



New England Fishery Management Council

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MEMORANDUM

DATE: November 16, 2017
TO: Dr. Jamie Cournane, Groundfish Plan Coordinator
FROM: Mr. Jonathon Peros and Mr. Sam Asci, Council Staff
SUBJECT: **Scallop Fishery Catch of Cape Cod/Gulf of Maine Yellowtail Flounder**

This memorandum is intended to provide the Groundfish PDT with additional background information on scallop fishery catch of CC/GOM yellowtail flounder for its evaluation of “other” sub-component catch in Framework 57. The Scallop PDT projected bycatch estimates for the four flatfish stocks that the fishery has sub-ACLs for: George Bank and Southern New England/Mid-Atlantic yellowtail flounder, and Northern and Southern windowpane in a separate memo to the Groundfish PDT. Due to time and resource constraints, Council staff, not the full Scallop PDT, are providing you with this information on CC/GOM yellowtail in response to the discussion during the Groundfish PDT call on November 15, 2017. In the process of developing this memo, Council staff evaluated observer data to help characterize recent interactions between the scallop fleet and Cape Cod/Gulf of Maine (CC/GOM) yellowtail flounder. Background information on Framework

Considerations when evaluating scallop fishery catch of CC/GOM yellowtail flounder for FY 2018:

1. The scallop fishery operates within the stock boundary in both the Gulf of Maine, and off the backside of Cape Cod in statistical reporting area 521. The stock boundary overlaps with the NGOM management area, and the western portion of Closed Area I.
2. Both the Limited Access (LA) and Limited Access General Category (LAGC) components interact with CC/GOM YT while targeting scallops using dredge gear. Observed haul locations in FY2013 - 2017 are provided in Figure 9 - Figure 13 for context of where these fleets operate and recent haul level catch rates of CC/GOM yellowtail. LA and LAGC haul data is combined these plots.
3. Scallop recruitment in open areas has been unremarkable for several years, and the Council is considering recommending lower open area F rates in Framework 29. This results in lower allocations of DAS for the LA fleet, and lower overall quota for the LAGC IFQ component. Options in Framework 29 range from 21 DAS under the most conservative scenario, to 31 DAS per FT LA vessel. Scallop DAS for FT LA vessels were 34.55 in 2016, and 30.41 in FY 2017. Reducing DAS relative to recent allocations is anticipated to generally reduce total bycatch from open areas. Surveys indicate there are no new scallop cohorts that are expected to recruit into the fishery within GOM/CC YT stock area. Landings in FY 2018 and FY 2019 will come from animals that have already recruited into the fishery.

4. The Council is considering options in Framework 29 that would allocate around 7.6 million lbs of harvest from Closed Area I. The majority of fishing is anticipated to be on high densities of 8 year-old animals that are in around 100 meters of water. This area has not been fished in some time (Closed Area I “sliver”), and working on high densities of animals can reduce overall area swept, which in turn may limit interactions with flatfish.
5. Through FW29, the Council is considering how the LA component operates in the NGOM management area, and is considering options that cap removals from this area for by LAGC and LA components. An analysis of CC/GOM YT bycatch in the NGOM management area was done by NEFOP staff using audited data from observed LA trips between March 1, 2017 and March 20, 2017.
 - a. 193 out of 311 hauls were observed over 6 trips that primarily occurred on Stellwagen Bank.
 - b. 100,279 lbs of kept scallops were observed.
 - c. 635.8 lbs of yellowtail flounder were observed.
 - d. d/K ratio for CC/GOM yellowtail from these trips: 0.00634
 - e. The scallop PDT estimates that roughly 1.6 million lbs of scallops were harvested in the NGOM management area in March of 2017 before the area was closed to scallop fishing. Applying the above d/K ratio to the unobserved landings from the area results in a roughly 10,000 lbs of CC/GOM yellowtail discards from the NGOM fishery in 2017.
6. The *HIGHEST* NGOM TAC option currently under consideration in FW29 for FY 2018 is 200,000 lbs.
7. In 2016, the scallop fishery catch of CC/GOM yellowtail flounder was estimated to be 40.5 mt, the highest estimate from 2010 – 2016. A preliminary review of 2016 observer data shows some of the highest catches of CC/GOM yellowtail occurring on observed trips in the Gulf of Maine, specifically Jeffreys Ledge and Stellwagen Bank, and off of Provincetown along the southern border of the Western Gulf of Maine closure in SRA 514 (Figure 6). In SRA 521, there were 3x more observed hauls, and total observed catch of yellowtail was less than half of observed catch in 514 (Figure 5). The majority of scallop landings from the CC/GOM stock area come from SRA 521. It may be appropriate to investigate the impacts of stratifying bycatch estimates at a finer scale for this stock – such as stratifying catches and discards in the Great South Channel in 521 separately from the Gulf of Maine.

Framework 29 Overview:

Scallop Framework 29 is considering a range of allocations for FY 2018, which include scenarios where measures in OHA2 are approved (Table 1). The Council may select a provisional preferred alternative for each scenario. A description of the anticipated scallop landings and spatial management configuration for each measure (under each OHA2 scenario) is described in Table 2. It is worth noting that the spatial management configuration varies substantially between some measures, which is expected to drive swings in bycatch estimates for each stock. For example, if NMFS approves OHA2 measures for the Great South Channel and Southern New England, some allocation alternatives shift effort from Closed Area II, where the fishery interacts with GB yellowtail and Northern windowpane, to the Nantucket Lightship “West” area, which is considered part of the SNE/MA yellowtail and Southern windowpane stock areas. A series of figures outlining the spatial management under each alternative are included to provide context. Scallop landings may increase next year (52 mil. lbs – 60 mil. lbs), based on the 2018 projected landings estimates (Table 2).

Table 1 - Range of specification scenarios under consideration in Scallop FW 29.

#	OHA2 Specification Scenarios	Council's preferred alternative
1	Status Quo – No change to current habitat and groundfish closures.	TBD
2	Approval and implementation of both Georges Bank measures (Alternative 10 in 2.3.4 of OHA2) and Great South Channel and Southern New England (Alternative 4 in Section 2.3.5 of OHA2)	TBD
3	Approval and implementation of only Great South Channel and Southern New England measures through OHA2	TBD
4	Approval and implementation of only Georges Bank measures through OHA2	TBD

Figure 1. VMS hours fished by LA and LAGC vessels in March-September FY2017.

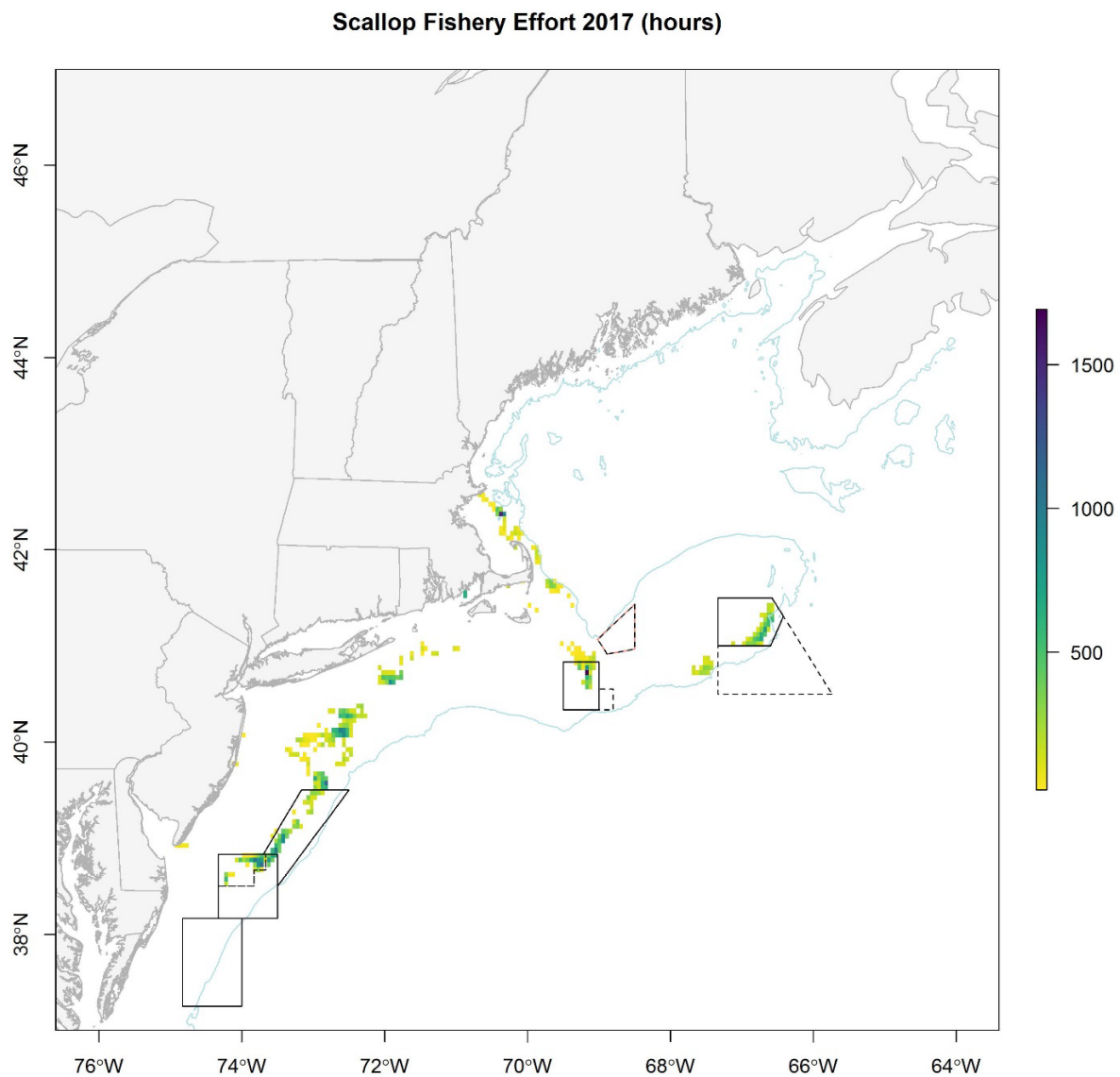


Figure 2. VMS hours fished by LA and LAGC vessels in FY2016.

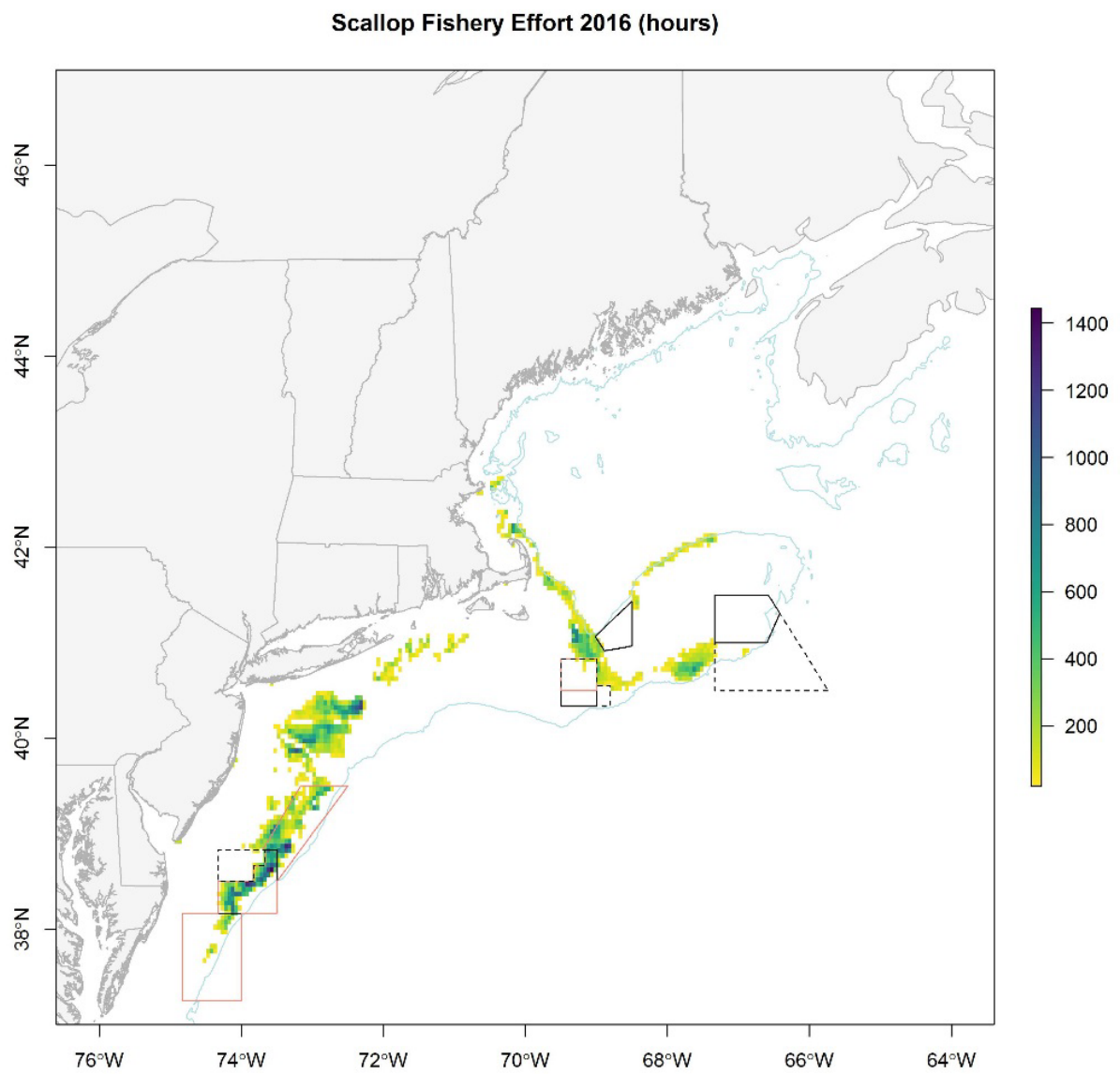


Table 2 - Preliminary Scallop Fishery Specifications under consideration in FW29.

Values presented here are for discussion purposes ONLY. Final allocations in lbs will be described in FW 29. Landings shown in Scenarios 2, 3, 4 include the allocation of Closed Area I carryover lbs(*).													
Scenario	Reg. Requirements		Scenario 1: OHA2 NOT IMPLEMENTED			Scenario 3-NLS-West available		Scenario 2: OHA2 - BOTH NLS West and CAI available				Scenario 4: Only CAI	
Oct. CTE Motion	N/A	N/A	Motion 1 - F=0.36	Motion 1 - F=0.4	Sensitivity: F=0.44	Motion 2 - F=0.36	Motion 2 - F=0.4	Motion 3 - F=0.36	Motion 3 - F=0.4	Motion 4 - F=0.295	Motion 4 - F=0.26	Motion 3 - F=0.36	
RUN	NO Action	FW28 - SQ	BASE36	BASE40	S-BASE44	NLSW36	NLSW40	SBOTH36	SBOTH40	6BOTH295	6BOTH26	C1F36	
Open area F		F=0.44	F=0.36	F=0.4	F=0.44	F=0.36	F=0.4	F=0.36	F=0.4	F=0.295	F=0.26	F=0.36	
Landings (mil lbs)	24.6 mil	44.0 mil	52.0 mil	53.8 mil	55.5 mil	57.8 mil*	60 mil*	57.7 mil*	60 mil*	60 mil*	57.8 mil*	53.0 mil*	
APL (after set-asides)	22.3 mil	41.7 mil	49.6 mil	51.5 mil	53.2 mil	55.5 mil	57.7 mil	55.5 mil	57.6 mil.	57.7 mil	55.5 mil	50.7 mil	
LA Allocation (94.5%)	21.1 mil	39.4 mil	47 mil	48.6 mil	50.3 mil	52.5 mil**	54.4 mil**	52.4 mil**	54.4 mil**	54.5 mil**	52.5 mil**	47.8 mil**	
FT LA DAS	21.75	25	23	26	28	28	31	28	31	24	21	23	
FT Trips at 18,000 lbs	1	4	5	5	5	5	5	5	5	6	6	5	
IFQ Only (5% of APL)	1.1 mil	2.08 mil	2.48 mil	2.57 mil	2.66 mil	2.77 mil	2.88 mil	2.77 mil	2.88 mil	2.88 mil	2.77 mil	2.5 mil	
Georges Bank													
CL1ACC	Closed	Closed	Closed	Closed	Closed	Closed	Closed	1 trip CA I AA (CL1ACC & CL1NA)	1 trip CA I AA (CL1ACC & CL1NA)	1 trip CA I AA (CL1ACC & CL1NA)	1 trip CA I AA (CL1ACC & CL1NA)	1 trip CA I AA (CL1ACC & CL1NA)	
CL1NA	Closed	Closed	Closed	Closed	Closed	Closed	Closed						
CL-2(N)	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	
CL-2(S)	Closed	CA II AA	1 trip CA II AA (CL-2(S) & CL2Ext)	1 trip CA II AA (CL-2(S) & CL2Ext)	1 trip CA II AA (CL-2(S) & CL2Ext)	Closed	Closed	Closed	Closed	Closed	Closed	1 trip CA II AA (CL-2(S) & CL2Ext)	
CL2Ext	Closed	Closed				Open	Open	Open	Open	Open	Open		Open
NLSAccN	Closed	NLS AA	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	
NLSAccS	Closed	NLS AA	1 Trip in NLS-S	1 Trip in NLS-S	1 Trip in NLS-S	1 Trip in NLS-S	1 Trip in NLS-S	Closed	Closed	1 Trip in NLS-S	1 Trip in NLS-S	1 Trip in NLS-S	
NLSNA	Closed	Closed	Closed	Closed	Closed	2 Trips in NLS-W	2 Trips in NLS-W	2 Trips in NLS-W	2 Trips in NLS-W	2 Trips in NLS-W	2 Trips in NLS-W	Closed	
NLSExt	Closed	NLS AA	Open	Open	Open	Open	Open	Open	Open	Open	Open	Open	
NF	Open	Open	Open	Open	Open	Open	Open	Open	Open	Open	Open	Open	
SCH	Open	Open	Open	Open	Open	Open	Open	Open	Open	Open	Open	Open	
SF	Open	Open	Open	Open	Open	Open	Open	Open	Open	Open	Open	Open	
MidAtlantic													
Block Island	Open	Open	Open	Open	Open	Open	Open	Open	Open	Open	Open	Open	
Long Island	Open	Open	Open	Open	Open	Open	Open	Open	Open	Open	Open	Open	
NYB	Open	Open	Open	Open	Open	Open	Open	Open	Open	Open	Open	Open	
MA inshore	Open	Open	Open	Open	Open	Open	Open	Open	Open	Open	Open	Open	
HCSAA	MAAA	MAAA	3 Trips MAAA	3 Trips MAAA	3 Trips MAAA	2 Trips MAAA	2 Trips MAAA	2 Trips MAAA	2 Trips MAAA	2 Trips MAAA	2 Trips MAAA	2 Trips MAAA	
ET Open	MAAA	MAAA											
ET Flex	Closed	ET-Flex											
DMV	MAAA	MAAA	Open, DMV@F=0	Open, DMV@F=0	Open, DMV@F=0	Open, DMV@F=0	Open, DMV@F=0	Open, DMV@F=0	Open, DMV@F=0	Open, DMV@F=0	Open, DMV@F=0	Open, DMV@F=0	
Virginia	Open	Open	Open	Open	Open	Open	Open	Open	Open	Open	Open	Open	
Description of Table: Open = Open Area/DAS fishing, Closed = Closed to Fishing. Access Areas: SAMS areas are grouped by label and color to show which areas would constitute an access area. All runs under OHA2 Scenarios 2, 3, 4 include the allocation of CAI carryover lbs. The LAGC IFQ component does not have carryover quota from 2012.													

Figure 3 - Spatial management under Scenario 1 - No changes made through OHA2, status quo (BASE36, BASE40 in Table 2)

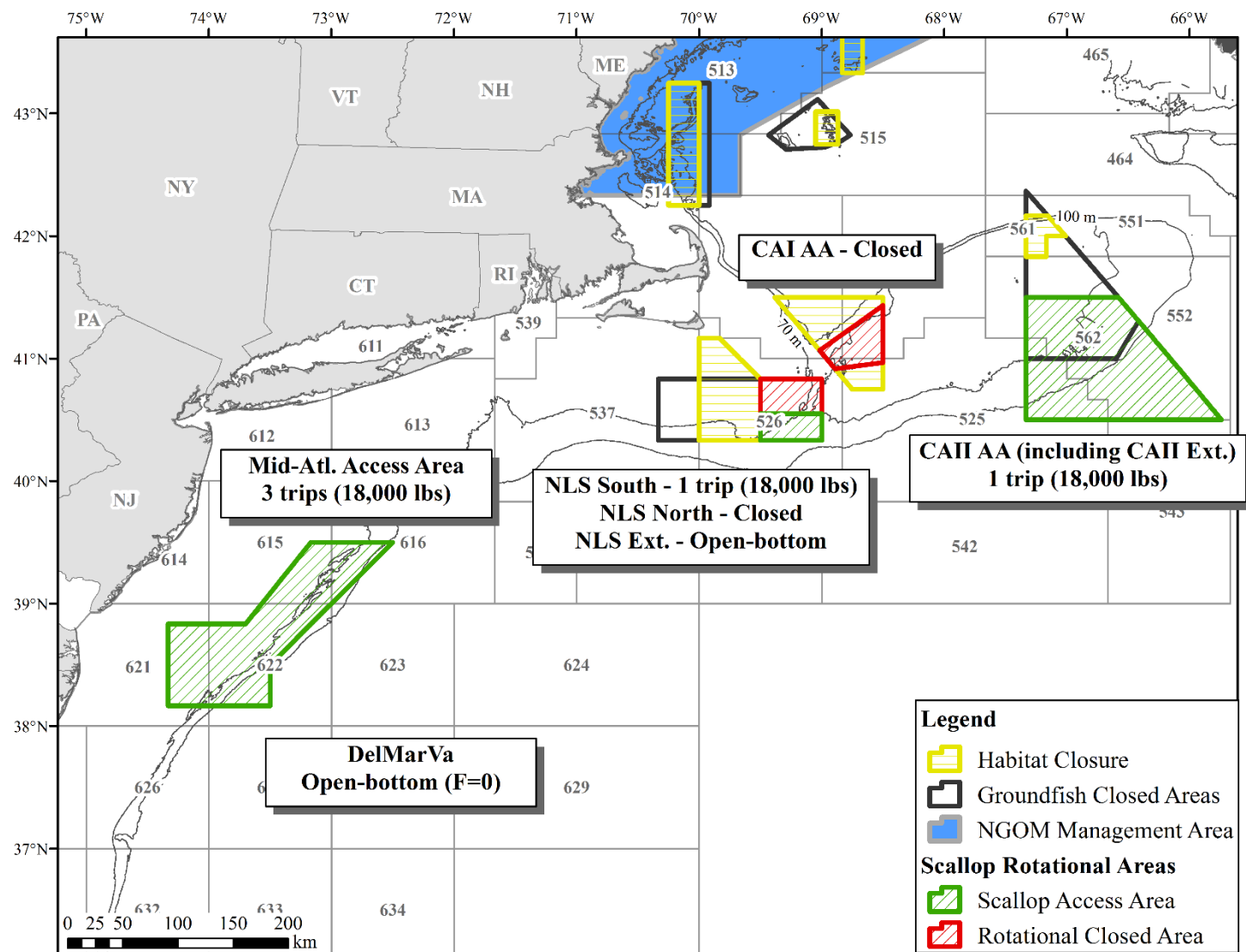


Figure 4 - Spatial management under Scenario 2 – Both NLS-West and CAI available (5BOTH36, 5BOTH40 in Table 2)

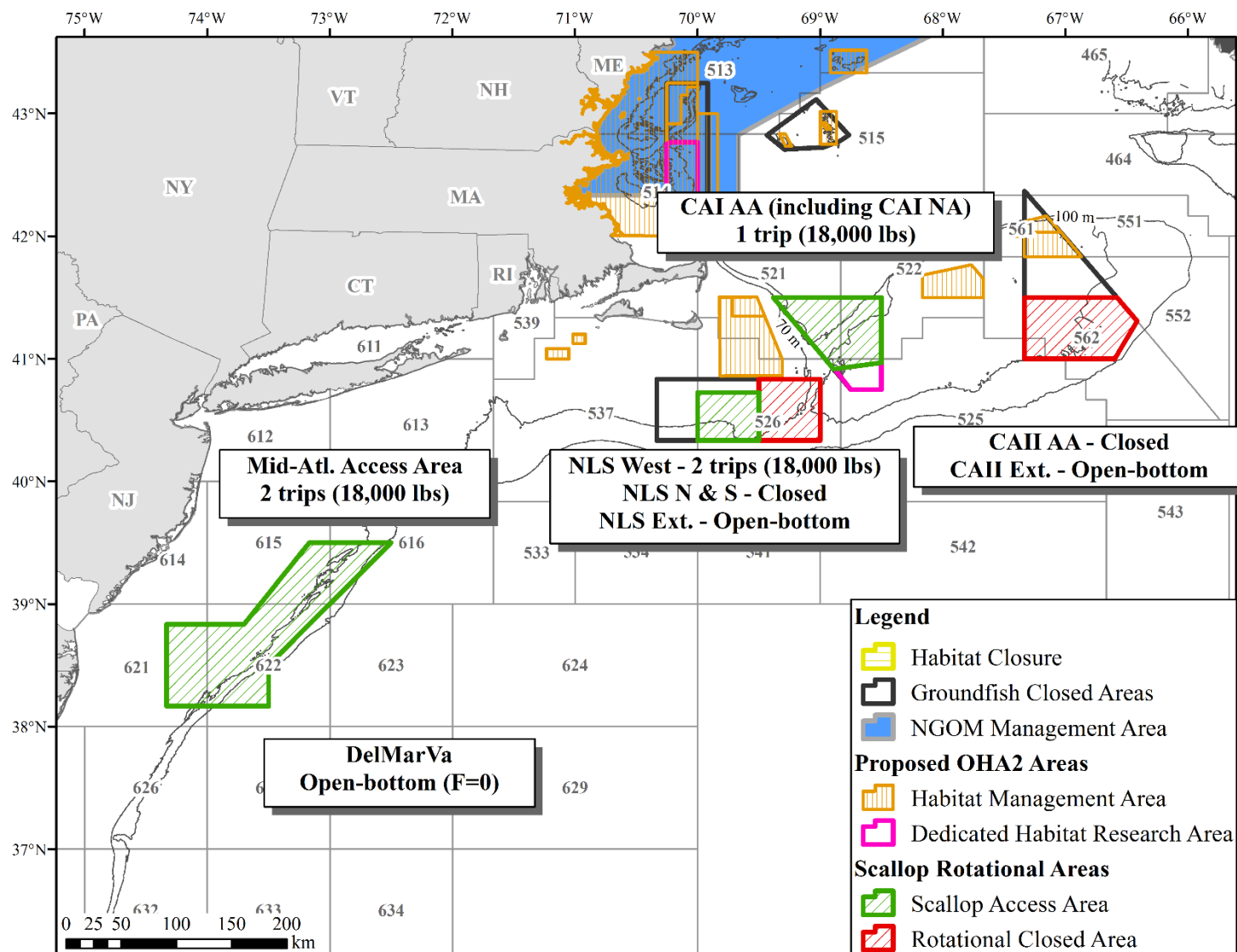


Figure 5 – Spatial management under Scenario 3 – Only NLS-West opens (NLSW36 and NLSW40 in Table 2)

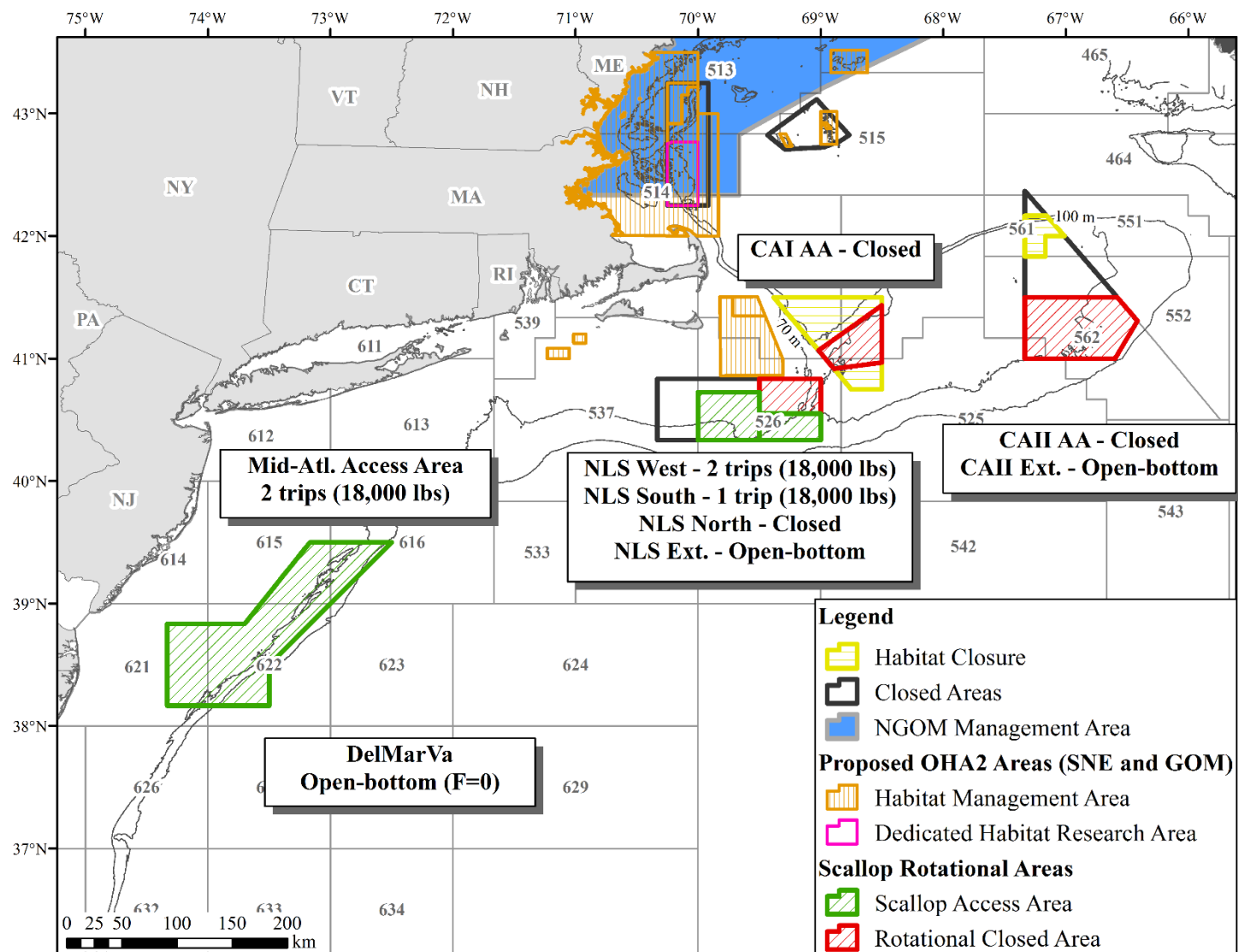


Figure 6 - Spatial management under Scenario 4 – Only Closed Area I available (C1F36 in Table 2)

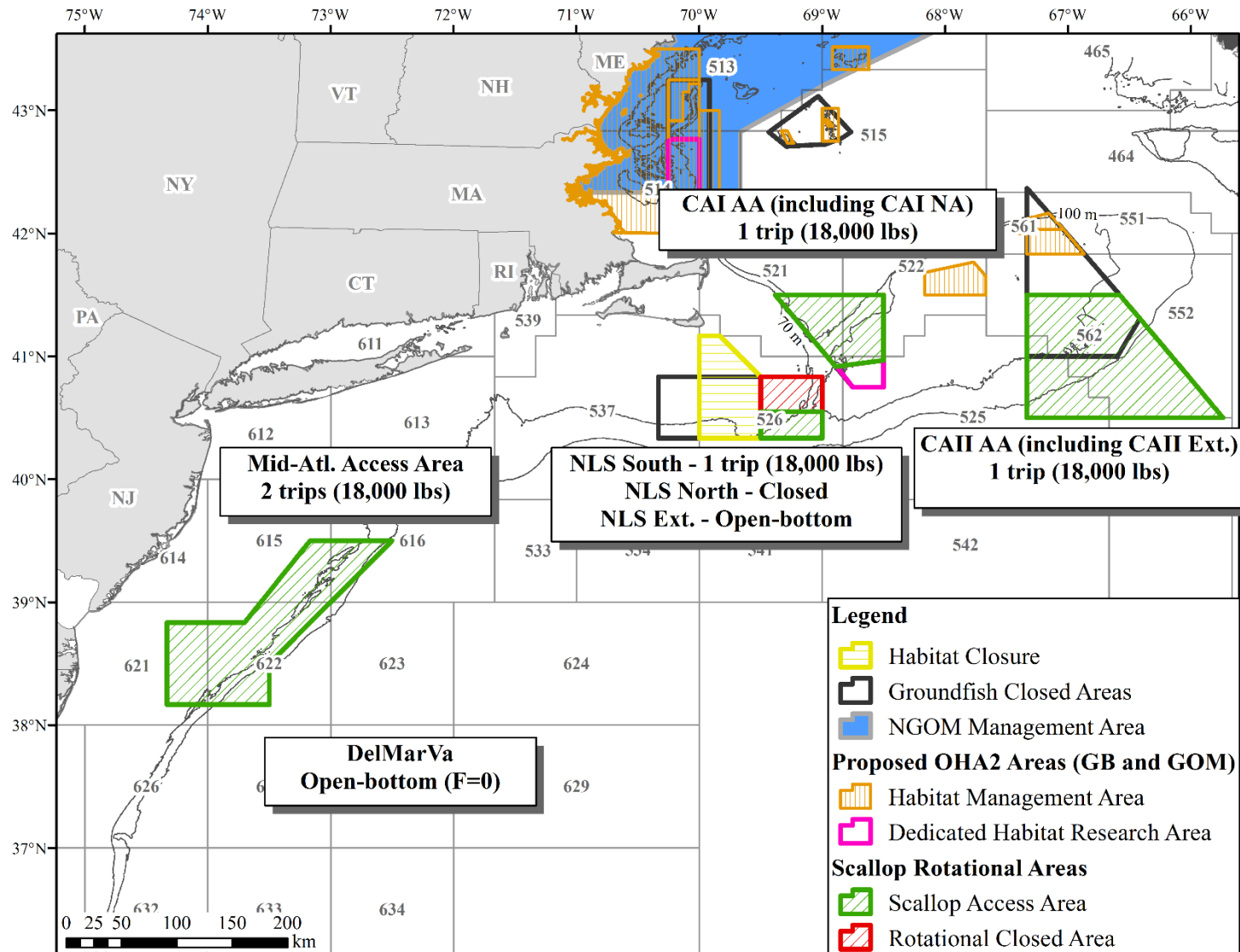


Figure 7. Observed CC/GOM yellowtail catch (lbs) and the number of observed hauls on LA and LAGC vessels fishing in SRA 514 from FY2013-2017. Note that FY2017 data is through Sept. 11th, 2017.

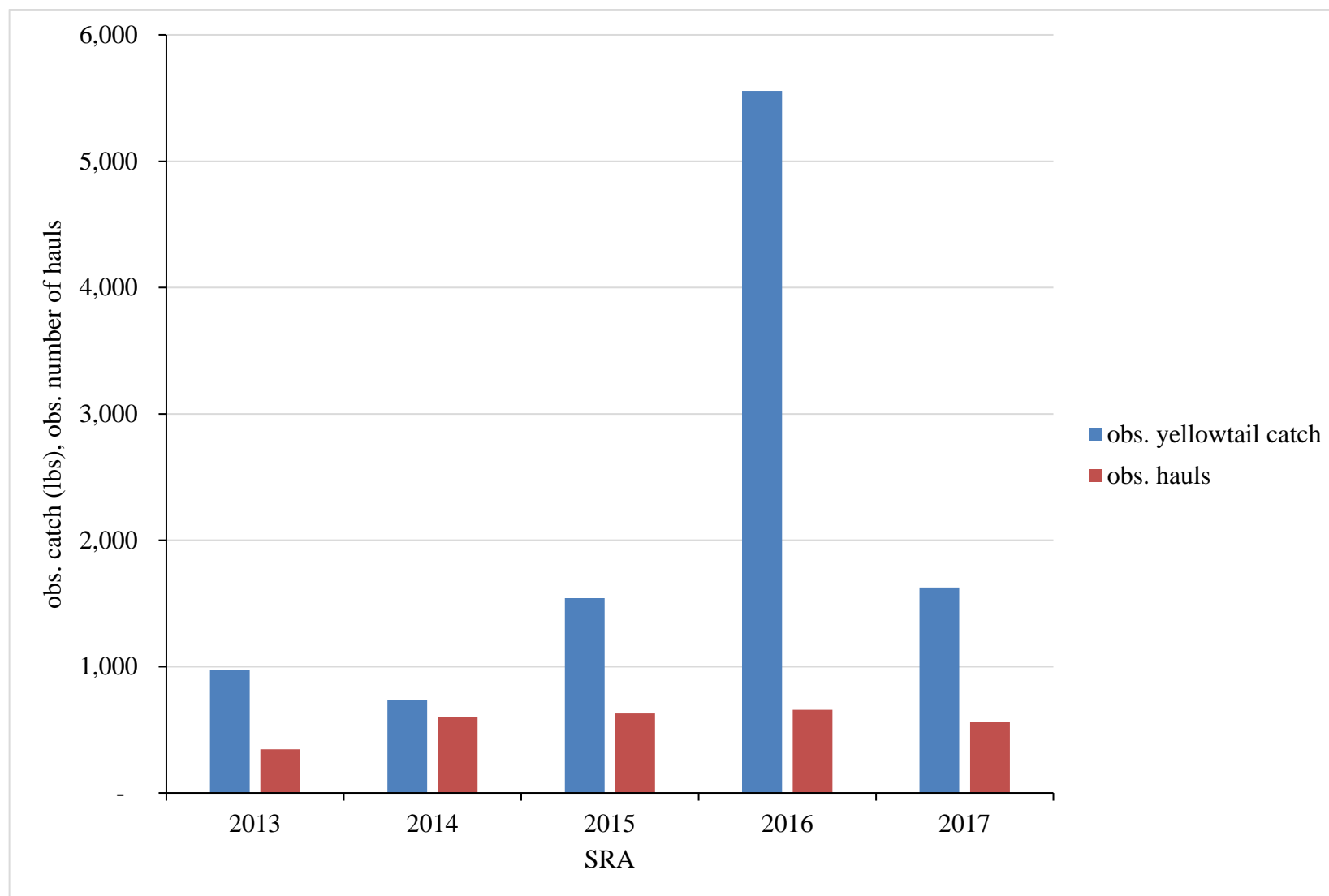


Figure 8. Observed CC/GOM yellowtail catch (lbs) and the number of observed hauls on LA and LAGC vessels fishing in SRA 521 from FY2013-2017. Note that FY2017 data is through Sept. 11th, 2017.

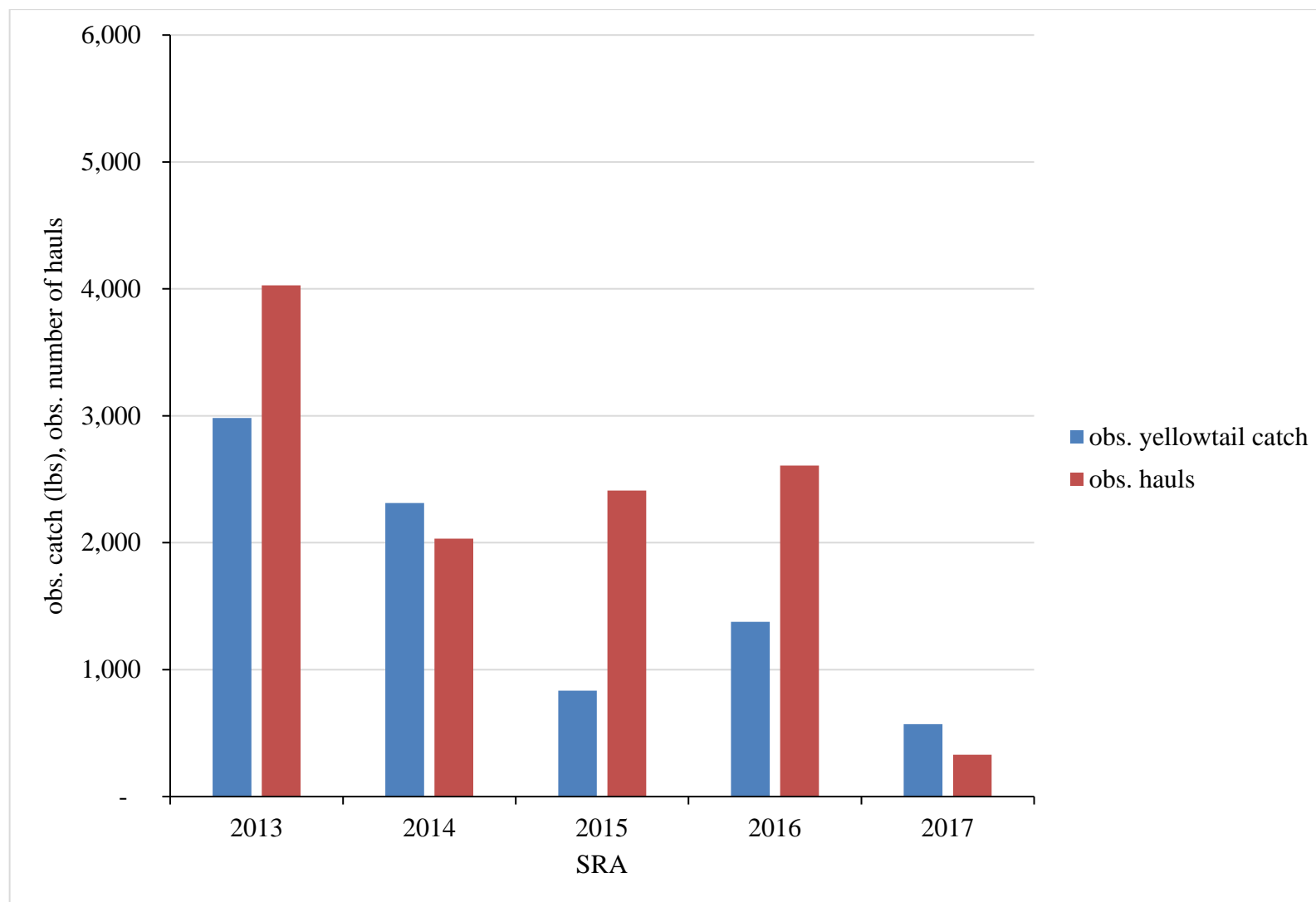


Figure 9. Observed CC/GOM yellowtail catch per haul by LA and LAGC vessels in FY2013.

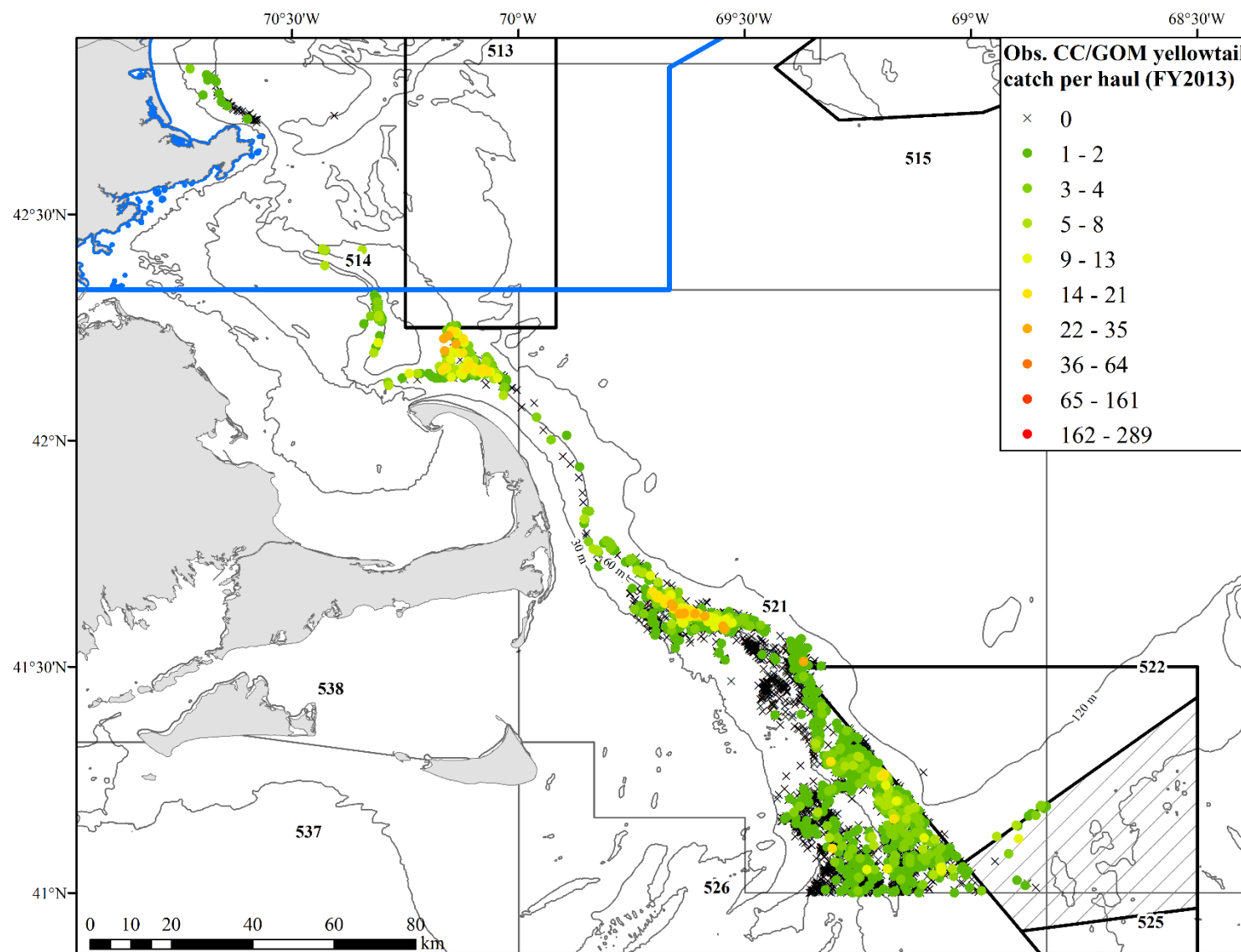


Figure 10. Observed CC/GOM yellowtail catch per haul by LA and LAGC vessels in FY2014.

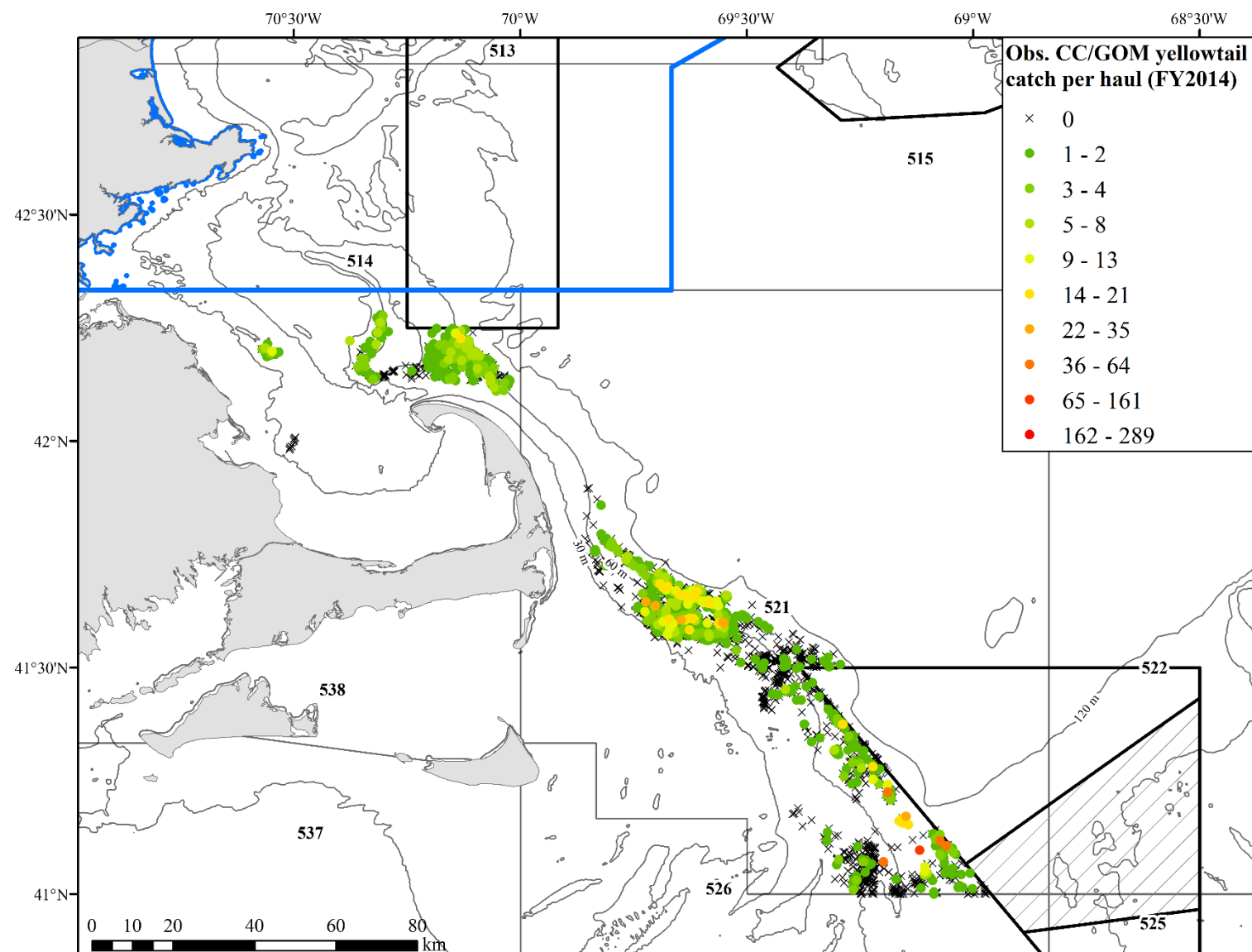


Figure 11. Observed CC/GOM yellowtail catch per haul by LA and LAGC vessels in FY2015.

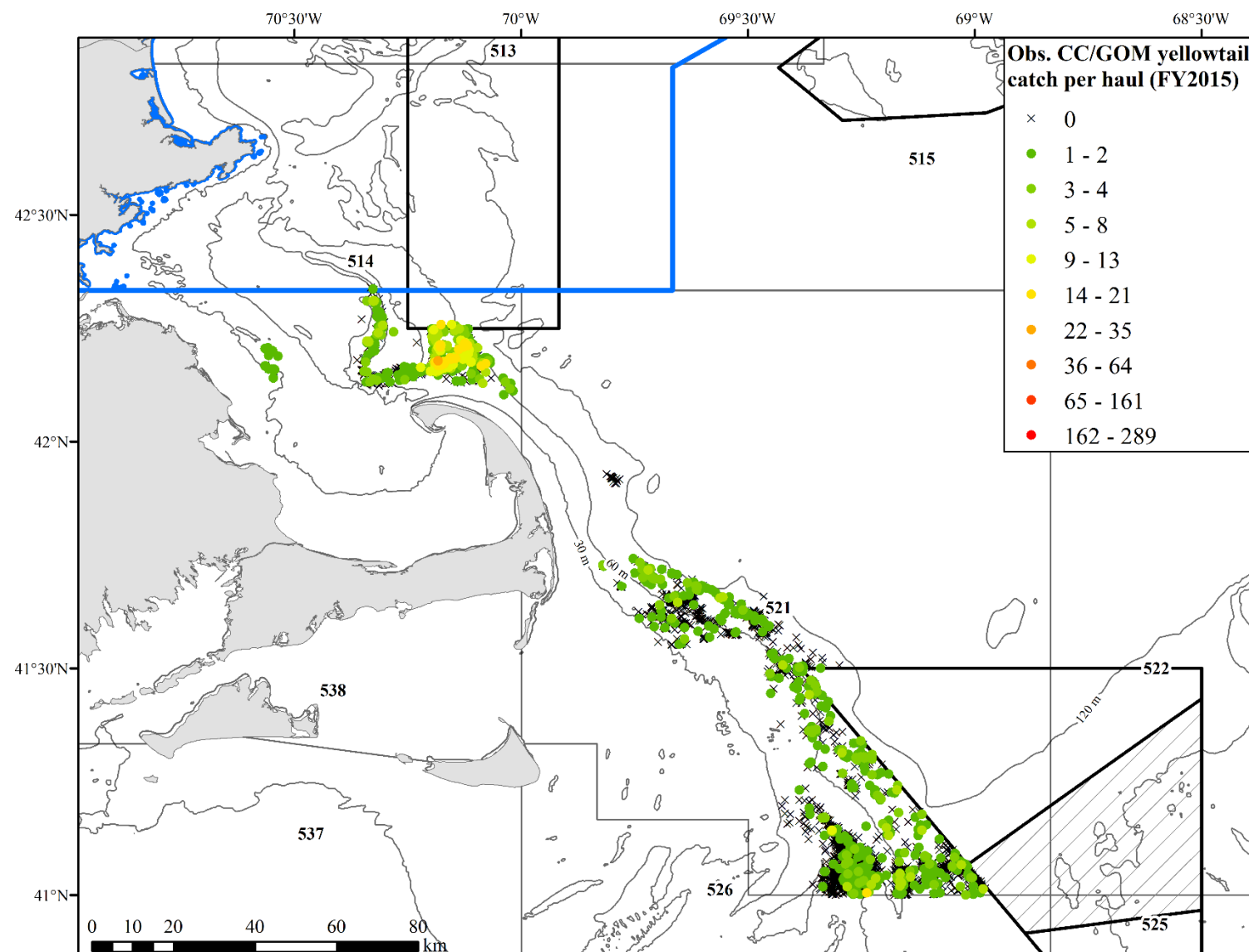


Figure 12. Observed CC/GOM yellowtail catch per haul by LA and LAGC vessels in FY2016.

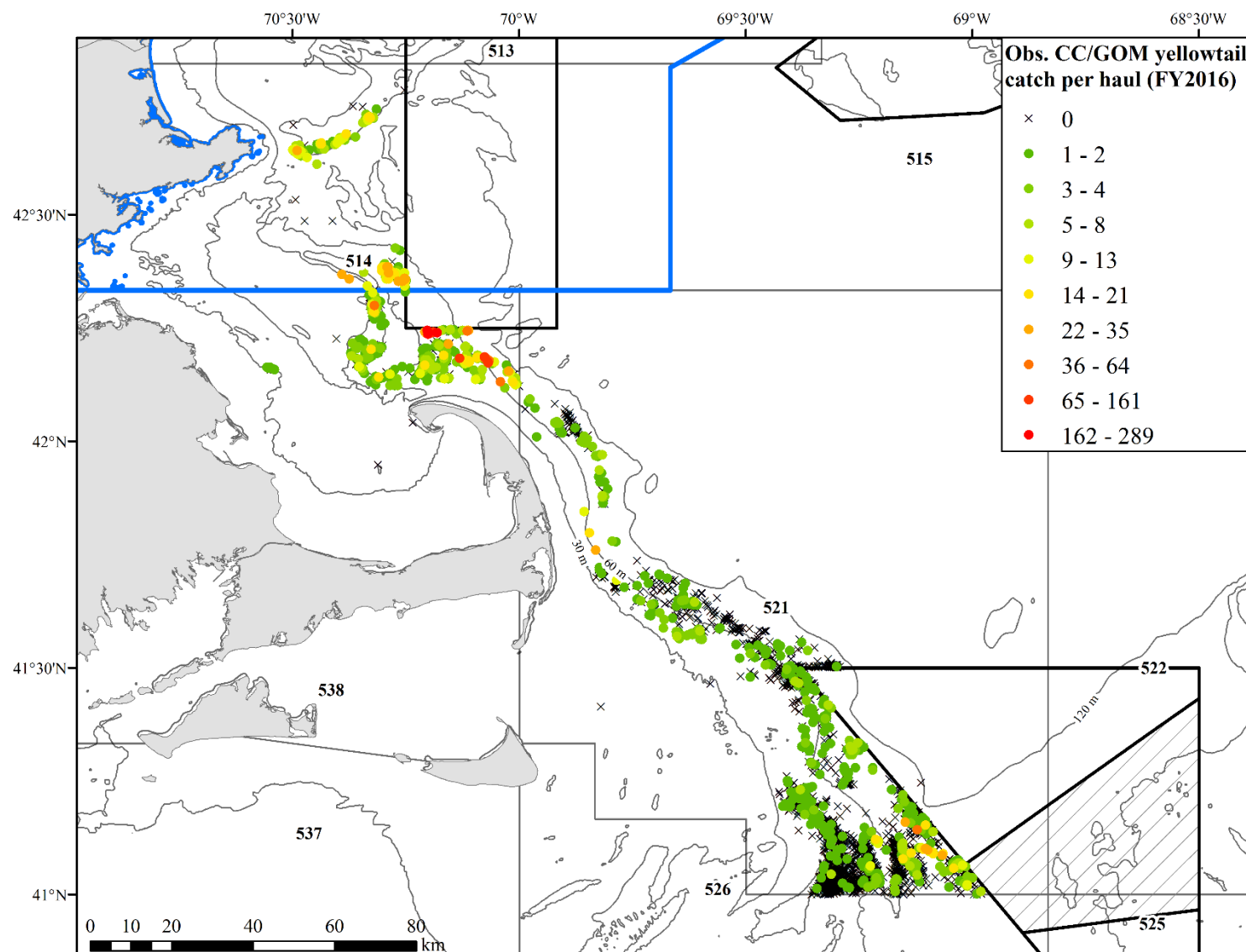


Figure 13. Observed CC/GOM yellowtail catch per haul by LA and LAGC vessels in FY2017 (through Sept. 11th, 2017).

