

Appendix Y
Commercial and Recreational Fisheries
Technical Report

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Acronyms and Abbreviations

ACCSP	Atlantic Coastal Cooperative Statistics Program
CBI	Consensus Building Institute
CFR	Code of Federal Regulations
COP	Construction and Operations Plan
DWSF	Deepwater Wind South Fork, LLC
EEZ	exclusive economic zone
FMP	fisheries management plan
GARFO	Greater Atlantic Region Fisheries Office
km	kilometer(s)
MRIP	Marine Recreational Information Program
NMFS	NOAA National Marine Fishery Service
NOAA Fisheries	National Oceanic Atmospheric Administration's National Marine Fisheries Service
NROC	Northeast Regional Ocean Council
NYCRR	New York Codes, Rules, and Regulations
NYSDEC	New York State Department of Environmental Conservation
Ocean SAMP	<i>Rhode Island Ocean Special Area Management Plan</i>
PSE	percent standard error
RIDEM	Rhode Island Department of Environmental Management
RI-MA WEA	Rhode Island-Massachusetts Wind Energy Area
SFEC	South Fork Export Cable
SFEC-NYS	South Fork Export Cable – New York State territorial waters
SFEC-OCS	South Fork Export Cable – Outer Continental Shelf Waters
SFWF	South Fork Wind Farm
U.S.	United States
USD	United States dollar(s)
VMS	Federal Vessel Monitoring System
VTR	vessel trip report
WEA	Wind Energy Area

Introduction

This technical report provides a detailed explanation of the data and analyses used to assess commercial and recreational fisheries resources in the Rhode Island-Massachusetts Wind Energy Area (RI-MA WEA), South Fork Wind Farm (SFWF), and South Fork Export Cable (SFEC) fisheries study corridor. The information presented here supports the summary-level data and analysis presented in Section 4.6.5 of the main Construction and Operations Plan (COP) environmental document. Section 2 of this report describes the data sources used to characterize commercial and recreational fisheries, and how these sources were analyzed and processed to narrow the assessment of fishing activity in the region to the fisheries that most likely could be impacted by the SFWF and SFEC. Section 3 of this report provides detailed result summaries of data requested from state and federal agencies, as well as supplementary maps for data sets referenced in Section 4.6.5 of the COP.

Data Sources, Methods, and Limitations

2.1 Federal Vessel Trip Report Data

National Oceanic Atmospheric Administration’s National Marine Fisheries Service (NOAA Fisheries) requires federally permitted fishing vessels to submit vessel trip reports (VTRs) for every fishing trip (50 Code of Federal Regulations [CFR] 648.7). The VTR data set provides a broad census of fishing activity, and covers most commercial fisheries active near the SFWF. VTRs include the fishing location (reported in latitude and longitude coordinates) for where “the majority of fishing effort occurred” on that trip (NOAA Fisheries, 2018).

The VTR data used for characterizing fisheries in the SFWF and SFEC as summarized in this report were first processed by NOAA Fisheries following the methods described by Kirkpatrick et al. (2017), which includes the application of the statistical model as described by DePiper (2014). NOAA Fisheries then provided nonconfidential data on commercial fishing activity (2006 to 2015) in terms of revenue and landings, for fishing activity reported to occur within the RI-MA WEA, as well as within a 6.2-mile (10-kilometer [km])-wide study corridor approximating the SFEC route (Figure Y-1). The 6.2-mile (10-km) SFEC fisheries study corridor was defined to provide a reasonable geographic sample of fisheries activity that may occur near the SFEC, and may, therefore, be impacted in some way by the installation of the submarine export cable. The SFEC fisheries study corridor was created based on a preliminary SFEC route and was defined to be wide enough to accommodate changes over time to the submarine export cable centerline. The data are provided with the context of data available for all fishing activity in the Great Atlantic Region, ranging from Maine to North Carolina.

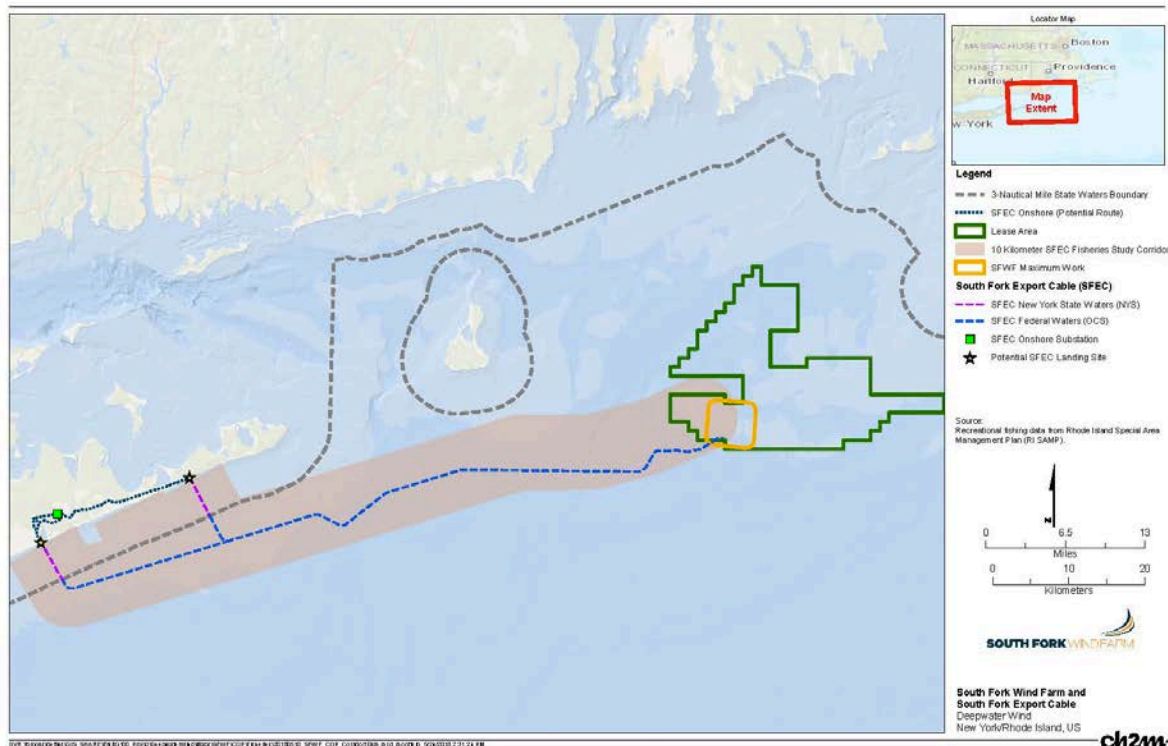


Figure Y-1. Map of SFWF, including the SFWF Turbine Array Within the RI-MA WEA, the SFEC-OCS, and SFEC-NYS

The data provided by NOAA Fisheries represent fishing activity for federally permitted vessels, whether they fish in federal or in state waters. Fishermen with federal and state permits are only required to submit VTRs to NOAA Fisheries; however, Federal VTR data do not include those fishermen who are permitted for fishing in only state waters. The VTR data for fishermen who fish only in state waters were also requested from the Atlantic Coastal Cooperative Statistics Program (ACCSP) (Section 2.4).

Therefore, duplication of fishing activity values in state waters is avoided.

A benefit of the VTR data provided by NOAA Fisheries for this characterization effort is that they include information in terms of both revenue and pounds landed, which brings nuance to the characterization of both high-volume and high-value fisheries. A limitation of the data set is that it is most accurate when used to describe fisheries in aggregate. In contrast, Federal Vessel Monitoring System (VMS) data provide precise vessel locations, although the locations do not include information on whether the vessel is actively fishing, or in transit. For these reasons, it is helpful to review results from both data sets to get a more complete picture of fishing activity and effort. Both VTR and VMS results are presented in Section 3.

2.2 Federal Vessel Monitoring System

VMS data are collected through a satellite surveillance system that primarily is used for monitoring the location of certain commercial fishing vessels working in United States (U.S.) federal waters. The location data are sent once an hour, or at smaller time intervals, by transceiver units on the fishing vessels, and the data include vessel identification, time, date, and the location at sea (NOAA Fisheries, 2017a). This information makes it possible to calculate the approximate speed that the vessel is travelling between known locations. The data are then filtered by estimated vessel-speed, depending on the gear and fishery, to indicate areas where it is likely that fishing is occurring (and not simply locations the vessel transited from). The benefit of VMS data is the specificity of the fishing locations; one limitation of the data is that the “speed rule” used to filter the fishing locations from the vessel’s path of transit does not perfectly isolate fishing locations (DePiper, 2017, pers. comm.).

To characterize fisheries active in the SFWF, spatial data indicating relative intensity of fishing activity for multiple fisheries was overlaid with SFWF project components. The VMS data showing distribution and density of fishing locations was provided by NOAA National Marine Fishery Service (NMFS). Metadata about the VMS data is available at the Northeast Ocean Data portal (www.northeastoceandata.org) and in a report by Fontenault (2018) on how the VMS data was prepared for the Northeast Regional Ocean Council (NROC). The VMS maps were qualitatively assessed for intensity of fishing activity in the SFWF and SFEC. As there is no catch or revenue information attached to the VMS point locations, the intensity of fishing location should be considered in conjunction with other available data and stakeholder input. The VMS data overlaid with the SFWF are illustrated on Figures Y-3 through Y-9.

In addition, this Technical Report includes a review of the results of the 2017 report published by Rhode Island Department of Environmental Management (RIDEM) that linked together fishing location from VMS data, trip identification information from VTR data, and additional information from dealer landings data (RIDEM, 2017). This analysis worked with multiple sources of data on federal fishing activity to attach revenue and landings data to VMS point locations from within each of the Wind Energy Areas (WEAs), and created fishing-intensity maps based on those data sets for the southern New England region. The results of this analysis describe the fisheries active in the RI-MA WEA and take advantage of the VMS data spatial resolution for describing fishing locations. RIDEM also produced smoothed relative vessel density maps for the fisheries reporting with VMS between 2011 and 2016; although these maps are complementary to the data from the Northeast Ocean Data Portal, they are very similar in content and are not included here to avoid repetition.

2.3 Rhode Island Ocean Special Area Management Plan

A valuable reference for characterizing fisheries in and near the SFWF is the *Rhode Island Ocean Special Area Management Plan* (Ocean SAMP) (CRMC, 2010). The Ocean SAMP accomplished significant stakeholder outreach through a comprehensive effort to incorporate stakeholder feedback on key fishing grounds for multiple user groups. Fishing areas were aggregated into groups: commercial mobile-gear, commercial fixed-gear, and recreational for-hire fishermen. The reported fishing locations were aggregated and used to create geospatial data files of aggregated fishing areas. The methods to build these spatial data sets are described in greater detail in the Ocean SAMP, Appendix B (CRMC, 2010). Although the maps are helpful qualitative data, as noted in the Ocean SAMP document, fisheries are “...inherently difficult to capture through a static mapping exercise...” given the variation from season to season and year to year amongst fishermen, target species, and gears (CRMC, 2010).

The Ocean SAMP spatial data files are overlaid with the SFWF and SFEC, and are used as additional qualitative information to inform the discussion of commercial and recreational fisheries in the SFWF and SFEC. The data are an important additional piece of context provided directly by regional stakeholders and are useful to provide qualitative context to characterizing fisheries in both the SFWF turbine array and in the SFEC-OCS. Maps of this fishing location data overlaid with the SFWF are presented in Figures Y-10 through Y-12.

The Ocean SAMP map of for-hire recreational fishing is unique in that it provides more specific information on important recreational fishing locations. The other source of recreational fishing effort used in this Technical Report, Marine Recreational Information Program (MRIP) data, does not include spatial fishing location data (NOAA, 2017b). One limitation of the Ocean SAMP data sets for use in this assessment is that the data were collected only from fishermen based in Rhode Island. Several other data sources indicate that fishermen from the neighboring states of New York, Connecticut, and Massachusetts are also active near the SFWF. In addition, because of privacy concerns, and because of the qualitative nature of the presented data, it is difficult to differentiate between areas considered very important to a single fisherman versus to several fishermen. Despite these limitations, the data provide a valuable insight for areas fishermen consider important for their fishing activity, and are used in this assessment to supplement VMS and VTR data.

2.4 New York State Vessel Trip Reports

Federal VTR data describe most commercial fishing activity in both state and federal waters by vessels that have a federal permit or a state and federal fishing permit. However, those vessels that only have state commercial fishing permits are not included in the federal VTR data set. State-permitted vessels must report their catch, including the statistical area within which fishing occurred (Figure Y-2), to the New York State Department of Environmental Conservation (NYSDEC) (6 New York Codes, Rules, and Regulations [NYCRR] 40.1). Data on fishing in state waters by state-permitted vessels can be accessed by the public through data requests to the ACCSP.

State commercial fishing data for this report were requested from statistical areas 167 and 168 to characterize those fisheries that could be impacted by the SFEC – New York State territorial waters (SFEC-NYS) (Figure Y-2). Fishing activity is characterized in terms of landed pounds of target species, the landing port, and the gear category. The data are presented in the units of landed pounds of catch because the landing price was not readily available. The “average” of pounds landed reflects the sum of pounds landed during the 2007 to 2016 period, divided by the number of years with data available (in this way, 0-value years are excluded).

There are limitations to state VTR data. The ACCSP holds records for fishing activity reported to occur in state waters by those fishermen who hold state permits, federal permits, or both state and federal permits. The fishing activity in state waters by those fishermen with federal and state permits is

reported to NOAA Fisheries, and was included in the activity summary of commercial fisheries (Section 2.1). The federal VTR data were used to summarize fishing within the SFEC fisheries study corridor, which extends into New York State waters; therefore, it includes fishing by vessels with federal permits in those areas. Thus, to avoid reporting fishing activity in state waters twice, data on fishing in state waters were filtered to include records for vessels that only fish in New York State waters. Many fishermen fish both in state and federal waters; however, those fishermen are not included in the state-waters-only data. For this reason, the data seem to indicate that certain species are not caught and landed from the statistical areas every year, or at all. Landings of those species are reflected in the federal VTR data summary. The New York State data should be considered in the broader context of fishing activity reported to the federal VTR database, and in conjunction with stakeholder input provided through the communication and engagement program that Deepwater Wind South Fork, LLC (DWSF) has developed for this purpose.

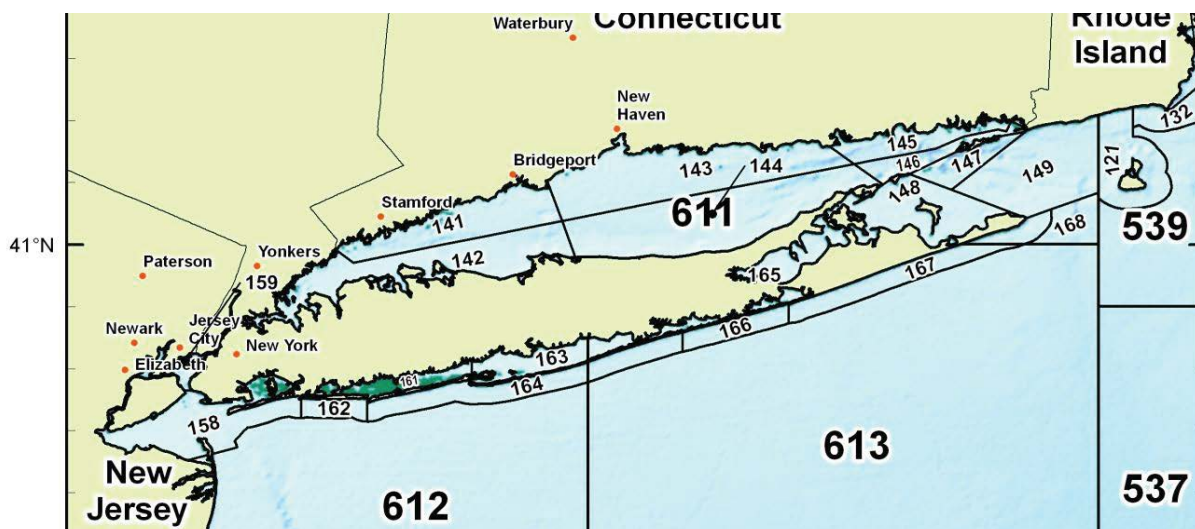


Figure Y-2. Long Island Sound and New York Northeast Marine Fisheries Information System (NEMFIS) Area Codes
Source: ACCSP, 2012.

2.5 Marine Recreational Information Program

The NOAA Fisheries MRIP is a collection of regional surveys organized to produce recreational fisheries statistics. The data are collected through angler-intercept surveys after a fishing trip to a beach or pier, by boat occurred. This integrated series of surveys provides estimates of marine recreational catch, effort, and participation across states, fishing locations, and fishing modes (Steinback, 2017, pers. comm.). To describe the affected environment of recreational fisheries in the SFWF and SFEC, this Technical Report used the NOAA Fisheries MRIP estimates for shoreside and private fishing modes, occurring in inland, state territorial sea, and federal exclusive economic zone (EEZ) fishing locations. MRIP data used for this report were provided by NOAA Fisheries, and are available through queries at the Fisheries Statistics Division website (Steinback, 2017, pers. comm.; NOAA Fisheries, 2017b).

The limitation of the MRIP data set is that it does not include a spatial component; the only location information available is the categorization of fishing location into state or federal waters. An additional limitation of this data set is that the survey program was designed to estimate fishing effort by recreational anglers at the state level. When the data are disaggregated to the county level or lower, the data values increase in percent standard error (PSE), and the information is less reliable (NOAA Fisheries, 2017b). Given that we cannot assign estimated angler effort to any location in the ocean, it is impossible to estimate recreational effort near the SFWF. For this reason, the MRIP data must be considered in conjunction with stakeholder input provided both by recreational for-hire boat captains in

the Ocean SAMP data set, and through the stakeholder communication and engagement program that DWSF has developed for this purpose.

2.6 Deepwater Wind Stakeholder Communication and Engagement

DWSF has committed to engaging with stakeholders in the fishing communities who are active in the SFWF and SFEC. This Project-specific stakeholder outreach program is spearheaded by DWSF and the Consensus Building Institute (CBI) to gather local knowledge of the region’s fishermen. The outreach program is ongoing and will continue throughout the design and permitting phases of the SFWF and SFEC. It is designed to be a two-way process of communication, including public presentations and listening sessions, individual outreach, and employment of fishery liaisons in the fishing communities of eastern Long Island. Detailed information about the communication and outreach plan supported by CBI and implemented by DWSF is provided in Appendix B, Fisheries Communication Plan.

Results

The following section presents the results of data used to assess relative intensity of several fisheries active in the SFWF and SFEC, organized based on the data source.

3.1 Federal Vessel Trip Report Data

VTR data were provided by NOAA Fisheries for the RI-MA WEA, and for a SFEC fisheries study corridor surrounding the most up-to-date export cable route at the time of writing the COP. The following section presents the summary of fishing activity for the RI-MA WEA and the SFEC fisheries study corridor from federal VTR data. The data are presented based on the subset, defined by the gear used, the targeted species, and the fisheries' landing ports associated with trips to the two respective areas. Each fishery subset includes estimates for the 10-year period (2006 to 2015) for the annual average values of revenue and landings sourced *from within the RI-MA WEA or the SFEC fisheries study corridor*; the annual average revenue and landings during that period, for *all fishing activity from Maine to North Carolina*, as reported by VTR to NOAA Fisheries' Greater Atlantic Region Fisheries Office (GARFO); and the percent of revenue and landings for that subset that were sourced from within the RI-MA WEA or the SFEC fisheries study corridor, out of total landings reported to GARFO. Revenue units are United States dollars (USD) deflated to January 2014; they are real (detrended) and not nominal dollars; landings are in pounds and are at-sea estimates (DePiper, pers. comm., 2017).

3.1.1 Rhode Island-Massachusetts Wind Energy Area

The top fisheries reported on VTRs by federally permitted vessels in terms of revenue are caught using bottom trawl (mobile-gear), sink gillnet (fixed-gear), lobster pot (fixed-gear), and scallop dredge (mobile-gear) in the RI-MA WEA. In terms of pounds landed, the top gears are the bottom trawl, mid-water trawl (mobile-gear), and sink gillnet (Table Y-1).

Table Y-1. Summary of Federal VTR Fishing Data in RI-MA WEA, by Gear, for 2006 to 2015.

Gear	Average Revenue and Landings from within RI-MA WEA		Average of Total Revenue and Landings		Percent of Total Gear Values in RI-MA WEA	
	Revenue	Landings	Revenue	Landings	% of Revenue	% of Landings
Bottom Trawl	409,083	667,546	170,688,174	167,671,141	0.24	0.40
Sink Gillnet	343,332	324,146	37,902,248	36,469,318	0.91	0.89
Lobster Pot	248,212	79,281	73,563,964	25,756,281	0.34	0.31
Scallop Dredge	192,435	22,875	439,437,467	47,700,866	0.04	0.05
Clam Dredge	75,699	10,707	2,794,204	368,086	2.71	2.91
Other Gear	69,433	22,811	6,654,271	837,292	1.04	2.72
Midwater Trawl	51,352	368,909	22,558,570	157,523,934	0.23	0.23
Other Pot	43,587	11,586	18,953,088	8,810,981	0.23	0.13
Bottom Longline	5,488	2,245	7,121,161	3,750,358	0.08	0.06
Other Gillnet	3,213	1,955	261,074	405,655	1.23	0.48

Table Y-1. Summary of Federal VTR Fishing Data in RI-MA WEA, by Gear, for 2006 to 2015.

Gear	Average Revenue and Landings from within RI-MA WEA		Average of Total Revenue and Landings		Percent of Total Gear Values in RI-MA WEA	
	Revenue	Landings	Revenue	Landings	% of Revenue	% of Landings
Separator and Ruhle Trawl	1,685	10,148	5,159,800	4,445,644	0.03	0.23
Hand Gear	1,316	521	3,423,913	1,624,319	0.04	0.03

Source: NOAA Fisheries, 2017.

Notes:

Values are sorted from largest to smallest revenue values for landings data.

Landings are reported in pounds.

Revenue is in USD deflated to January 2014; they are real (detrended and not nominal dollars; DePiper, 2017, pers. comm.).

“Total” revenue and landings values refer to all fishing activity as reported by VTRs for fisheries active in state and federal waters from Maine to North Carolina.

% = percent

Federally permitted vessels target dozens of species in the SFWF and SFEC. In the RI-MA WEA, the top species-groups reported on VTRs by federally permitted vessels in terms of revenue are monkfish, lobster, skates, sea scallops, and surfclam-ocean quahog. In terms of pounds landed, the top species-groups in the RI-MA WEA are Atlantic herring, skates, and monkfish. Table Y-2 provides the full species summary, and Table Y-3 provides the complete summary of all fisheries management plans (FMPs) caught by federally permitted vessels in the RI-MA WEA.

Table Y-2. Summary of Federal VTR Fishing Data in RI-MA WEA, by Species, for 2006 to 2015.

Species	Average Revenue and Landings from within RI-MA WEA		Average of Total Revenue and Landings		Percent of Total Species Values in RI-MA WEA	
	Revenue	Landings	Revenue	Landings	% of Revenue	% of Landings
Monkfish	247,323	112,742	16,282,683	7,185,917	1.52	1.57
Lobster	230,358	53,237	71,261,522	17,154,741	0.32	0.31
Skates	205,044	364,149	8,371,392	15,450,236	2.45	2.36
Scallop, Sea	193,337	22,554	457,830,112	48,918,133	0.04	0.05
Surfclam/Ocean Quahog	109,655	17,511	18,957,318	1,980,898	0.58	0.88
Inshore Longfin Squid	54,803	50,259	26,539,639	24,383,519	0.21	0.21
Herring, Atlantic	52,864	416,979	25,235,025	185,322,600	0.21	0.23
Hake, Silver	47,354	77,671	9,577,359	13,954,114	0.49	0.56
Flounder, Summer	45,333	16,830	23,631,915	10,031,839	0.19	0.17
Scup	29,348	39,227	6,506,510	9,075,870	0.45	0.43
Whelk, Channeled	27,444	4,069	8,450,926	1,634,929	0.32	0.25
Cod	26,577	10,900	22,178,935	10,204,251	0.12	0.11

Table Y-2. Summary of Federal VTR Fishing Data in RI-MA WEA, by Species, for 2006 to 2015.

Species	Average Revenue and Landings from within RI-MA WEA		Average of Total Revenue and Landings		Percent of Total Species Values in RI-MA WEA	
	Revenue	Landings	Revenue	Landings	% of Revenue	% of Landings
Flounder, Winter	19,592	7,830	9,517,178	4,532,081	0.21	0.17
Sea Bass, Black	18,191	4,967	5,120,590	1,483,794	0.36	0.33
Skate, Winter	16,600	36,100	1,908,443	3,312,710	0.87	1.09
Flounder, Yellowtail	15,888	10,505	5,034,895	3,038,149	0.32	0.35
Crab, Jonah	14,991	21,549	6,166,735	9,007,108	0.24	0.24
Mackerel, Atlantic	14,333	76,633	6,255,567	33,566,971	0.23	0.23
Dogfish Spiny	11,311	52,141	2,146,145	10,052,493	0.53	0.52
Skate, Little	7,857	72,615	500,526	4,678,419	1.57	1.55
Hake, Red	7,202	19,938	613,644	1,375,449	1.17	1.45
Butterfish	4,929	6,940	1,472,750	2,048,823	0.33	0.34
Bluefish	2,197	4,099	1,502,374	2,790,346	0.15	0.15
Crab, Rock	1,816	3,666	230,632	428,542	0.79	0.86
Hake, White	1,578	1,321	4,349,399	2,676,306	0.04	0.05
Crab, Blue	1,487	1,657	483,092	432,331	0.31	0.38
Skate, Thorny	1,125	98	3,556	2,253	31.65	4.35

Source: NOAA Fisheries, 2017.

Notes:

This table includes species with average revenue from within the RI-MA WEA more than \$1,000 a year.

Values are sorted from largest to smallest by average revenue values for landings data.

Landings are reported in pounds.

Revenue is in USD deflated to January 2014; they are real (detrended and not nominal dollars; DePiper, 2017, pers. comm.). "Total" revenue and landings values refer to all fishing activity as reported by VTRs for fisheries active in state and federal waters from Maine to North Carolina.

Table Y-3. Summary of Federal VTR Fishing Data in RI-MA WEA, by Fishery Management Plan (FMP), for 2006 to 2015.

FMPs	Average Revenue and Landings from within RI-MA WEA		Average of Total Revenue and Landings		Percent of Total FMP Values in RI-MA WEA	
	Revenue	Landings	Revenue	Landings	% of Revenue	% of Landings
Monkfish Joint	247,323	112,742	16,282,683	7,185,917	1.52	1.57
Sea Scallop NE	193,337	22,554	457,830,112	48,918,133	0.04	0.05
Surfclam/Ocean Quahog (Mid-Atlantic)	98,694	15,761	18,957,318	1,980,898	0.58	0.88
Skate NE	61,657	126,837	1,715,342	3,728,330	3.59	3.40

Table Y-3. Summary of Federal VTR Fishing Data in RI-MA WEA, by Fishery Management Plan (FMP), for 2006 to 2015.

FMPs	Average Revenue and Landings from within RI-MA WEA		Average of Total Revenue and Landings		Percent of Total FMP Values in RI-MA WEA	
	Revenue	Landings	Revenue	Landings	% of Revenue	% of Landings
Atlantic Herring NE	52,864	416,979	25,235,025	185,322,600	0.21	0.23
Summer Flounder/Scup/Black Sea Bass Mid-Atlantic	30,957	20,341	11,753,005	6,863,834	0.26	0.30
Mackerel/Squid/Butterfish Mid-Atlantic	20,576	37,183	10,511,930	20,865,845	0.20	0.18
NE Multi Small	16,331	29,130	2,699,012	4,058,266	0.61	0.72
Spiny Dogfish Joint	11,311	52,141	2,146,145	10,052,493	0.53	0.52
None	10,736	3,305	1,361,915	1,052,599	0.79	0.31
NE Multi Large	6,365	3,075	6,428,929	4,189,131	0.10	0.07
Bluefish Mid-Atlantic	2,197	4,099	1,502,374	2,790,346	0.15	0.15
Golden Tilefish Mid-Atlantic	759	215	5,140,432	1,525,484	0.01	0.01
Highly Migratory Species	15	11	128,932	23,428	0.01	0.05
River Herring Joint	15	17	17,512	22,469	0.08	0.07

Source: NOAA Fisheries, 2017.

Notes:

Values are sorted from largest to smallest by average revenue values for landings data.

Landings are reported in pounds.

Revenue is in USD deflated to January 2014; they are real (detrended and not nominal dollars; DePiper, 2017, pers. comm.). "Total" revenue and landings values refer to all fishing activity as reported by VTRs for fisheries active in state and federal waters from Maine to North Carolina.

NE = northeast

Vessels hailing from ports in Massachusetts, Rhode Island, Connecticut, and New York conduct the most federally permitted fishing activities in the RI-MA WEA. There are also some vessels that fish in the RI-MA WEA from New Jersey, Virginia, and North Carolina (Table Y-4). The greatest average revenue generated by federally permitted vessels in the RI-MA WEA were from landings in New Bedford, Massachusetts (\$407,000); Point Judith, Rhode Island (\$391,100); and Newport and Little Compton, Rhode Island (about \$188,000 each). These values are put in context by including the total revenue landed in that port from all fishing activity during 2006 to 2015. The ports where the greatest percentage of revenue is sourced from within the RI-MA WEA are Little Compton, Rhode Island (8.5 percent), and Chilmark and Westport, Massachusetts (5.4 and 5.1 percent, respectively) (Table Y-5).

Table Y-4. Summary of Federal VTR Fishing Data in RI-MA WEA, by Port, for 2006 to 2015.

Port Groups	Average Revenue and Landings from within RI-MA WEA		Average of Total Revenue and Landings		Percent of Total Port Values from RI-MA WEA	
	Revenue	Landings	Revenue	Landings	% of Revenue	% of Landings
Connecticut						
New London	6,727	5,968	7,149,685	4,364,312	0.09	0.14
Stonington	5,312	3,318	7,839,885	2,844,945	0.07	0.12
Massachusetts						
Barnstable	1,169	751	3,506,017	1,211,587	0.03	0.06
Boston	2,813	13,354	11,649,206	9,447,160	0.02	0.14
Chatham	637	597	10,297,936	8,249,673	0.01	0.01
Chilmark	16,160	3,924	301,816	93,355	5.35	4.20
Fairhaven	16,446	13,432	10,940,643	1,519,669	0.15	0.88
Fall River	7,364	33,215	2,289,371	6,567,559	0.32	0.51
Falmouth	1,676	226	225,500	103,442	0.74	0.22
Gloucester	17,362	100,172	43,975,764	86,347,051	0.04	0.12
Harwichport	75,830	11,080	3,074,957	723,183	2.47	1.53
Hyannis	3,461	1,707	3,073,764	1,113,996	0.11	0.15
Menemsha	7,875	2,342	322,706	99,014	2.44	2.37
Nantucket	1,130	197	1,124,605	367,045	0.10	0.05
New Bedford	406,922	454,872	324,780,909	111,508,393	0.13	0.41
Other Dukes	221	52	36,083	10,583	0.61	0.49
Sandwich	408	228	3,538,161	2,018,998	0.01	0.01
Westport	75,350	35,198	1,486,904	935,613	5.07	3.76
Woods Hole	5,241	897	444,131	162,445	1.18	0.55
North Carolina						
Beaufort	741	307	2,032,023	741,043	0.04	0.04
Engelhard	1,274	529	5,314,292	1,481,702	0.02	0.04
Wanchese	1,402	594	7,000,180	6,131,876	0.04	0.04
New Jersey						
Atlantic City	538	76	25,670,408	2,615,061	< 0.01	< 0.01
Cape May	1,082	5,479	70,491,504	66,875,608	< 0.01	< 0.01
Point Pleasant	2,085	782	28,206,234	7,457,546	0.01	0.01

Table Y-4. Summary of Federal VTR Fishing Data in RI-MA WEA, by Port, for 2006 to 2015.

Port Groups	Average Revenue and Landings from within RI-MA WEA		Average of Total Revenue and Landings		Percent of Total Port Values from RI-MA WEA	
	Revenue	Landings	Revenue	Landings	% of Revenue	% of Landings
<i>New York</i>						
Montauk	15,730	10,975	17,067,482	12,066,543	0.09	0.09
Shinnecock	382	287	6,451,075	3,495,421	0.01	0.01
<i>Rhode Island</i>						
Bristol	35	14	24,263	13,542	0.14	0.10
Davisville	4,590	16,606	6,109,212	12,422,292	0.08	0.13
Little Compton	187,347	155,234	2,216,499	1,851,403	8.45	8.38
New Shoreham	589	247	214,085	112,016	0.28	0.22
Newport	188,541	244,795	11,564,118	7,552,963	1.63	3.24
North Kingstown	6,349	36,036	9,919,938	22,072,486	0.06	0.16
Point Judith	391,103	372,693	37,452,024	38,016,358	1.04	0.98
Tiverton	16,013	27,475	1,174,187	1,429,200	1.36	1.92
<i>Other Ports</i>						
Other Ports	23,065	54,736	29,701,838	10,443,849	0.08	0.52
<i>Virginia</i>						
Chincoteague	3,431	1,727	5,187,243	2,446,219	0.07	0.07
Hampton	4,302	1,810	14,176,045	3,894,592	0.03	0.05
Newport News	10,721	5,544	34,907,954	5,661,726	0.03	0.10

Source: NOAA Fisheries, 2017.

Notes:

Values are sorted alphabetically by port, for each state.

Landings are reported in pounds.

Revenue is in USD deflated to January 2014; they are real (detrended and not nominal dollars; DePiper, 2017, pers. comm.).

“Total” revenue and landings values refer to all fishing activity as reported by VTRs for fisheries active in state and federal waters from Maine to North Carolina.

Table Y-5. Ports that Sourced 5 percent or More of Revenue based on Federal VTR Fishing Data from the RI-MA WEA, for 2006 to 2015

Port Groups	Average Revenue and Landings from within RI-MA WEA		Average of Total Revenue and Landings		Percent of Total Port Values in RI-MA WEA	
	Revenue	Landings	Revenue	Landings	% of Revenue	% of Landings
Massachusetts						
Chilmark	16,160	3,924	301,816	93,355	5.35	4.20
Westport	75,350	35,198	1,486,904	935,613	5.07	3.76
Rhode Island						
Little Compton	187,347	155,234	2,216,499	1,851,403	8.45	8.38

Source: NOAA Fisheries, 2017.

Notes:

Values are sorted alphabetically by port, for each state.

Landings are reported in pounds.

Revenue is in USD deflated to January 2014; they are real (detrended and not nominal dollars; DePiper, 2017, pers. comm.). "Total" revenue and landings values refer to all fishing activity as reported by VTRs for fisheries active in state and federal waters from Maine to North Carolina.

3.1.2 South Fork Export Cable Fisheries Study Corridor

In a broad examination of fisheries that are active within the 6.2-mile (10-km) SFEC fisheries study corridor, the top fisheries reported on VTRs by federally permitted vessels by revenue are caught using bottom trawl, scallop dredge, sink gillnet, clam dredge, and lobster pot gear. In terms of pounds landed, the top gears in the SFEC fisheries study corridor are the bottom trawl, mid-water trawl, sink gillnet, and scallop dredge. The gear categories with the greatest proportion of total revenue that was sourced from within the SFEC – Outer Continental Shelf Waters (SFEC-OCS) and SFEC-NYS are clam dredge (15 percent), hand gear (3.2 percent), other gear (3.1 percent), and sink gillnet (3.0 percent). Table Y-6 summarizes the gears used to fish in the SFEC fisheries study corridor.

Table Y-6. Summary of Federal VTR Fishing Data in SFEC Fisheries Study Corridor, by Gear, for 2006 to 2015

Gear	Average of Revenue and Landings from within SFEC Fisheries Study Corridor		Average of Total Revenue and Landings		Percent of Total Gear Values in SFEC Fisheries Study Corridor	
	Average of Revenue Inside Area	Average of Landings Inside Area	Revenue	Landings	% of Revenue	% of Landings
Bottom Trawl	2,430,082	3,139,581	170,688,175	167,671,142	1.42	1.87
Scallop Dredge	1,849,828	185,955	439,437,467	47,700,866	0.42	0.39
Sink Gillnet	1,140,280	877,217	37,902,248	36,469,319	3.01	2.41
Clam Dredge	439,453	62,901	2,794,205	368,087	15.73	17.09
Lobster Pot	228,833	79,591	73,563,964	25,756,282	0.31	0.31
Other Gear	207,744	45,052	6,654,272	837,293	3.12	5.38

Table Y-6. Summary of Federal VTR Fishing Data in SFEC Fisheries Study Corridor, by Gear, for 2006 to 2015

Gear	Average of Revenue and Landings from within SFEC Fisheries Study Corridor		Average of Total Revenue and Landings		Percent of Total Gear Values in SFEC Fisheries Study Corridor	
	Average of Revenue Inside Area	Average of Landings Inside Area	Revenue	Landings	% of Revenue	% of Landings
Midwater Trawl	160,187	1,240,462	22,558,570	157,523,935	0.71	0.79
Hand Gear	109,973	48,978	3,423,914	1,624,320	3.21	3.02
Bottom Longline	77,423	26,112	7,121,161	3,750,358	1.09	0.70
Other Pot	61,922	28,006	18,953,089	8,810,981	0.33	0.32
Separator and Ruhle Trawl	13,442	56,067	5,159,800	4,445,644	0.26	1.26
Shrimp Trawl	10,772	8,964	12,570,585	6,113,352	0.09	0.15
Drift Gillnet	7,778	4,495	503,189	903,380	1.55	0.50
Other Gillnet	5,527	2,244	261,074	405,655	2.12	0.55
Other Dredge	3,165	446	578,356	295,453	0.55	0.15
Scallop Trawl	1,308	257	3,868,766	565,341	0.03	0.05

Source: NOAA Fisheries, 2017.

Notes:

This table includes species with average revenue from within the SFEC fisheries study corridor greater than \$1,000 a year.

Values are sorted from largest to smallest by average revenue values for landings data.

Landings are reported in pounds.

Revenue is in USD deflated to January 2014; they are real (detrended and not nominal dollars; DePiper, 2017, pers. comm.).

“Total” revenue and landings values refer to all fishing activity as reported by VTRs for fisheries active in state and federal waters from Maine to North Carolina.

In the SFEC fisheries study corridor, the top individual species reported on VTRs by federally permitted vessels in terms of revenue are sea scallops, monkfish, skates, summer flounder, surfclam-ocean quahog, and inshore longfin squid. In terms of pounds landed, the top species in the SFEC fisheries study corridor include Atlantic herring, skates, scup, little skate, Atlantic mackerel, and inshore longfin squid. Table Y-7 provides a full summary of the species caught in the SFEC fisheries study corridor.

Table Y-7. Summary of Federal VTR Fishing Data in SFEC Fisheries Study Corridor, by Species, for 2006 to 2015

Species	Average Values from within SFEC Fisheries Study Corridor		Total Average Values for that Species		Percent of Total Species Values in SFEC Fisheries Study Corridor	
	Revenue	Landings	Revenue	Landings	% of Revenue	% of Landings
Scallop, Sea	1,881,203	185,299	457,830,112	48,918,133	0.41	0.38
Monkfish	548,511	265,911	16,282,683	7,185,917	3.37	3.70
Skates	517,478	951,909	8,371,392	15,450,236	6.18	6.16
Flounder, Summer	443,606	160,285	23,631,915	10,031,839	1.88	1.60
Surfclam/Quahog	394,700	60,186	18,957,318	1,980,898	2.08	3.04
Inshore Longfin Squid	340,101	311,882	26,539,639	24,383,519	1.28	1.28
Scup	307,721	416,253	6,506,510	9,075,870	4.73	4.59
Flounder, Winter	288,047	114,197	9,517,178	4,532,081	3.03	2.52
Lobster	201,940	48,841	71,261,522	17,154,741	0.28	0.28
Herring, Atlantic	174,421	1,474,957	25,235,025	185,322,600	0.69	0.80
Bass, Striped	169,308	50,106	2,097,357	679,574	8.07	7.37
Flounder, Yellowtail	158,168	92,446	5,034,895	3,038,149	3.14	3.04
Hake, Silver	123,794	199,673	9,577,359	13,954,114	1.29	1.43
Cod	118,589	50,600	22,178,935	10,204,251	0.53	0.50
Sea Bass, Black	85,634	24,495	5,120,590	1,483,794	1.67	1.65
Bluefish	60,013	104,493	1,502,374	2,790,346	3.99	3.74
Mackerel, Atlantic	59,188	323,564	6,255,567	33,566,971	0.95	0.96
Tilefish, Golden	44,731	14,152	5,140,432	1,525,484	0.87	0.93
Skate, Little	42,235	399,513	500,526	4,678,419	8.44	8.54
Butterfish	25,354	34,479	1,472,750	2,048,823	1.72	1.68
Hake, Red	22,291	56,595	613,644	1,375,449	3.63	4.11
Dogfish Spiny	21,290	98,302	2,146,145	10,052,493	0.99	0.98
Crab, Jonah	17,734	25,165	6,166,735	9,007,108	0.29	0.28
Skate, Winter	16,755	30,219	1,908,443	3,312,710	0.88	0.91
Flounder, Southern	12,672	4,796	196,805	100,903	6.44	4.75
Weakfish, Spotted	12,423	6,589	71,441	36,931	17.39	17.84
Dogfish Smooth	11,089	16,575	682,111	974,786	1.63	1.70
Tautog	10,275	3,286	385,607	125,510	2.66	2.62
Flounder, Sand-Dab	9,242	13,642	75,715	118,387	12.21	11.52

Table Y-7. Summary of Federal VTR Fishing Data in SFEC Fisheries Study Corridor, by Species, for 2006 to 2015

Species	Average Values from within SFEC Fisheries Study Corridor		Total Average Values for that Species		Percent of Total Species Values in SFEC Fisheries Study Corridor	
	Revenue	Landings	Revenue	Landings	% of Revenue	% of Landings
Cunner	8,365	2,060	23,863	6,994	35.05	29.46
Whelk, Channeled	7,686	1,459	8,450,926	1,634,929	0.09	0.09
Weakfish, Squeteague	6,611	4,674	154,057	110,161	4.29	4.24
Other Species	6,330	1,383	160,106	120,083	3.95	1.15
Conchs	5,039	1,434	1,011,848	354,766	0.50	0.40
Eel, NK	4,832	1,808	202,630	24,483	2.38	7.38
Hake, White	4,583	3,374	4,349,399	2,676,306	0.11	0.13
Seatrout (NK)	4,066	762	33,382	7,592	12.18	10.04
Flounders (NK)	3,838	653	54,771	24,133	7.01	2.70
Bonito	3,568	1,587	84,135	38,406	4.24	4.13
Flounder, Am. Plaice	3,188	1,488	4,284,960	2,522,689	0.07	0.06
Spot	3,172	3,269	258,733	299,595	1.23	1.09
Whiting, King	2,756	3,073	321,315	317,611	0.86	0.97
Flounder, Witch	2,606	930	4,654,774	1,876,664	0.06	0.05
Eel, Conger	2,297	3,032	23,240	34,228	9.88	8.86
Tuna, Bluefin	2,153	195	1,150,968	127,463	0.19	0.15
Hake, Offshore	2,150	3,279	128,905	191,249	1.67	1.71
Tuna, Little	1,700	2,932	14,002	23,860	12.14	12.29
Crab, Blue	1,399	1,242	483,092	432,331	0.29	0.29
Crab, Rock	1,365	2,749	230,632	428,542	0.59	0.64
Pout, Ocean	1,349	1,448	5,544	5,991	24.34	24.17

Source: NOAA Fisheries, 2017.

Notes:

This table includes species with average revenue from within the SFEC fisheries study corridor greater than \$1,000 a year.

Values are sorted from largest to smallest by average revenue values.

Landings are reported in pounds.

Revenue is in USD deflated to January 2014; they are real (detrended and not nominal dollars; DePiper, 2017, pers. comm.).

“Total” revenue and landings values refer to all fishing activity as reported by VTRs for fisheries active in state and federal waters from Maine to North Carolina.

NK = not known

NS = not specific

The top species by FMPs caught by federally permitted vessels in the SFEC fisheries study corridor in terms of revenue are sea scallops, monkfish, surfclam-ocean quahog, and summer flounder-scup-black sea bass. In terms of pounds landed, the top species by FMPs in the SFEC fisheries study corridor include Atlantic herring, skates, monkfish, summer flounder-scup-black sea bass, sea scallop, and mackerel-squid-butterfish. The data indicate that of all catch landed under the skate FMP, 8 percent of that revenue is sourced from within the SFEC fisheries study corridor used for the analysis. Table Y-8 provides a full summary of FMPs caught in the SFEC fisheries study corridor.

Table Y-8. Summary of Federal VTR Fishing Data in SFEC Fisheries Study Corridor, by FMP, for 2006 to 2015

FMP	Average Revenue and Landings from SFEC Fisheries Study Corridor		Average of Total Revenue and Landings		Percent of Total FMP Values in SFEC Fisheries Study Corridor	
	Revenue	Landings	Revenue	Landings	% of Revenue	% of Landings
Sea Scallop NE	1,881,203	185,299	457,830,112	48,918,133	0.41	0.38
Monkfish Joint	548,511	265,911	16,282,683	7,185,917	3.37	3.70
Surfclam Ocean Quahog Mid-Atlantic	394,700	60,186	18,957,318	1,980,898	2.08	3.04
Sum Flounder/Scup/Black Sea Bass Mid-Atlantic	278,987	200,345	11,753,005	6,863,834	2.37	2.92
Atlantic Herring NE	174,421	1,474,957	25,235,025	185,322,600	0.69	0.80
Skate NE	140,717	337,039	1,715,342	3,728,330	8.20	9.04
Mackerel/Squid/Butterfish Mid-Atlantic	108,905	171,820	10,511,930	20,865,845	1.04	0.82
Bluefish Mid-Atlantic	60,013	104,493	1,502,374	2,790,346	3.99	3.74
NE Multi Large	55,804	26,494	6,428,929	4,189,131	0.87	0.63
Golden Tilefish Mid-Atlantic	44,731	14,152	5,140,432	1,525,484	0.87	0.93
NE Multi Small	42,357	74,162	2,699,012	4,058,266	1.57	1.83
Spiny Dogfish Joint	21,290	98,302	2,146,145	10,052,493	0.99	0.98
None	12,852	4,987	1,361,915	1,052,599	0.94	0.47
Highly Migratory Species	658	320	128,932	23,428	0.51	1.37
River Herring Joint	222	236	17,512	22,469	1.27	1.05

Source: NOAA Fisheries, 2017.

Notes:

Values are sorted from largest to smallest by average revenue values for landings data.

Landings are reported in pounds.

Revenue is in USD deflated to January 2014; they are real (detrended and not nominal dollars; DePiper, 2017, pers. comm.). "Total" revenue and landings values refer to all fishing activity as reported by VTRs for fisheries active in state and federal waters from Maine to North Carolina.

The data indicate that the top ports reported by federally permitted vessels for revenue sourced from within the SFEC fisheries study corridor include Point Judith, Rhode Island (\$2.12 million); Montauk, New York (\$1.44 million); and New Bedford, Massachusetts (\$1.37 million). Other notable ports with large revenue from the SFEC fisheries study corridor include Newport, Rhode Island (\$249,000); Shinnecock, New York (\$217,000); Tiverton, Rhode Island (\$211,000); and Stonington, Connecticut (\$130,000). Table Y-9 provides a full summary of ports used by federally permitted vessels in the SFEC fisheries study corridor.

Table Y-9. Summary of Federal VTR Fishing Data in SFEC Fisheries Study Corridor, by Port, for 2006 to 2015

Port Groups	Average Revenue and Landings from within SFEC Fisheries Study Corridor		Average of Total Revenue and Landings		Percent of Total Port Values in SFEC Fisheries Study Corridor	
	Revenue	Landings	Revenue	Landings	% of Revenue	% of Landings
Connecticut						
Groton	695	149	116,105	34,883	0.60	0.43
New London	113,477	93,099	7,149,685	4,364,312	1.59	2.13
Noank	665	125	106,622	26,813	0.62	0.47
Old Saybrook	10,756	1,140	45,516	7,342	23.63	15.52
Stonington	138,516	84,328	7,839,885	2,844,945	1.77	2.96
Massachusetts						
Barnstable	902	319	3,506,017	1,211,587	0.03	0.03
Boston	1,351	6,199	11,649,206	9,447,160	0.01	0.07
Chilmark	596	138	301,816	93,355	0.20	0.15
Fairhaven	46,732	6,237	10,940,643	1,519,669	0.43	0.41
Fall River	14,461	91,667	2,289,371	6,567,559	0.63	1.40
Gloucester	38,105	232,515	43,975,764	86,347,051	0.09	0.27
Hyannis	2,522	529	3,073,764	1,113,996	0.08	0.05
Menemsha	48	17	322,706	99,014	0.01	0.02
New Bedford	1,369,123	948,915	324,780,909	111,508,393	0.42	0.85
Westport	10,952	3,157	1,486,904	935,613	0.74	0.34
Woods Hole	21,288	2,764	444,131	162,445	4.79	1.70
North Carolina						
Beaufort	2,165	903	2,032,023	741,043	0.11	0.12
Engelhard	1,729	739	5,314,292	1,481,702	0.03	0.05
Oriental	222	75	2,534,557	682,486	0.01	0.01
Wanchese	1,279	543	7,000,180	6,131,876	0.02	0.01

Table Y-9. Summary of Federal VTR Fishing Data in SFEC Fisheries Study Corridor, by Port, for 2006 to 2015

Port Groups	Average Revenue and Landings from within SFEC Fisheries Study Corridor		Average of Total Revenue and Landings		Percent of Total Port Values in SFEC Fisheries Study Corridor	
	Revenue	Landings	Revenue	Landings	% of Revenue	% of Landings
<i>New Jersey</i>						
Atlantic City	16,188	1,418	25,670,408	2,615,061	0.06	0.05
Barnegat	5,437	440	19,797,526	4,781,848	0.03	0.01
Belford	2,883	3,350	3,303,558	5,930,477	0.09	0.06
Cape May	34,404	84,233	70,491,504	66,875,608	0.05	0.13
Long Beach	188	41	25,624,426	5,760,449	<0.01	<0.01
Point Pleasant	51,354	17,197	28,206,234	7,457,546	0.18	0.23
<i>New York</i>						
Amagansett	10,318	4,817	96,695	53,075	10.67	9.08
East Hampton	20,329	13,043	311,778	190,082	6.52	6.86
Freeport	200	142	1,096,804	316,444	0.02	0.04
Greenport	15,136	9,744	266,592	224,508	5.68	4.34
Hampton Bay	31,578	26,102	2,447,890	1,216,657	1.29	2.15
Islip	91	67	374,672	175,899	0.02	0.04
Mattituck	5,136	3,041	1,047,061	574,761	0.49	0.53
Montauk	1,443,318	928,434	17,067,482	12,066,543	8.46	7.69
Moriches	274	424	403,149	261,212	0.07	0.16
Mount Sinai	711	125	965,659	194,600	0.07	0.06
Northport	180	32	107,402	18,769	0.17	0.17
Orient	1,863	468	42,212	15,646	4.41	2.99
Other Bronx	462	144	59,119	38,096	0.78	0.38
Other NY	590	532	189,168	38,803	0.31	1.37
Other Suffolk	699	311	216,021	85,557	0.32	0.36
Point Lookout	131	122	2,880,110	1,196,009	< 0.01	0.01
Shinnecock	217,415	144,119	6,451,075	3,495,421	3.37	4.12
Southold	15	10	15,128	11,664	0.10	0.09
Wainscott	3,799	2,211	95,135	52,259	3.99	4.23
<i>Rhode Island</i>						
Bristol	426	154	24,263	13,542	1.76	1.13
Davisville	117,388	120,660	6,109,212	12,422,292	1.92	0.97
Little Compton	170,245	137,405	2,216,499	1,851,403	7.68	7.42

Table Y-9. Summary of Federal VTR Fishing Data in SFEC Fisheries Study Corridor, by Port, for 2006 to 2015

Port Groups	Average Revenue and Landings from within SFEC Fisheries Study Corridor		Average of Total Revenue and Landings		Percent of Total Port Values in SFEC Fisheries Study Corridor	
	Revenue	Landings	Revenue	Landings	% of Revenue	% of Landings
New Shoreham	45,301	26,320	214,085	112,016	21.16	23.50
Newport	249,415	320,808	11,564,118	7,552,963	2.16	4.25
North Kingstown	31,477	177,138	9,919,938	22,072,486	0.32	0.80
Point Judith	2,123,848	2,171,941	37,452,024	38,016,358	5.67	5.71
Tiverton	211,338	184,095	1,174,187	1,429,200	18.00	12.88
Other Ports	88,112	124,198	29,701,838	10,443,849	0.30	1.19
Virginia						
Chincoteague	3,419	1,507	5,187,243	2,446,219	0.07	0.06
Hampton	5,360	2,348	14,176,045	3,894,592	0.04	0.06
Newport News	7,471	2,457	34,907,954	5,661,726	0.02	0.04

Source: NOAA Fisheries, 2017.

Notes:

Ports are listed alphabetically within each state.

Landings are reported in pounds.

Revenue is in USD deflated to January 2014; they are real (detrended and not nominal dollars; DePiper, 2017, pers. comm.). "Total" revenue and landings values refer to all fishing activity as reported by VTRs for fisheries active in state and federal waters from Maine to North Carolina.

Table Y-10 provides a detailed summary of ports with a proportion of over 5 percent of their total revenue sourced from within the SFEC fisheries study corridor.

Table Y-10. Ports that Sourced 5 percent or More of Revenue based on Federal VTR Fishing Data from the SFEC Fisheries Study Corridor, for 2006-2015

Port Groups	SFEC Fisheries Study Corridor		Percent of Total Port Value	
	Average of Revenue from within SFEC Fisheries Study Corridor	Average of Landings Inside from within SFEC Fisheries Study Corridor	% of Port Revenue	% of Port Landings
Connecticut				
Old Saybrook	10,756	1,140	23.63	15.52
Massachusetts				
Woods Hole	21,288	2,764	4.79	1.70
New York				
Amagansett	10,318	4,817	10.67	9.08
East Hampton	20,329	13,043	6.52	6.86
Greenport	15,136	9,744	5.68	4.34

Table Y-10. Ports that Sourced 5 percent or More of Revenue based on Federal VTR Fishing Data from the SFEC Fisheries Study Corridor, for 2006-2015

Port Groups	SFEC Fisheries Study Corridor		Percent of Total Port Value	
	Average of Revenue from within SFEC Fisheries Study Corridor	Average of Landings Inside from within SFEC Fisheries Study Corridor	% of Port Revenue	% of Port Landings
Montauk	1,443,318	928,434	8.46	7.69
<i>Rhode Island</i>				
Little Compton	170,245	137,405	7.68	7.2
New Shoreham	45,301	26,320	21.16	23.50
Tiverton	211,338	184,095	17.99	12.88

Source: NOAA Fisheries, 2017.

Notes:

Ports are listed alphabetically within each state.

Landings are reported in pounds.

Revenue is in USD deflated to January 2014; they are real (detrended and not nominal dollars; DePiper, 2017, pers. comm.).

“Total” revenue and landings values refer to all fishing activity as reported by VTRs for fisheries active in state and federal waters from Maine to North Carolina.

3.2 Vessel Monitoring System Data

VMS data can be used to provide additional qualitative information on fishing location for a particular gear type or target species. The methods used by NOAA Fisheries to rank vessel density into relative “low” to “very high” fishing intensity categories are described in detail in the spatial metadata (NOAA Fisheries, 2017a). In addition to discussing VMS intensity as presented on Figures Y-3 through Y-9, this section also incorporates information about some fisheries as described in RIDEM (2017), which were highlighted as the four fisheries that are the most exposed to the combined WEAs: fisheries in the sea scallop, squid/mackerel/butterfish, monkfish, and northeast multispecies FMPs.

The VMS data map of vessel intensity for the **groundfish** (large-mesh multispecies or northeast multispecies) fleet for the years 2011 to 2014 indicates there is high density of fishing vessels along portions of the SFEC, and medium-low and low density in the SFWF, as indicated on Figure Y-3. In addition, RIDEM (2017) indicated that there is medium-low and low relative density of fishing activity near the SFEC (RIDEM, 2017; Figure 88). Over the years 2011 to 2016, the total nonconfidential landings revenue for groundfish activity in the RI-MA WEA overall was over \$1 million (RIDEM, 2017; Table 23).

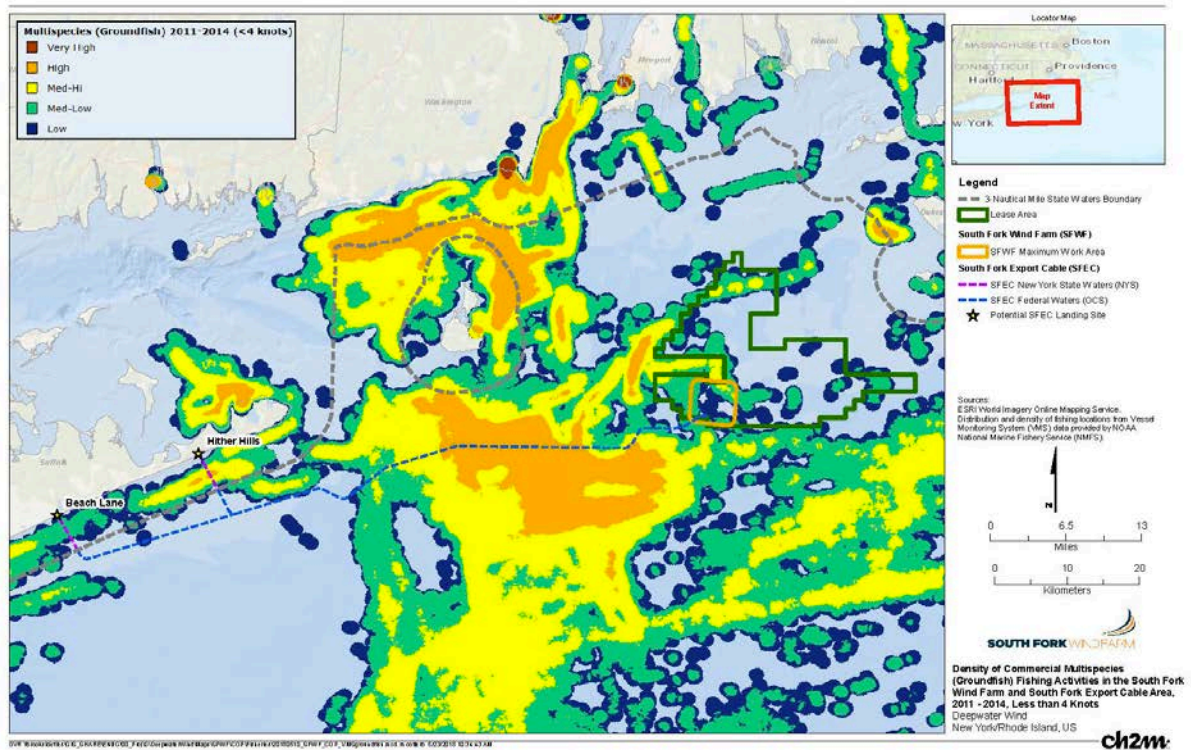


Figure Y-3. VMS Map of Vessel Intensity for Large-mesh Multispecies Fishing, 2011 to 2014.

The map of vessel intensity for the **Atlantic herring** fleet for the years 2011-2014 indicates medium-high and medium-low intensity in areas along the SFEC route, and no vessel activity within the SFWF. There are medium-low intensity spots at discrete locations at the two potential landing sites (Figure Y-4). There is no map available of smoothed federal fishing activity for Atlantic herring from RIDEM (2017).

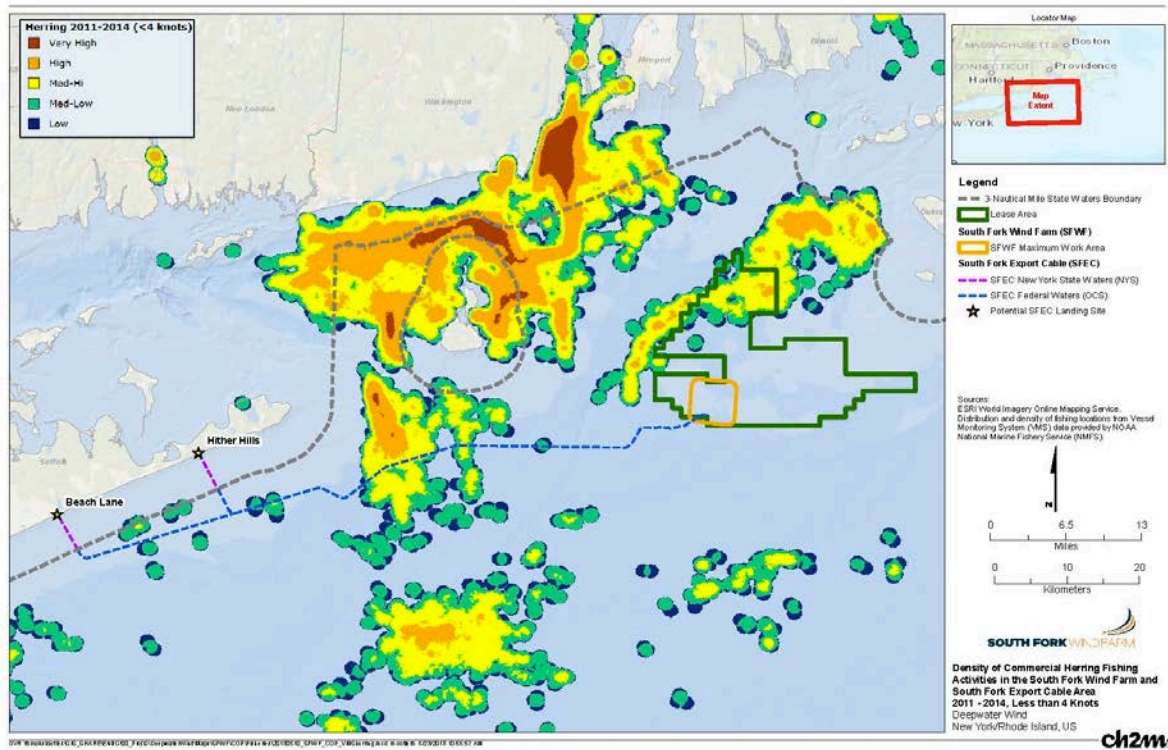


Figure Y-4. VMS Map of Vessel Intensity for Atlantic Herring Fishing, 2011 to 2014.

The VMS data for vessels targeting **pelagic species (herring/mackerel/squid)** during 2015 to 2016 suggest that activity targeting these species can be highly concentrated, with very high and high relative vessel density overlapping both potential landing site approaches of the SFEC-NYS (Figure Y-5). There are also smaller areas of high and very high relative vessel density at two areas along the SFEC-OCS. These data are for several target species combined for a 2-year period, so it is not possible to separate which species is targeted in a specific location from this map. In addition, RIDEM (2017) indicated that there is low relative density of fishing activity for the SFWF, the SFEC-OCS, and the SFEC-NYS for the squid/mackerel/butterfish FMP (Figure 142) over the years 2011-2016. The total nonconfidential landings revenue for fishing under the squid/mackerel/butterfish FMP in the RI-MA WEA overall was over \$397,000 (RIDEM, 2017; Table 23).

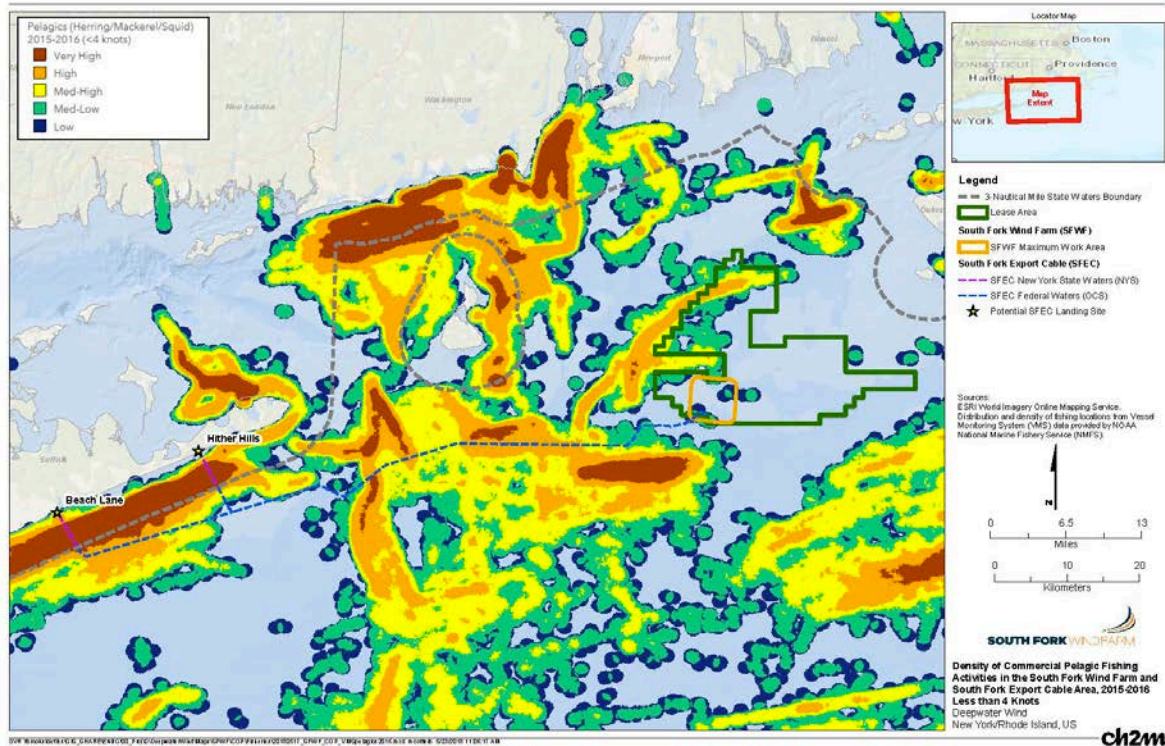


Figure Y-5. VMS Map of Vessel Intensity for Pelagic Species (Herring/Mackerel/Squid) Fishing, 2015 to 2016.

The map of vessel intensity for the **monkfish** fleet for the years 2011 to 2014 indicates very high and high intensity activity in areas along the SFEC route (Figure Y-6). It also indicates high and medium-high activity within the SFWF. In addition, RIDEM (2017) indicate there is very high and high relative density of fishing activity near the SFEC (Figure 87). Over the years 2011 to 2016, the total nonconfidential landings revenue for monkfish activity in the RI-MA WEA overall was more than \$1.27 million (RIDEM, 2017, Table 23).

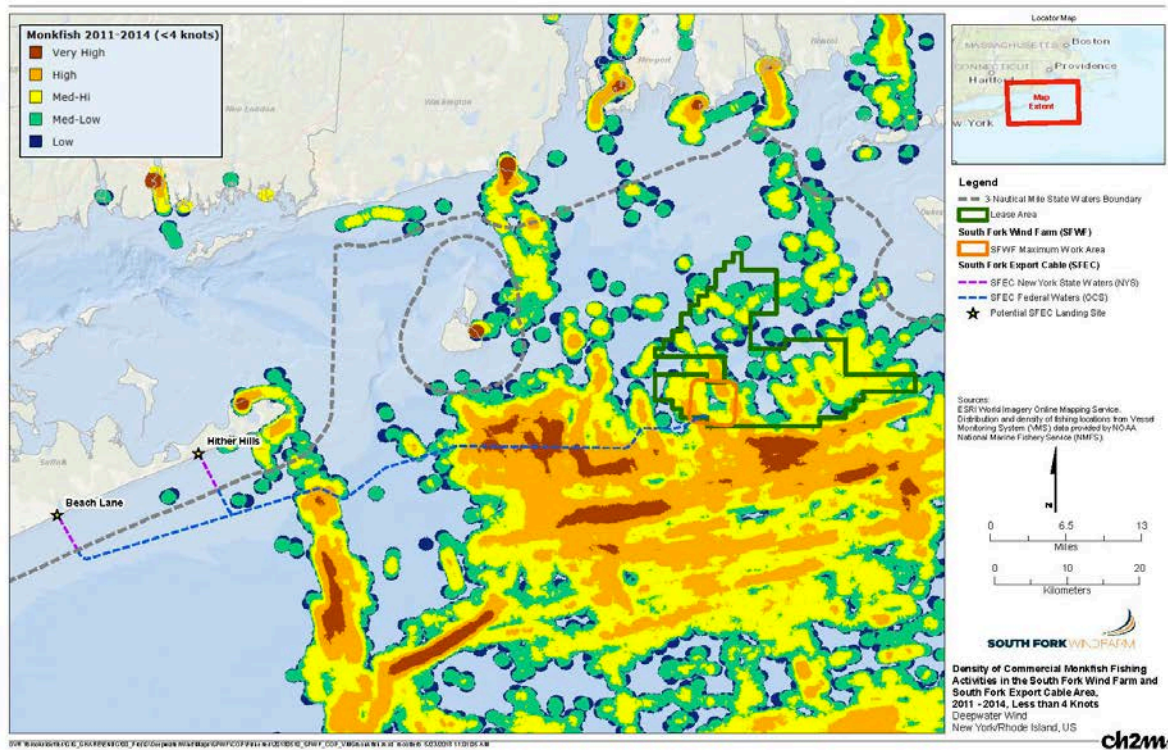


Figure Y-6. VMS Map of Vessel Intensity for Monkfish Fishing, 2011 to 2014.

The map of vessel intensity for vessels fishing under a **surfclam/ocean quahog** permit, for the years 2012 to 2014, shows medium-high and high intensity relative vessel activity near a portion of the SFEC route (Figure Y-7). There is a single location of low intensity within the SFWF, which suggests over that period, there was little surfclam/ocean quahog activity in the SFWF. RIDEM (2017) indicated that for surfclam/ocean quahog fishing with dredge gear (Figure 59), there is some scattered medium and medium-low smoothed relative density of fishing activity in the SFWF and SFEC-OCS, and scattered low relative density in the SFEC-NYS, over the years 2011 to 2016. Landings revenue for surfclam/ocean quahog dredge activity in the RI-MA WEA overall was confidential for the years 2011-2016 (RIDEM, 2017; Table 16).

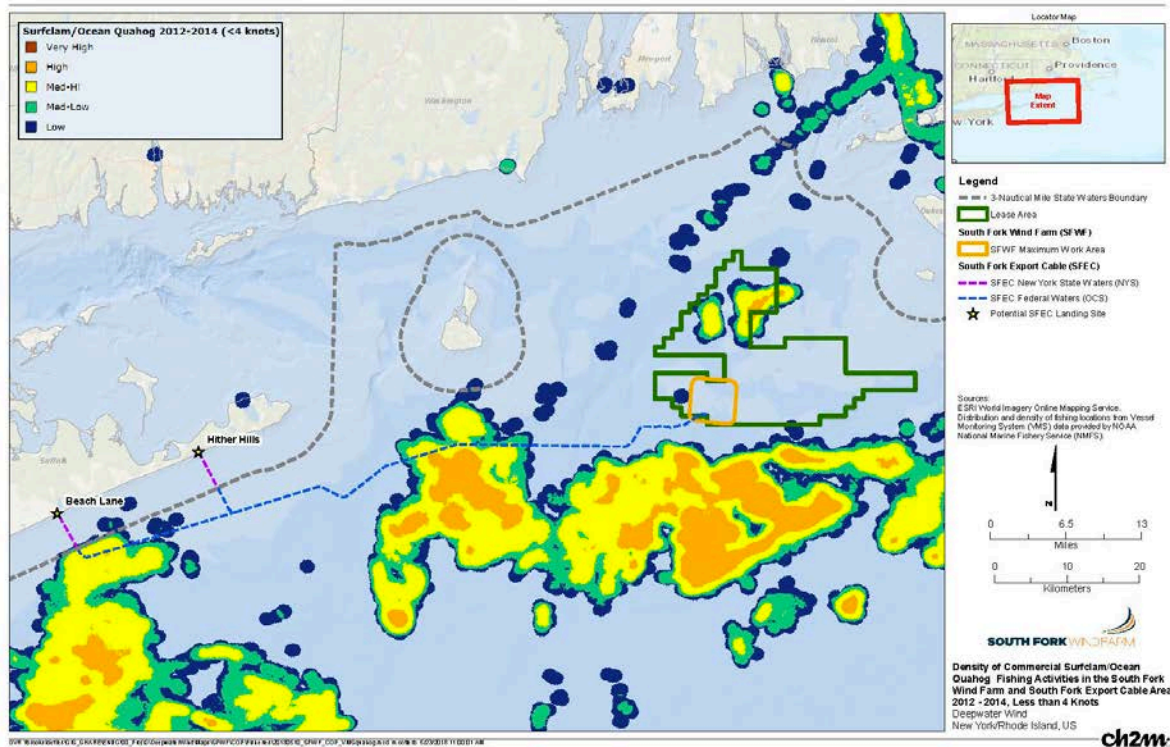


Figure Y-7. VMS Map of Vessel Intensity for Surfclam/Ocean Quahog Fishing, 2012 to 2014.

The intensity map for vessels fishing for **sea scallops** for the years 2011 to 2014 indicates a section of high and medium-high intensity on the edge of the SFWF, with most of the SFWF footprint empty of vessel traffic (Figure Y-8). In contrast, the eastern-portion of the SFEC route crosses broad areas of high and medium-high scallop activity. The western portion of the SFEC traverses the edge of an area of high and medium-high scallop relative fishing intensity. In addition, RIDEM (2017) indicate there are patches of very high and high relative density of fishing activity near the SFEC (Figure 95). Over the years 2011 to 2016, the total nonconfidential landings revenue for sea scallop FMP activity in the RI-MA WEA overall was more than \$2.9 million (RIDEM, 2017, Table 23).

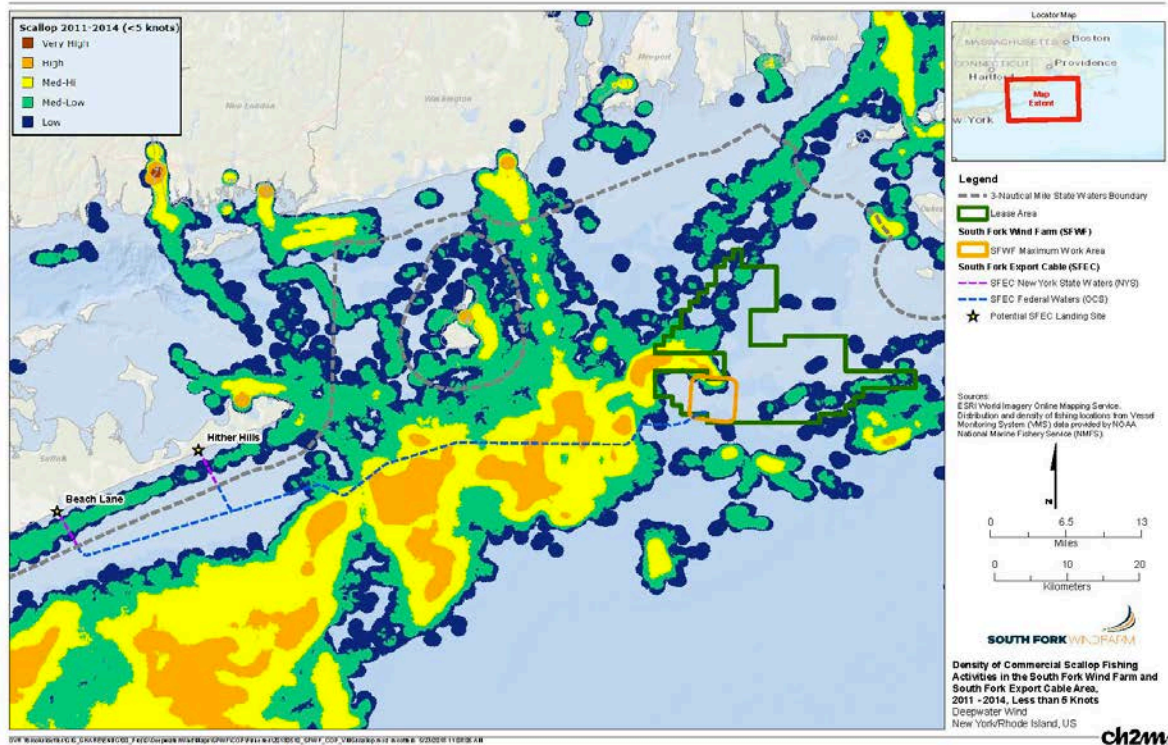


Figure Y-8. VMS Map of Vessel Intensity for Sea Scallop Fishing, 2011 to 2014.

The intensity map for vessels fishing for **squid** in the year 2014 indicates no fishing for that year occurred in the SFWF (Figure Y-9). There is some high and medium-high density in a portion of the SFEC route, with the higher intensity mostly to the north of the submarine export cable route. The two potential SFEC export cable landfall locations appear to cross areas where vessels fished for squid in 2014. As noted previously, RIDEM (2017) indicated that there is low relative density of fishing activity for the SFWF, the SFEC-OCS, and the SFEC-NYS for the squid/mackerel/butterfish FMP (Figure 142) over the years 2011-2016. The total nonconfidential landings revenue for fishing under the squid/mackerel/butterfish FMP in the RI-MA WEA overall was over \$397,000 (RIDEM, 2017; Table 23).

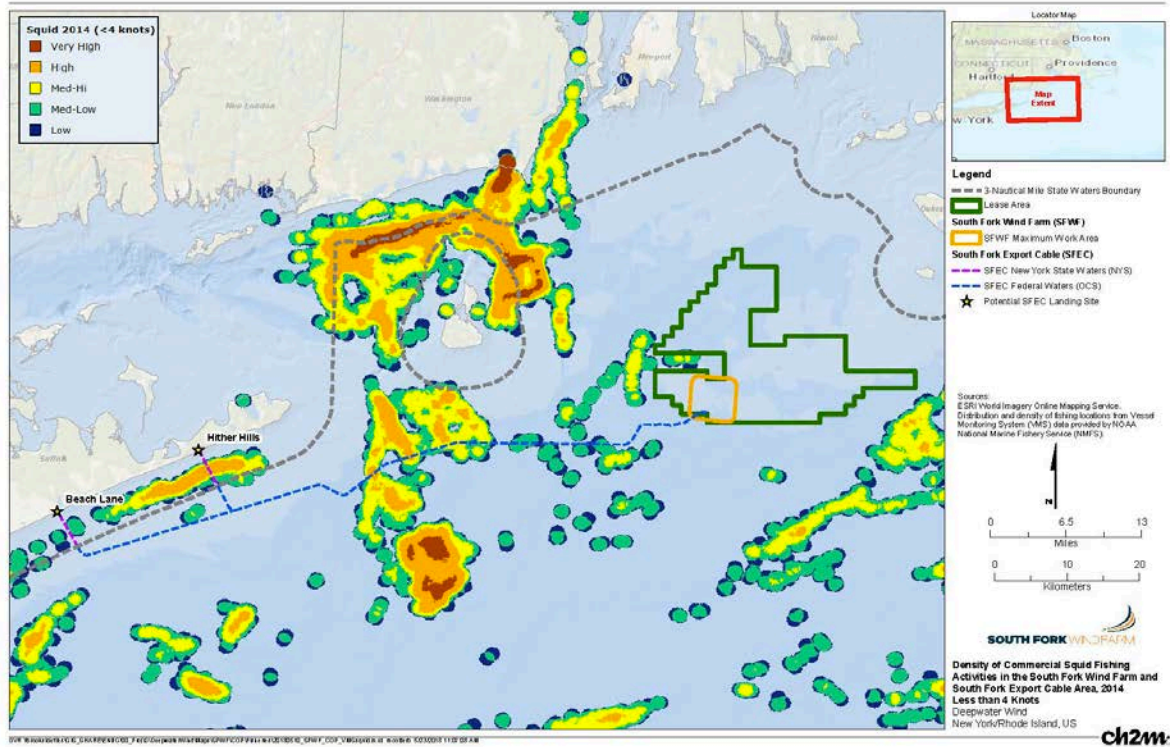


Figure Y-9. VMS Map of Vessel Intensity for Squid Fishing, 2014.

3.3 Rhode Island Ocean Special Area Management Plan

According to Ocean SAMP documentation, the mobile fishing gear data collected for the Ocean SAMP indicate that bottom trawling occurs south and southeast of Block Island, while scallop dredges are most active in the areas furthest offshore in the Ocean SAMP, south and southwest of Block Island, and in the Cox Ledge area (Figure Y-10). The mobile gear data set corroborates the VMS data, in that bottom trawl and scallop dredge vessels (targeting monkfish, groundfish, scallops, and surfclam/ocean quahog) fish in areas surrounding the SFEC.

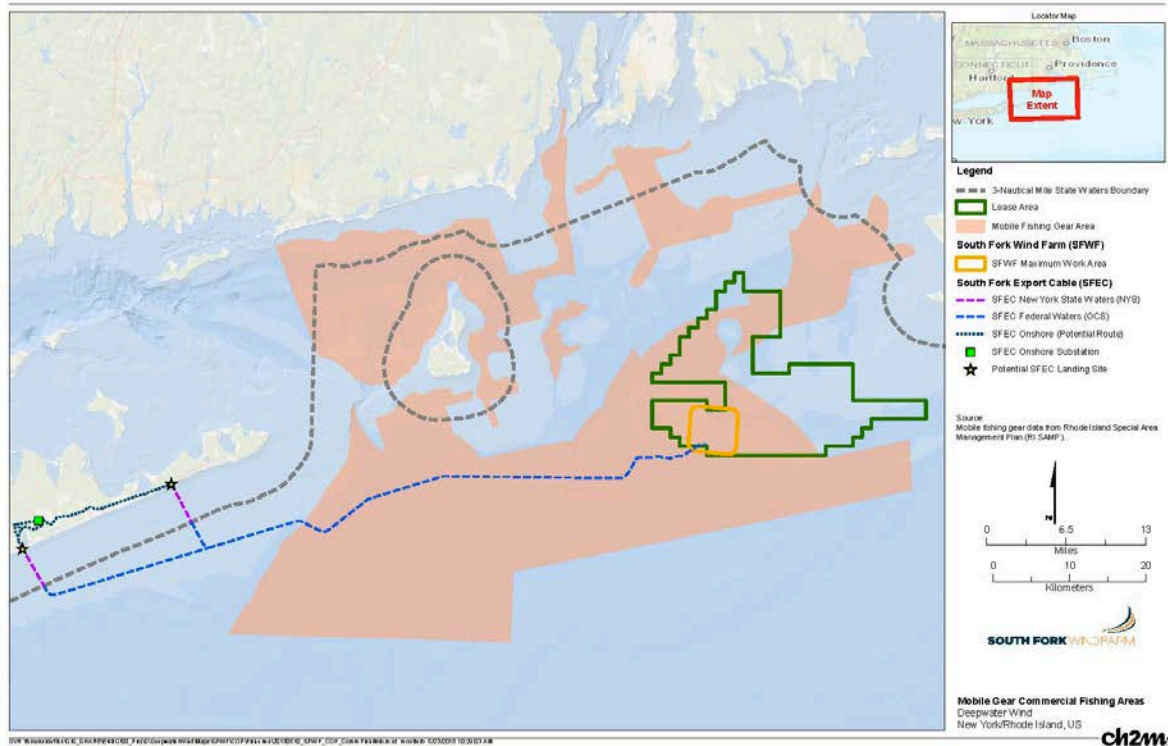


Figure Y-10. Mobile Gear Commercial Fishing Location Data from the Ocean SAMP

The fixed gear data collected for the Ocean SAMP indicate areas used at some point during the fishing year by fixed-gear fishermen (Figure Y-11). The description of this data set in the Ocean SAMP report indicates that an area of particular importance is Cox Ledge, used for fixed and mobile gears and by recreational fishermen.

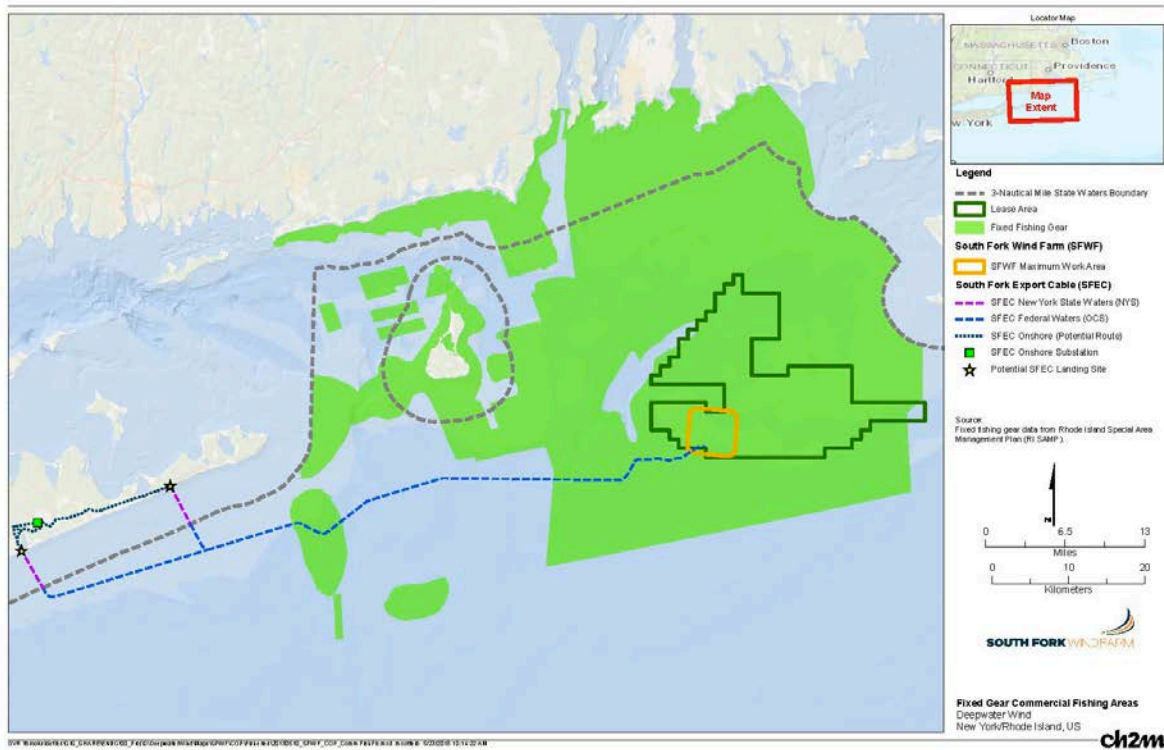


Figure Y-11. Fixed Gear Commercial Fishing Data from the Ocean SAMP

The CRMC collected spatial data from Rhode Island for-hire recreational fishermen, who noted on a map the locations of particular value to their industry. On Figure Y-12, the SFWF is mapped with the CRMC recreational fishing data. The map indicates that recreational fishing occurs in the SFWF and that there is some recreational fishing reported near the eastern portion of the SFEC-OCS.

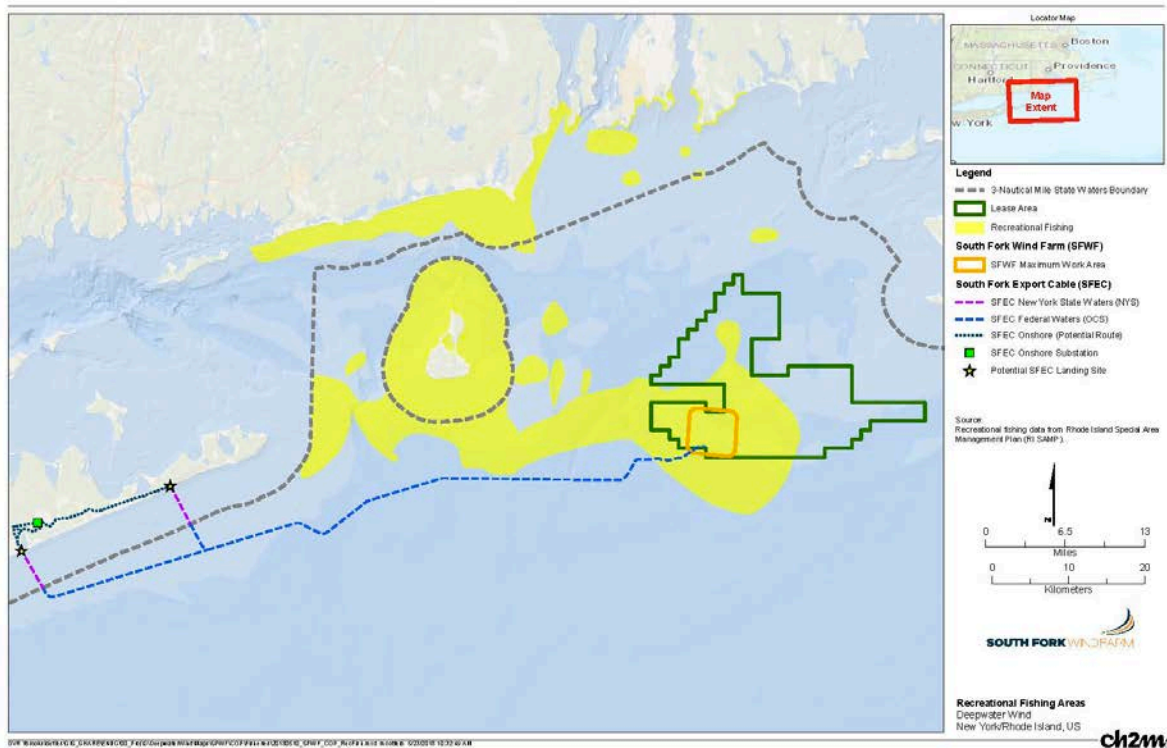


Figure Y-12. Recreational Fishing Data from the Ocean SAMP

Note: Data indicate fishing grounds used by Rhode Island recreational fishermen. Data were developed from September 2008 to January 2009, and went through a final review by fishermen in September to October 2009

3.4 New York State-DEC Vessel Trip Report Data

Commercial fisheries in New York State waters may be categorized similarly to those in federal waters. The largest fishery by gear category in statistical areas 167 and 168 for the years 2007 to 2016 used gillnets, where an average of 210,000 pounds were landed per year in areas 167 and 168, representing about 32 percent of all fish caught by gillnet in all New York State waters. The next largest fishery in the two statistical areas was fished using hook-and-line gear, where about 70,000 pounds on average were landed each year; this represents about 15.5 percent of all hook and line fishing activity in New York State waters. Table Y-11 provides an overview of the gears used in New York State waters (ACCSP, 2017).

Table Y-11. Categories of Gear Used by State-permitted Vessels in New York State Waters during 2007-2016

Gear Category	Average Pounds Landed per Year (2007-2016)		Total Pounds Landed (2007-2016)		Total Pounds Landed in New York State Waters (2007-2016)	% Pounds Landed out of Total New York State Waters, by Gear	
	167	168	167	168		167	168
Gill Nets	196,508	13,262	1,965,083	39,785	6,312,779	31.1	0.6
By Hand, Diving Gear	761		6,847		28,415	24.1	
Hook and Line	63,657	6,238	636,566	24,951	4,285,654	14.9	0.6
Other Trawls	8,774	235	35,095	469	253,094	13.9	0.2
Otter Trawls	33,512		301,604		5,882,708	5.1	
Dredge	46,786		140,358		3,762,962	3.7	
By Hand, No Diving Gear	4,548		40,929		3,294,940	1.2	
Pots and Traps	13,367	2,392	133,673	7,175	12,011,773	1.1	0.1
Not Coded	1,187		3,562		44,066,164	0.0	

Source: ACCSP, 2017.

Notes:

Values reflect pounds landed caught in statistical subareas relevant to SFWF.

Confidential information was redacted from the ACCSP data set.

Blank cells indicate those years when fishing area 168 had no reported landings or redacted confidential landings.

Average pounds landed were calculated as an arithmetic mean, using the sum of pounds landed and the count of distinct years, ignoring zero years.

Over the last 10 years (2007 to 2016), commercial fishermen permitted to fish in New York State waters landed a wide range of species from state waters. Important fisheries in New York State waters near the SFEC include striped bass, longfin inshore squid, skates, bluefish, American lobster, monkfish, horseshoe crab, summer flounder, and scup. For a complete summary of all species landed in these statistical subareas, see Table Y-12. The majority of species and landings came from area 167. Area 168 was an important fishing area for striped bass and American lobster (Figure Y-2). Together these two statistical areas represent important state fishing grounds for a variety of species. The greatest average pounds landed for the years 2007 to 2016 in these statistical areas include striped bass (total approximately 205,000 pounds); longfin inshore squid (approximately 43,000 pounds); skates (approximately 26,000 pounds); bluefish (about 23,000 pounds); and American lobster (approximately 13,000 pounds).

Table Y-12. Species Landed by State-only Permitted Vessels in New York State Waters

Species	Average Pounds Landed per Year (2007-2016)		Total Pounds Landed (2007-2016)		Total Pounds Landed in New York State Waters (2007-2016)	% Pounds Landed out of Total New York State Waters, by Species	
	167	168	167	168		167	168
Bass, Striped	189,547	15,017	1,895,475	60,067	6,581,517	28.8	0.9
Squid, Longfin Inshore	43,472		173,886		931,649	18.7	0.0
Skates	25,677		389,908		598,013	65.2	0.0
Bluefish	23,510		211,589		3,346,004	6.3	0.0
Lobster, American	10,815	2,317	54,073	11,586	5,194,787	1.0	0.2
Monkfish	8,272		66,173		95,407	69.4	0.0
Crab, Horseshoe	6,394		51,152		3,959,553	1.3	0.0
Flounder, Summer	6,127		55,139		1,698,266	3.2	0.0
Scup	6,052		54,470		3,692,106	1.5	0.0
Bass, Black Sea	5,795		52,158		505,565	10.3	0.0
Crabs, Spider	3,475		10,425		209,664	5.0	0.0
Dogfish, Smooth	1,666		13,332		284,575	4.7	0.0
Crab, Blue	1,603		8,014		4,966,679	0.2	0.0
Albacore	1,412		5,646		9,228	61.2	0.0
Dogfish, Spiny	1,274		6,372		28,936	22.0	0.0
Tautog	1,167		10,500		556,250	1.9	0.0
Oyster, Eastern	1,112		1,112		1,356,246	0.1	0.0
Bonito, Atlantic	1,100		8,801		13,216	66.6	0.0
Butterfish	968		4,842		459,592	1.1	0.0
Flounder, Winter	918		7,340		45,648	16.1	0.0
Crab, Hermit	720		2,881		106,162	2.7	0.0
Herring, Atlantic	697		2,092		88,456	2.4	0.0
Crab, Jonah	679		5,433		1,322,834	0.4	0.0
Crab, Atlantic Rock	611		2,443		292,984	0.8	0.0
Tunny, Little	602		5,419		12,338	43.9	0.0

Table Y-12. Species Landed by State-only Permitted Vessels in New York State Waters

Species	Average Pounds Landed per Year (2007-2016)		Total Pounds Landed (2007-2016)		Total Pounds Landed in New York State Waters (2007-2016)	% Pounds Landed out of Total New York State Waters, by Species	
	167	168	167	168		167	168
Plaice, American	574		2,295		8,783	26.1	0.0
Windowpane	518		3,625		153,889	2.4	0.0
Weakfish	407		3,659		134,565	2.7	0.0
Crab, Green	372		1,115		804,964	0.1	0.0
Cod, Atlantic	259		2,334		7,607	30.7	0.0
Mackerel, Spanish	246		1,232		7,033	17.5	0.0
Shad, American	232		1,158		69,825	1.7	0.0
Shark, Thresher	203		813		5,542	14.7	0.0
Hake, Red	185		1,292		14,451	8.9	0.0
Mackerel, Atlantic	179		717		11,069	6.5	0.0
Eel, American	127		636		159,040	0.4	0.0
Triggerfishes	115		922		3,177	29.0	0.0
Hake, Silver	109		435		7,752	5.6	0.0

Source: ACCSP, 2017.

Notes:

Values reflect average pounds landed by species and by statistical subarea.

Confidential information was redacted from the requested data set.

Species are sorted by average pounds caught each year in statistical subarea 167.

Blank cells indicate those years when fishing area 168 had no reported landings or redacted confidential landings.

Average pounds landed were calculated as an arithmetic mean, using the sum of pounds landed and the count of distinct years, ignoring zero years.

The top ports where fishermen landed their catch after fishing in statistical subareas 167 and 168 were Moriches, Shinnecock Indian Reservation, and Montauk. While Moriches was the landing port for the greatest average pounds and for the greatest proportion of landed catch, Montauk had the greatest total number of active fishing permits during this period over all ports where catch from statistical areas 167 and 168 were landed (Table Y-13).

Landings in Moriches from statistical subarea 167 during this period represent about 53.5 percent of all landed catch (in terms of pounds) for fish caught in state waters that were landed in Moriches. When a port is attributed to Suffolk County, that port was unknown or not identified, but was located within Suffolk County. Ports labeled unknown were either expressly reported as unknown, or no port was reported at all (Myers, 2017, pers. comm.).

Table Y-13. Landing Ports Used by State-only Permitted Vessels in New York State Waters during 2007-2016

Landing Port	Average Pounds Landed by Subarea (2007-2016)		Total Number of Active Fishing Permits		Total Pounds Landed by Subarea (2007-2016)		Total Pounds Landed in New York State Waters	% of Total Catch from State Subarea, by Landing Port	
	167	168	167	168	167	168		167	168
Moriches	66,166		22		529,325		988,550	53.5	-
Montauk	46,090	2,820	113	7	414,808	8,459	1,715,253	24.2	0.5
Hampton Bays	18,699		19		149,590		899,467	16.6	-
Shinnecock Indian Reservation	55,646		46		445,171		3,960,957	11.2	-
Amagansett	13,702		20		109,615		1,005,619	10.9	-
East Hampton	10,029		24		80,232		2,172,908	3.7	-
Babylon	3,765		4		15,059		611,868	2.5	-
Unknown	169,555	13,827	375	46	1,356,439	69,134	59,248,007	2.3	0.1
East Moriches	1,362		3		4,086		274,547	1.5	-
Suffolk (County)	2,108		3		6,325		560,990	1.1	-

Source: ACCSP, 2017.

Notes:

Values reflect pounds landed caught in statistical subareas relevant to SFWF.

Confidential information was redacted from the ACCSP data set.

Blank cells indicate those years when fishing area 168 had no reported landings or redacted confidential landings.

Average pounds landed were calculated as an arithmetic mean, using the sum of pounds landed and the count of distinct years, ignoring zero years.

3.5 Marine Recreational Information Program Data

The MRIP integrates a coastwide intercept survey throughout the year to estimate the recreational fishing effort. The following section presents data provided by NOAA Fisheries through a custom data request (Steinback, 2017, pers. comm.) and data accessed from the MRIP online data portal (NOAA Fisheries, 2017b). MRIP data indicate that recreational angler trips in New England and Mid-Atlantic states (Figure Y-13) increase in relative seasonal intensity from May through October, peaking in July and August, for all known fishing locations (NOAA Fisheries, 2017b).

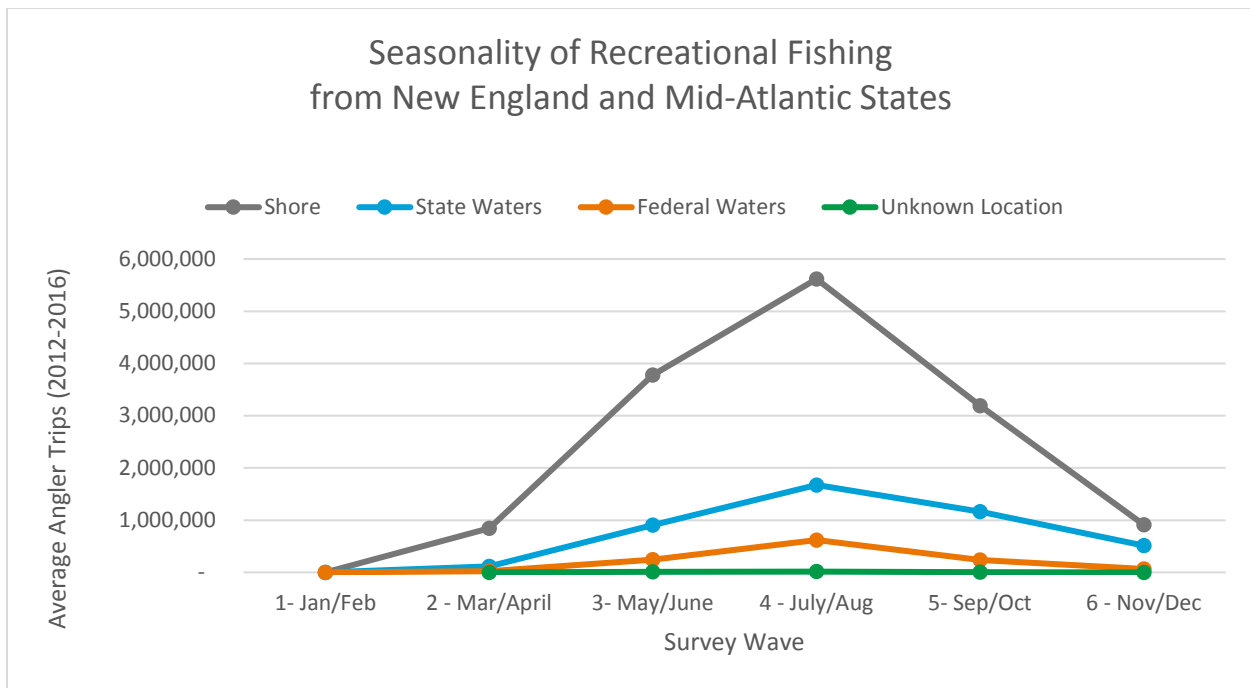


Figure Y-13. Average of Estimated Fishing Effort by Recreational Anglers for the Years 2012 to 2016 in New England and Mid-Atlantic States

Note: Angler-trip survey data include trips where the fishing location is not recorded, noted as “unknown location” in the figure.

Source: NOAA Fisheries, 2017b.

MRIP data are used to estimate relative angler effort for those states with coastlines relatively close to the SFWF. Angler effort is categorized by mode (for-hire or charter, private, shore) and by location (federal waters, state waters, and shore side). There is no location information associated with MRIP data; thus, there is no way to determine where fishing trips took place in state or federal waters. These values, therefore, are meant to provide some indication of angler effort and seasonal changes in activity.

The MRIP survey methods were designed to estimate recreational fishing effort aggregated at the state level. For this reason, standard error for estimates disaggregated to smaller units than the state level (i.e., to county, port, or community) are very high and indicate weak estimates for fishing activity. Based on estimates of recreational angler effort disaggregated to the state level, New York State has the greatest average estimated number of angler trips each year (about 3.8 million) for the years 2012 to 2016, most of which visit state waters (Table Y-14). Of the recreational trips out of New York State that visited state waters, 49 percent used private fishing vessels, and 41 percent were shoreside fishing trips (Table Y-15). Similarly, out of approximately 2.7 million recreational fishing trips leaving from Massachusetts during this period, most trips were to fish in state waters. Of the trips to state waters leaving from Massachusetts, 52 percent were on a private fishing vessel, and 43 percent were shoreside fishing trips. For Massachusetts, New York, and Rhode Island, the majority of trips to federal waters were on charter vessels, as opposed to private vessels; Connecticut recreational fishermen mostly remained in state waters for recreational fishing trips.

Table Y-14. Average Fishing Effort for Recreational Fishing by Mode (Charter Vessel, Private, and Shore Fishing) and by Fishing Area based on MRIP Data (2012-2016)

State	Fishing Area	Average Fishing Effort (Value/5 years)			
		Charter	Private	Shore	TOTAL
Connecticut					
	Federal	3,503	21,864	-	25,368
	State	50,191	820,651	480,573	1,351,416
	Unknown	424	-	-	424
Totals		54,119	842,516	480,573	1,377,208
Massachusetts					
	Federal	51,203	122,283	-	173,486
	State	127,790	1,342,424	1,097,498	2,567,712
	Unknown	3,931	-	-	3,931
Totals		182,924	1,464,707	1,097,498	2,745,129
New York					
	Federal	75,982	121,716	-	197,698
	State	354,288	1,780,617	1,482,542	3,617,447
	Unknown	9,465	-	-	9,465
New York Totals		439,734	1,902,333	1,482,542	3,824,609
Rhode Island					
	Federal	14,340	40,021	-	54,361
	State	32,333	452,876	548,241	1,033,449
	Unknown	764	-	-	764
Rhode Island Totals		47,437	492,897	548,241	1,088,575

Notes:

Federal waters (greater than 3 miles [4.8 kilometers, 2.6 nautical miles]), state waters (less than 3 miles [4.8 kilometers, 2.6 nautical miles]).

Unknown location indicates missing data in trip report.

Trips to federal waters cannot take place on-shore; therefore, the table cell is marked with "-" because there is no number of trips available.

Trips to state waters include trips that take place onshore, and in charter or private fishing vessels.

Table Y-15. Percent of Fishing Effort by Mode and Fishing Area, Out of State Totals based on MRIP Data (2012-2016)

State	Fishing Area	% of Total State Angler Trips (based on average values)		
		Charter	Private	Shore
Connecticut				
	Federal	0	2	0
	State	4	60	35
	Unknown	0	0	0
Connecticut Totals		4	61	35
Massachusetts				
	Federal	30	70	0
	State	5	52	43
	Unknown	100	0	0
Massachusetts Totals		7	53	40
New York				
	Federal	38	62	0
	State	10	49	41
	Unknown	100	0	0
New York Totals		11	50	39
Rhode Island				
	Federal	26	74	0
	State	3	44	53
	Unknown	100	0	0
Rhode Island Totals		4	45	50

Notes:

Trips to federal waters cannot take place onshore; therefore, shore trips comprise 0% of all trips to federal waters.

In Table Y-16, MRIP estimates are disaggregated to the county level. In consultation with NOAA Fisheries economists, it is important to note the limitations of the data. Estimates are more accurate at the state level for trips to state and federal waters, and at the county level for trips to state waters. Because of the smaller number of trips to federal waters, estimates of trips to federal waters disaggregated to the county level are less reliable (Steinback, 2017, pers. comm.). Angler-effort estimates, disaggregated to the county level, indicate that about 3.5 percent of trips are taken to federal waters each year out of Suffolk County, compared to about 65 percent of trips to state waters. In contrast, over 90 percent of Connecticut, Massachusetts, and Rhode Island trips were to fish in state waters instead of in federal waters. For all states, MRIP data disaggregated to the state and county level indicate that recreational fisheries are most active in state waters.

Table Y-16. Average Angler-Trip Counts Disaggregated to State and County Level based on MRIP Data (2012-2016)

State and County	Average Trip Counts Over 5-year Period (2012-2016)				Percent of Trips per State Totals	
	To Federal Waters	To State Waters	To Unknown Waters	Total Trips	Percent to Federal Waters Out of State Total Trips	Percent to State Waters Out of State Total Trips
Connecticut						
Fairfield	-	128,405	-	128,405	-	9.3
Middlesex	7,781	338,493	-	346,274	0.6	24.6
New Haven	-	205,213	-	205,213	-	14.9
New London	15,497	676,566	-	692,063	1.1	49.1
Unknown	2,089	2,740	424	5,253	0.2	0.2
Connecticut Total	25,368	1,351,416	424	1,377,208	1.8	98.1
Massachusetts						
Barnstable	19,156	956,852	-	976,009	0.7	34.9
Bristol	8,938	249,847	-	258,784	0.3	9.1
Dukes	865	86,600	-	87,465	0.0	3.2
Essex	77,326	582,702	-	660,028	2.8	21.2
Nantucket	2,201	182,920	-	185,121	0.1	6.7
Norfolk	10,656	77,163	-	87,819	0.4	2.8
Plymouth	48,749	389,022	-	437,772	1.8	14.2
Suffolk	3,622	39,924	-	43,547	0.1	1.5
Unknown	1,972	2,682	3,931	8,585	0.1	0.1
Massachusetts Total	173,486	2,567,712	3,931	2,745,129	6.3	93.5
New York						
Bronx	-	7,301	-	7,301	-	0.2
Kings	18,660	238,290	-	256,950	0.5	6.2
Nassau	18,707	631,965	-	650,673	0.5	16.5
New York	-	2,351	-	2,351	-	0.1
Queens	-	101,419	-	101,419	-	2.7
Richmond	6,447	41,740	-	48,187	0.2	1.1
Suffolk	132,833	2,499,898	-	2,632,730	3.5	65.4
Unknown	20,649	8,510	9,465	38,624	0.5	0.2
Westchester	402	85,973	-	86,375	0.0	2.2
New York Total	197,698	3,617,447	9,465	3,824,609	5.2	94.6

Table Y-16. Average Angler-Trip Counts Disaggregated to State and County Level based on MRIP Data (2012-2016)

State and County	Average Trip Counts Over 5-year Period (2012-2016)				Percent of Trips per State Totals	
	To Federal Waters	To State Waters	To Unknown Waters	Total Trips	Percent to Federal Waters Out of State Total Trips	Percent to State Waters Out of State Total Trips
Rhode Island						
Bristol	1,060	87,166	-	88,226	0.1	8.0
Kent	23	81,250	-	81,273	0.0	7.5
Newport	234	259,944	-	260,178	0.0	23.9
Providence	-	47,980	-	47,980	-	4.4
Unknown	2,926	5,331	764	9,021	0.3	0.5
Washington	50,118	551,779	-	601,897	4.6	50.7
Rhode Island Total	54,361	1,033,449	764	1,088,575	5.0	94.9

Notes:

Percent totals may not sum to 100% because of trips to unknown fishing locations.

Those counties with coastline facing the SFWF area are highlighted in blue.

A “-” indicates no data available for that fishing location.

Summary

This technical report provides detailed information on the available data used to characterize fisheries in the SFWF COP. Publicly available federal VTR and VMS data, as provided through queries to NOAA Fisheries and downloaded from the Northeast Ocean Data Portal (Northeast Ocean Data, 2018), respectively, are used to characterize commercial fishing activity in the SFWF and SFEC for federal waters. Fishing activity is described by the gear used, the targeted species, and the landings data from trips to the SFWF and SFEC. The results of an analysis by RIDEM (2017) provides additional interpretation of VMS data, connecting the federal VTR and VMS data sets to calculate revenue and landings from trips that occurred within WEAs.

In addition, New York State VTR data, as provided by the ACCSP, provides information not included in the federal fisheries data for activity in New York State waters that intersect the SFEC-NYS. In addition to the data requested from federal agencies, the Ocean SAMP data are a useful reference for the federal data that corroborate or further define the commercial and recreational fishing data in the SFWF and SFEC. The Ocean SAMP data provide some spatial information on recreational fishing activity, which is otherwise characterized by recreational angler-effort estimated by NOAA's MRIP data. Ongoing stakeholder outreach and engagement generates updated data on fisheries activities and can be compared to the publicly available data to further assess fisheries activities in the SFWF and SFEC, and refine expected potential impacts from SFWF and SFEC activities.

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