Alternative	Measures	Target species	Non-target species	Protected Resources	Physical Environment and EFH	Economy and Fishery-dependent Communities
<b>Action 3: Permit allowances (Section 4.3.3)</b>						
<b>Incidental</b>						
Alternative 1	Fishing in exemption areas only by qualifiers	Low positive	Low positive	Low positive	Low positive	Low negative
Alternative 2a	May exceed incidental possession limit on a Multispecies DAS using large-mesh	Positive	Positive	Neutral	Neutral	Low positive
Alternative 2b	May not exceed incidental possession limit on a Multispecies DAS using large-mesh	Negative	Potentially negative	Neutral	Neutral	Low negative
Alternative 3	May exceed incidental possession limit when fishing for squids or herring	Positive	Positive	Neutral	Neutral	Low positive
Alternative 4	Allow vessels with an incidental permit to fish in exemption areas requiring a raised footrope trawl	Neutral to low negative	Low positive on flatfish and low negative on roundfish	Low negative	Low negative	Positive