

Omnibus EFH Amendment 2

Georges Bank Habitat Management Alternatives

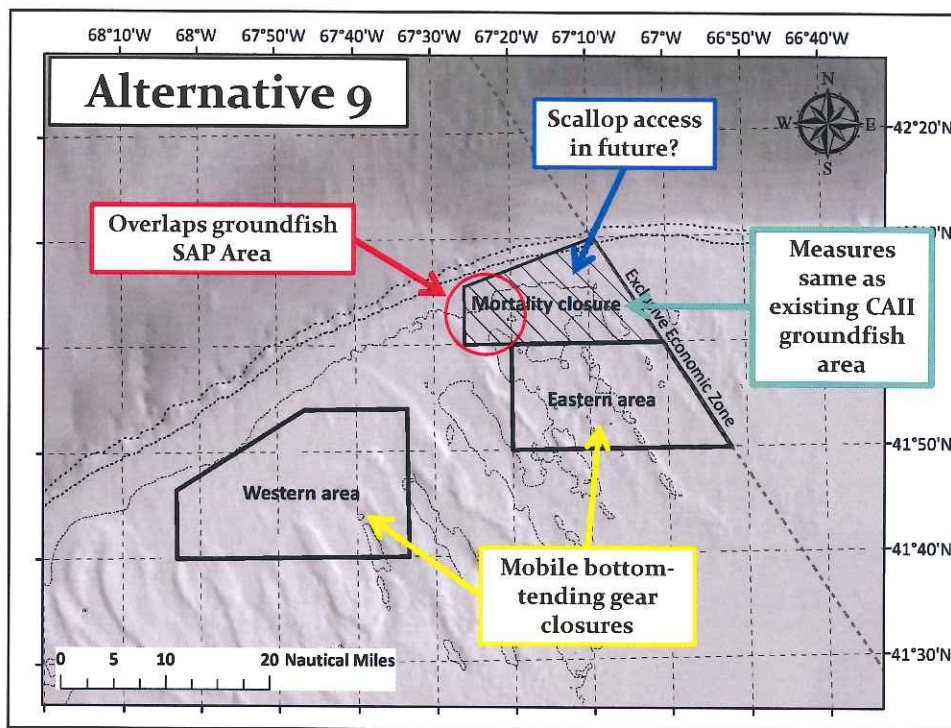
Michelle Bachman, NEFMC Staff, Habitat PDT Chair

Habitat Committee
Meeting
June 1, 2015



Purpose of presentation

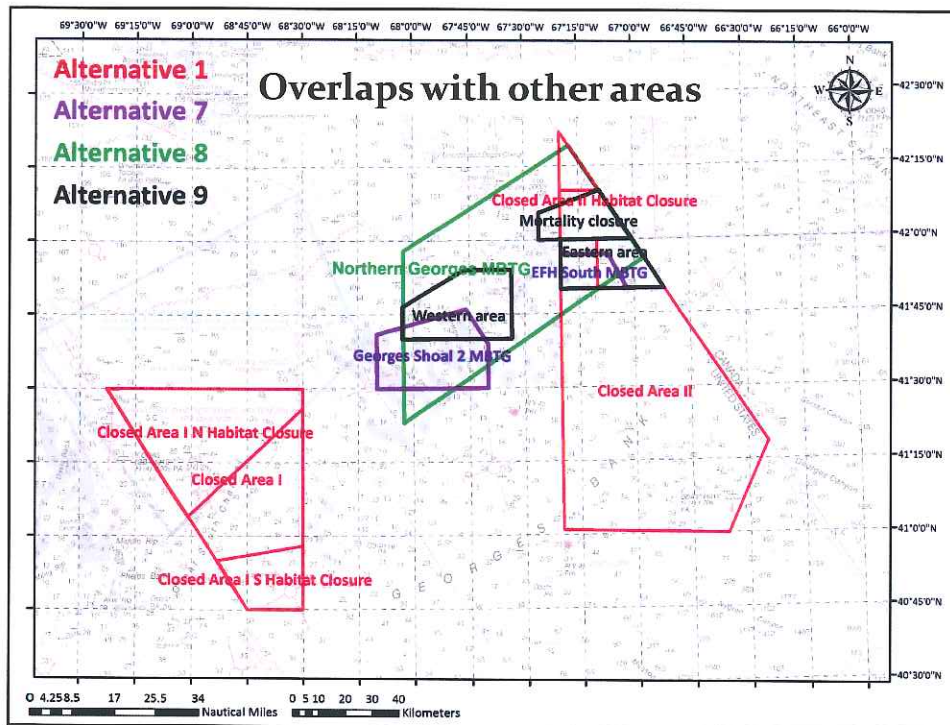
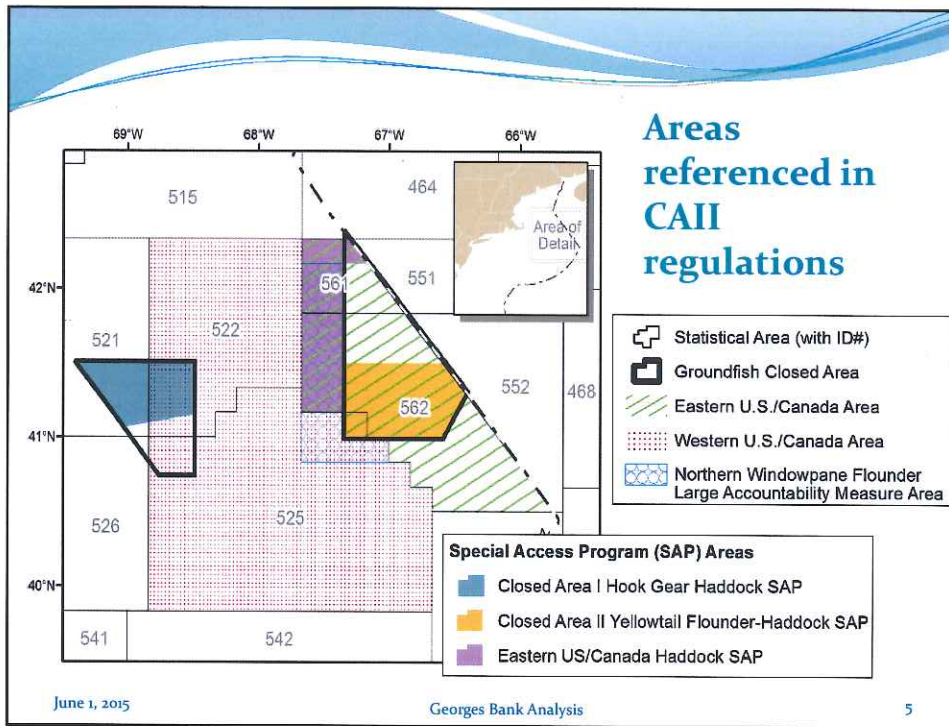
- Review updates to Georges Bank Habitat Management Area sections of OHA2 DEIS, Volume 3
 - Description of alternatives
 - Physical/biological environment
 - Large mesh groundfish
 - Human community
 - Lobster resource/fishery
 - *Scallop resource/fishery analysis in separate presentation*

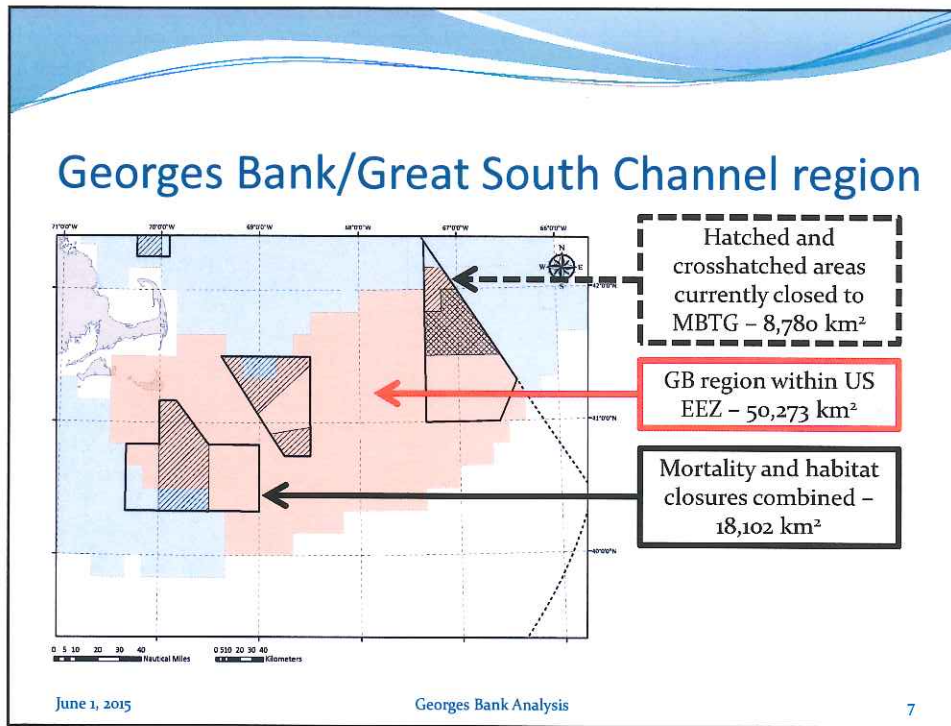


Measures for mortality closure

<p>No fishing vessel or person on a fishing vessel may enter, fish, or be in Closed Area II except for:</p>	<ul style="list-style-type: none"> • Lobster/hagfish pots • Pelagic longlines/hook-and-line, harpoons • Midwater trawl gear (w/bycatch limits) • Tuna purse seine gear (outside HAPC) • Fishing in the CAII Yellowtail Flounder/Haddock SAP or the Eastern U.S./Canada Haddock SAP Program • The vessel has declared into the Eastern U.S./Canada Area and is transiting CAII • Fishing for scallops within the Closed Area II Access Area • Transiting the area (gear stowed & safety reason)
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Comparison of area sizes

Alternative 1	Alternative 7	Alternative 8	Alternative 9
Total Area = 3,162 km ² <u>habitat</u> closures	Total Area = 1,303 km ²	Total Area = 4,788 km ²	Total Area = 1,949 km ²
<ul style="list-style-type: none"> •CAIN EFH 1,937 km² •CAIS EFH 584 km² •CAII EFH 641 km² 	<ul style="list-style-type: none"> •EFH South, 278 km² •Georges Shoal 2, 1,025 km² 	<ul style="list-style-type: none"> •N. Georges, 4,788 km² 	<ul style="list-style-type: none"> •Western, 900 km² •Eastern, 607 km² •Mortality, 442 km²
Total area = 10,801 km ² <u>habitat and mortality combined</u>			
<ul style="list-style-type: none"> •CAI 3,939 km² •CAII 6,862 km² 			

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Dominant sediment type (SASI grid)

	Substrate										Area, km ²
	Low energy					High energy					
	M	S	G	C	B	M	S	G	C	B	
No action EFH											
Closed Area I EFH N (607, #1)	-	4%	-	-	-	2%	82%	12%	<1%	-	2,028
Closed Area I EFH S (263, #1)	-	-	-	-	-	<1%	92%	7%	1%	-	617
Closed Area II EFH (1,175, #1)	1%	1%	<1%	-	-	<1%	32%	53%	12%	<1%	650
No action groundfish											
Closed Area I GF (2,628, #1)	-	2%	-	-	-	1%	81%	14%	2%	<1%	4,063
Closed Area II GF (2,904, #1)	<1%	5%	1%	-	-	1%	84%	8%	2%	<1%	6,826
Habitat management areas											
EFH South (195, #7)	-	-	-	-	-	1%	53%	38%	8%	1%	277
Georges Shoal 2 (277, #7)	-	-	-	-	-	-	66%	17%	16%	-	1,039
Northern Georges (3,229, #8)	2%	16%	1%	-	-	<1%	43%	25%	13%	<1%	4,808
Western area (429, #9)	-	-	-	-	-	-	43%	25%	30%	1%	895
Eastern area (517, #9)	-	<1%	-	-	-	<1%	58%	32%	9%	1%	611
Mortality area (1,099, #9)	-	<1%	<1%	-	-	<1%	19%	61%	19%	1%	435
Georges Bank/GSC region (17,663, n/a)	2%	21%	1%	<1%	-	1%	64%	8%	3%	<1%	48,992

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SASI data support

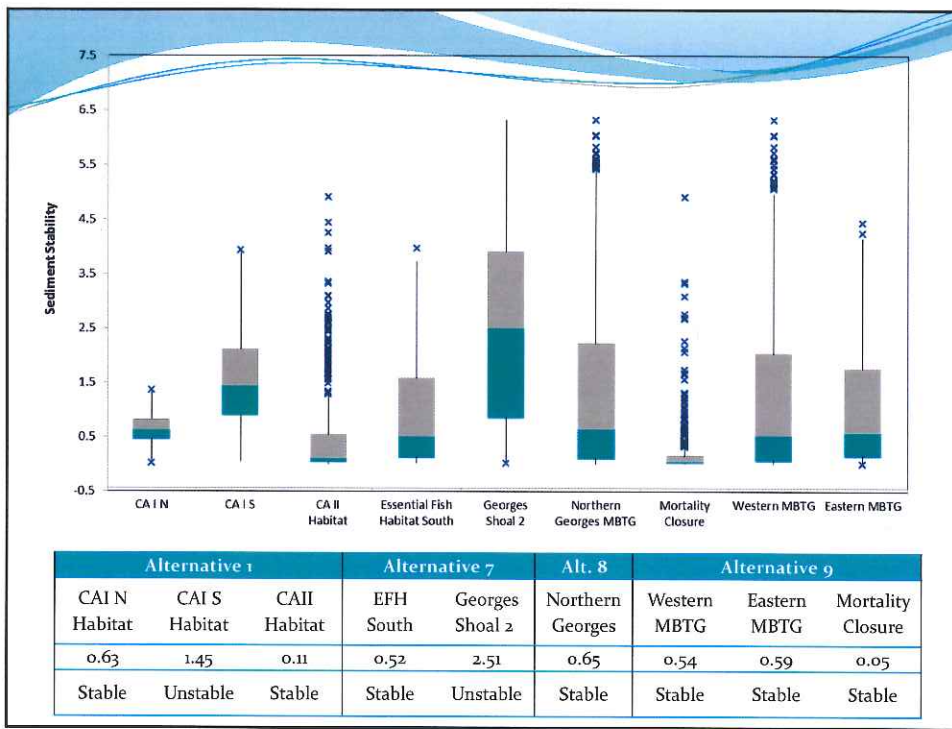
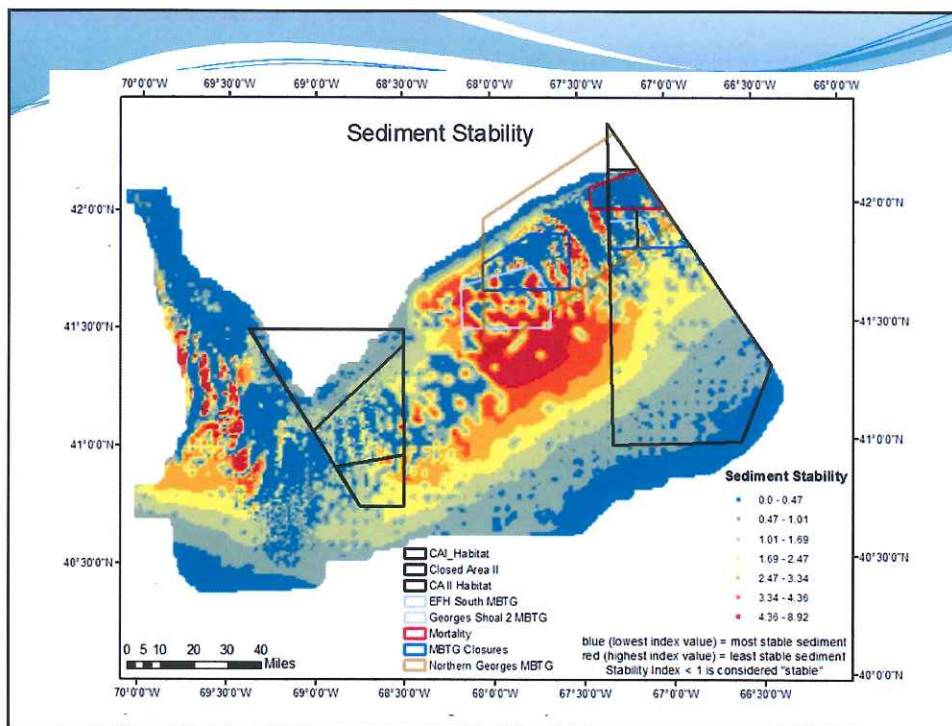
High support categories 5-7 indicate sampling for all five substrate types, and higher sampling resolution

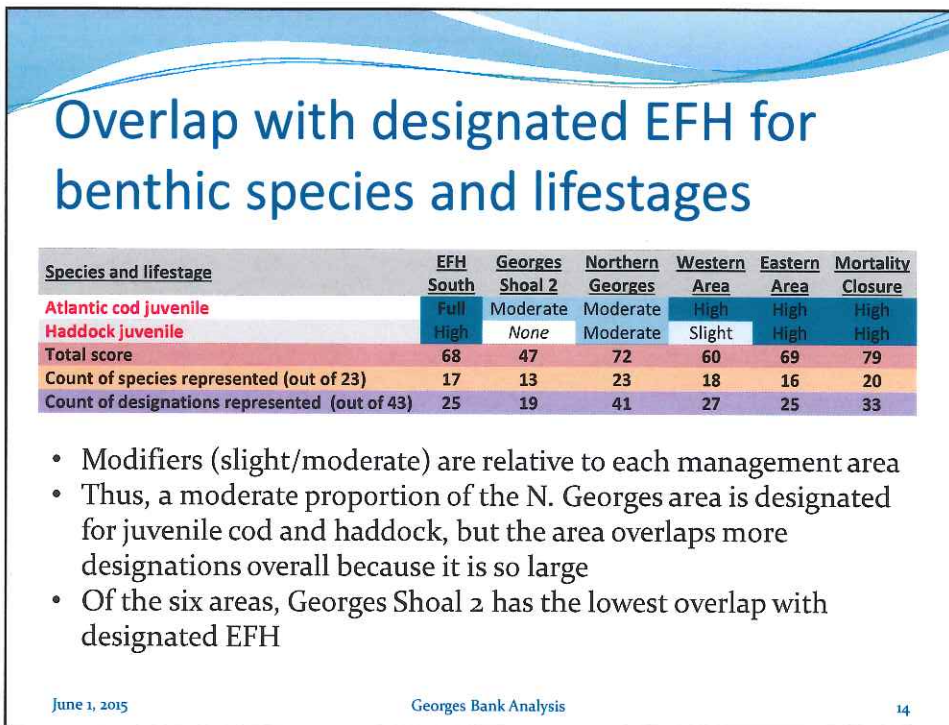
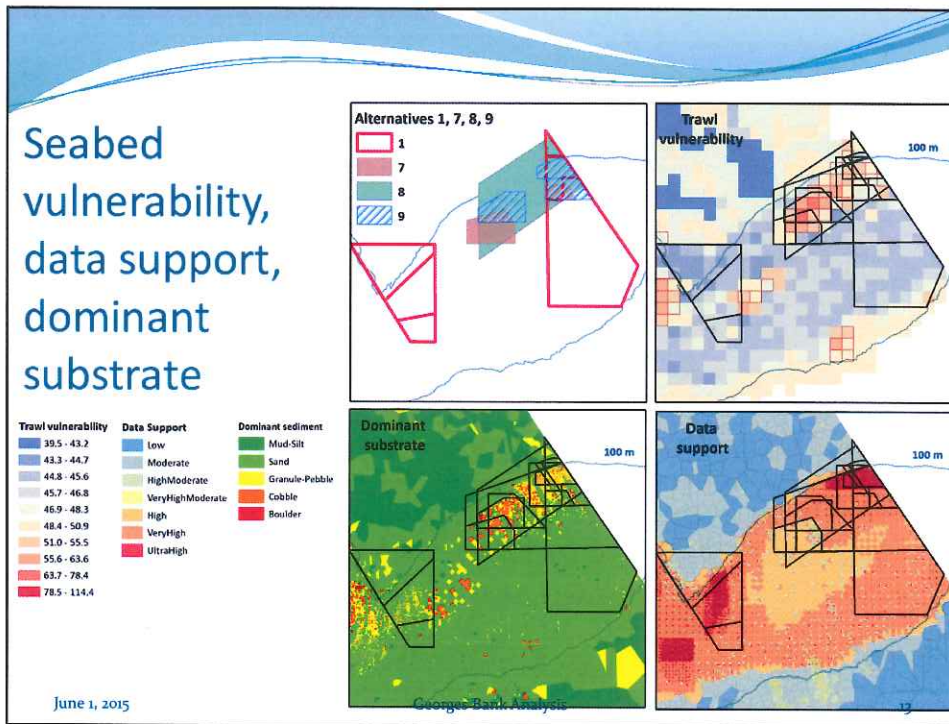
	Data support							Area, km ²
	Low	Moderate			High			
	1	2	3	4	5	6	7	
No action EFH								
Closed Area I EFH N (607, #1)	-	40%	7%	<1%	15%	30%	8%	2,028
Closed Area I EFH S (263, #1)	-	-	4%	<1%	-	87%	9%	617
Closed Area II EFH (1,175, #1)	-	-	2%	2%	-	38%	58%	650
No action groundfish								
Closed Area I GF (2,628, #1)	-	20%	5%	<1%	7%	47%	20%	4,063
Closed Area II GF (2,904, #1)	-	2%	5%	<1%	8%	78%	7%	6,826
Habitat management areas								
EFH South (195, #7)	-	-	2%	2%	-	90%	6%	277
Georges Shoal 2 (277, #7)	-	-	21%	4%	62%	12%	<1%	1,038
Northern Georges (3,229, #8)	-	12%	6%	2%	16%	49%	16%	4,807
Western area (429, #9)	-	-	10%	4%	9%	74%	2%	895
Eastern area (517, #9)	-	-	1%	1%	-	84%	14%	611
Mortality area (1,099, #9)	-	-	-	1%	-	2%	96%	435
Georges Bank/GSC region (17,663, n/a)	4%	19%	9%	1%	14%	47%	5%	48,992

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Juvenile groundfish hotspots (unweighted)

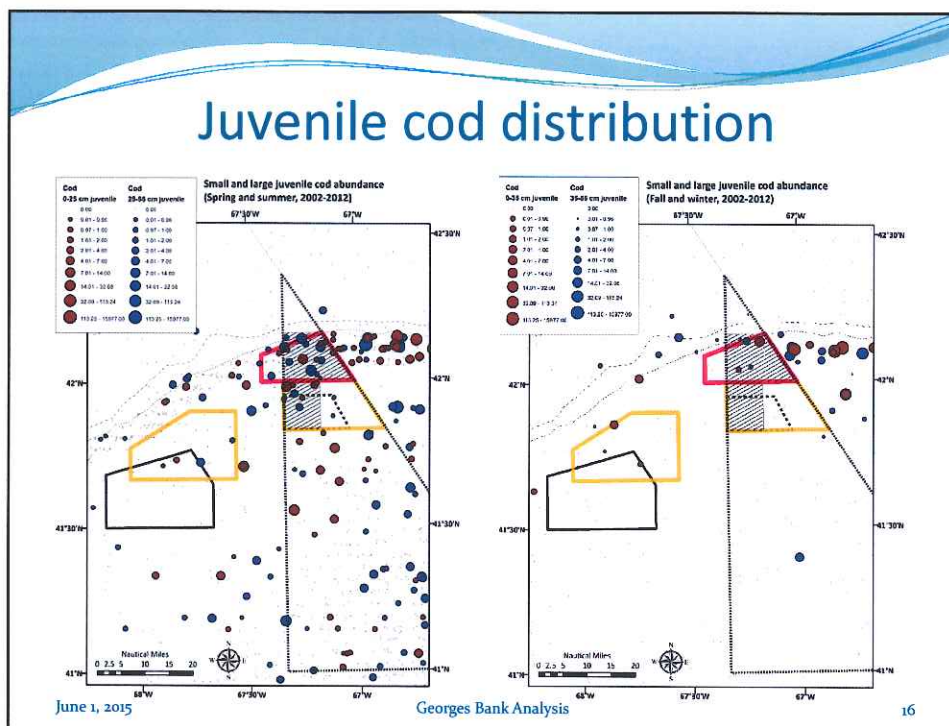
Species and season	Alt 1	Alt 7	Alt 8	Alt 9
Yellowtail (Summer & Fall)	0	0	1	1
Red hake (Fall)	12	0	26	9
Haddock (Fall)	8	0	7	2
Winter flounder (Summer)	5	1	14	7
American plaice (Fall)	1	0	0	0
Windowpane (Fall)	0	0	2	0
Total	26	1	50	19

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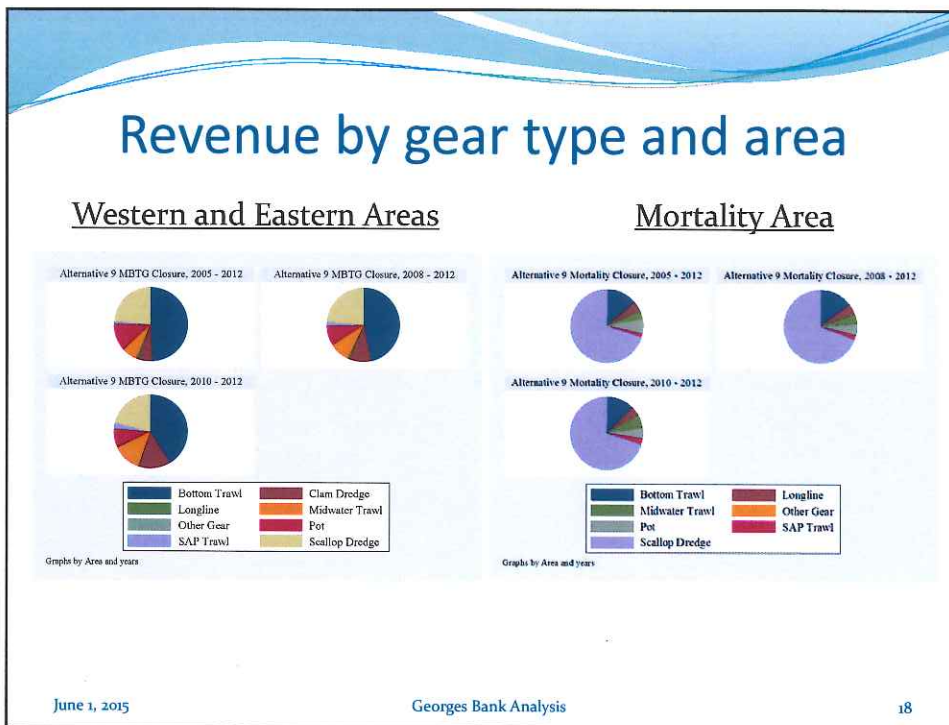
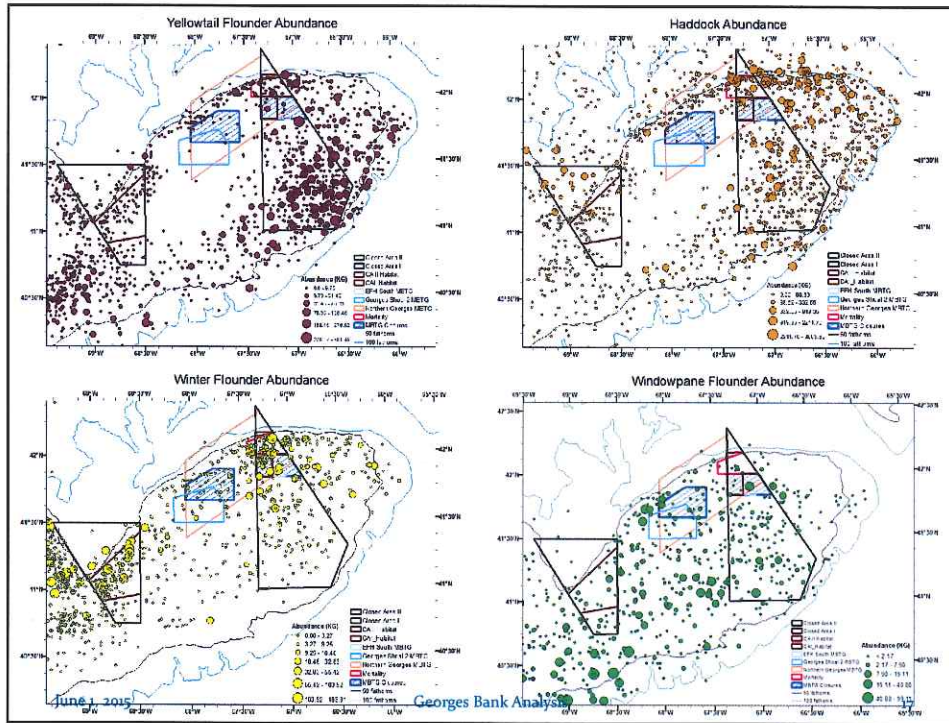
Juvenile cod distribution



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MBTG revenue by gear and area – VTR 2010-2012

Western area	Vessel Size	Mean Rev	Median Rev	SD Rev	Max Rev	Min Rev	Indv	# trip
Bot. trawl	L	1,606,851	1,595,582	50,322	1,661,852	1,563,119	68	880
Bot. trawl	OTHER	156,550	149,903	27,352	186,613	133,135	15	96
Clam drg.	ALL	595,306	-	-	-	-	2	59
SAP trawl	ALL	112,597	123,802	53,483	159,590	54,400	24	129
Scal. drg.	L	870,492	1,018,994	647,439	1,430,778	161,703	36	51
Scal. drg.	OTHER	32,243	45,770	28,044	50,959	-	5	4

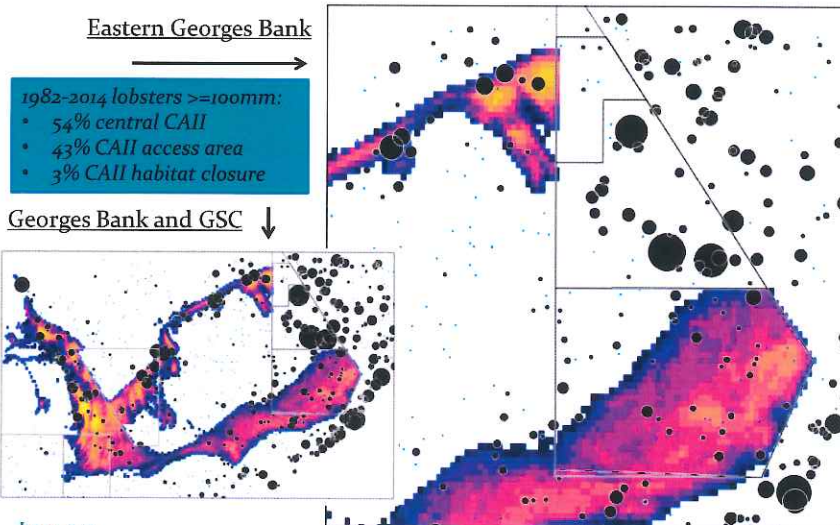
Mortality area	Vessel Size	Mean Rev	Median Rev	SD Rev	Max Rev	Min Rev	Indv	# trip
Bot. trawl	L	337,524	292,548	106,788	459,443	260,581	58	534
Bot. trawl	OTHER	20,803	21,597	10,576	30,959	9,853	12	56
SAP Trawl	ALL	72,391	70,695	45,725	118,940	27,537	20	95
Scal. drg.	L	1,884,799	978,545	2,193,115	4,385,799	290,053	36	50
Scal. drg.	OTHER	116,059	97,604	119,583	243,796	6,776	3	4

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Scallop VMS 2006-2014 vs. female lobsters >100mm 2005-2014 fall trawl survey



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