# Table of Contents

I. EXECUTIVE SUMMARY ......................................................................................................................... 5

II. PURPOSE .................................................................................................................................................. 8

III. BACKGROUND ...................................................................................................................................... 8
   A. Statutory Authority and Direction: ................................................................................................. 8
   B. ACPARS Methodology and Standards: ....................................................................................... 10
   C. Study Area: .................................................................................................................................... 10
   D. Previous Analyses: ...................................................................................................................... 11
   E. Definition of Terms: ..................................................................................................................... 12
   F. Abbreviations and Acronyms: ..................................................................................................... 12
   G. Outreach Process: ....................................................................................................................... 13

IV. THE STUDY ........................................................................................................................................... 15
   A. Existing Regulations & Pilotage: ................................................................................................. 15
   B. Existing Routing Measures: ........................................................................................................ 17
   C. Assessing Existing and Future Waterway Uses: ...................................................................... 17
   D. Vessel Traffic Pattern Analysis: ............................................................................................... 32
   E. Weather Conditions: .................................................................................................................. 36
   F. Navigational Difficulty: ............................................................................................................... 37
   G. Military and National Security: ................................................................................................ 37
   H. Aids to Navigation: ...................................................................................................................... 42
   I. Radar: ........................................................................................................................................... 43
   J. Public Comments: ....................................................................................................................... 44

V. DISCUSSION .......................................................................................................................................... 49
   A. Data: .............................................................................................................................................. 49
   B. Comments: .................................................................................................................................. 55
   C. Marine Planning Guideline Assessment: .................................................................................... 55

VI. ALTERNATIVES ................................................................................................................................... 59

VII. CONCLUSION .................................................................................................................................... 60
List of Figures

Figure 1 NNYBPARS Proposed Actions ................................................................. 7
Figure 2 NNYBPARS Study Area ........................................................................... 11
Figure 3 Unique Vessel Count by Type ................................................................. 19
Figure 4 Vessels Route Density 2019 (All vessel types) ....................................... 20
Figure 5 September 2019 Vessel Tracks ............................................................... 21
Figure 6 2019 VMS Transits in NNYBPARS Study Area ..................................... 22
Figure 7 BOEM New York Bight Final WEA Map, 29Mar21 ................................ 24
Figure 8 BOEM Fisheries Relative Use Index ....................................................... 25
Figure 9 Empire Wind 1 and 2 Lease Areas (pictured in dark blue) ....................... 26
Figure 10 Notional Cable Placement from OCS-A 0512 ....................................... 27
Figure 11 Maritime Incident Data JAN 2010 - JUN 2020 in NNYBPARS Study Area 32
Figure 12 2019 Cargo AIS Data ........................................................................... 33
Figure 13 2019 Tug Tow AIS Data ....................................................................... 34
Figure 14 2017 Fishing AIS Data ......................................................................... 35
Figure 15 2019 All Vessels AIS Data, Vessels at Anchor in vicinity of Precautionary Area 36
Figure 16 Scatter Plot of SAR Cases within NNYBPARS Study Area, 2009-2019 40
Figure 17 Surface Area Grid for Narragansett Bay Operating Area ...................... 41
Figure 18 Air Grid for Narragansett Bay Operating Area ...................................... 42
Figure 19 BOEM Wind Lease & Wind Energy Areas as of March 29, 2021 ......... 49
Figure 20 Location Conflict between Traditional Anchorage & Proposed Long Island Fairway 50
Figure 21 Modified Ambrose Anchorage & Adjusted Long Island Fairway ............ 51
Figure 22 Modified Ambrose Anchorage & Adjusted Long Island Fairway with AIS densities 52
Figure 23 Vessels Route Density 2019 (All vessel types) ..................................... 53
Figure 24 NNYBPARS Proposed Actions ......................................................... 55
Figure 25 Marine Planning Guideline Applicability to Traffic Separation Schemes 57
Figure 26 BOEM New York Bight Overview Map, June 2021 ............................ 58
List of Tables
Table 1 Unique Vessel Count by Type ......................................................................................... 18
Table 2 Counts of Transits and Permits by Year, Northern New York Bight ................................. 22
Table 3 Reportable Marine Casualty Initiating Events Jan 2010 - Jun 2020............................... 30
Table 4: All Reportable Marine Casualty Events Jan 2010 - Jun 2020 ........................................... 31
Table 5 U.S. Coast Guard SAR Cases 2009-2019 ........................................................................ 38
Table 6 U.S. Coast Guard SAR Case Types 2009-2019 .............................................................. 39

List of Appendices
Appendix A - Northern New York Bight Port Access Route Study Area
Appendix B - Definition of Terms
Appendix C - Abbreviations and Acronyms
Appendix D - Northern New York Bight Port Access Route Study Public Outreach
Appendix E - NMFS Vessel Monitoring System Data
Appendix F - Vessel Traffic Data
Appendix G - Weather Data

List of Enclosures
Enclosure 1 - Marine Planning Guidelines
Enclosure 2 - Federal Register Notice, USCG-2020-0278 (85 FR 38907)
Enclosure 3 - Marine Safety Information Bulletin 20-062
Enclosure 4 - Federal Register Supplemental Notice, USCG-2020-0278 (86 FR 18996)
Enclosure 5 - Marine Safety Information Bulletin 21-003
I. EXECUTIVE SUMMARY

On June 29, 2020, the First Coast Guard District issued a notice of study, request for comments to announce the Northern New York Bight Port Access Route Study (NNYBPARS) in the Federal Register (FR) (85 FR 38907). The NNYBPARS would consider whether existing or additional routing measures are necessary to improve navigation safety due to factors such as planned or potential offshore development, current port capabilities and planned improvements, increased vessel traffic, existing and potential anchorage areas, changing vessel traffic patterns, effects of weather, or navigational difficulty. The public was afforded a 60-day comment period, and two virtual public meetings were held to receive public input.

On April 12, 2021, the First Coast Guard District issued a supplemental notice of study, request for comments in the Federal Register (86 FR 18996) to seek additional information and allow the public another opportunity to provide comments. The public was afforded a 30-day comment period for the supplemental notice of study, request for comments.

The NNYBPARS was conducted according to the methodology outlined in United States Coast Guard (USCG) Commandant Instruction 16003.2B, Marine Planning to Operate and Maintain the Marine Transportation System (MTS) and Implement National Policy. The recommendations and results of this Port Access Route Study (PARS) are based on data gathered and analyzed, the comments received to the docket, public outreach, and consultation with other government agencies. The notices, supporting documents and all comments received are available in the public docket (USCG-2020-0278). The NNYBPARS evaluated several concerns that resulted in the following:

Recommendations:

A. Mariners transiting in or near leased or planned Wind Energy Areas (WEAs) in the New York Bight should use extra caution, ensure proper watch, proceed at a safe speed to avoid collision and be able to stop within a distance appropriate to the prevailing circumstances and conditions and assess all risk factors. Offshore renewable energy installations present new challenges to safe navigation, but proper voyage planning and access to relevant safety information should ensure that safety is not compromised.

Proposed Actions:

A. Establish the Cape Charles to Montauk Fairway proposed in the Atlantic Coast Port Access Route Study (ACPARS) Advanced Notice of Proposed Rulemaking (ANPRM) [Docket No. USCG-2011-0351 (85 FR 37034) June 29, 2020]. The First Coast Guard District recommends establishing a fairway that cuts across the New York Bight, but the exact coordinates of the fairway are best dispositioned by Coast Guard Headquarters as the fairway extends beyond multiple PARS study areas.
B. Establish a modified version of the “Ambrose Anchorage” discussed in the Approaches to New York notification of inquiry [Docket No. USCG-2020-0620 (86 FR 17090) April 1, 2021] and adjust the Southern end of the Long Island Fairway proposed in the ACPARS ANPRM [Docket No. USCG-2011-0351 (85 FR 37034) June 29, 2020] to the North of Ambrose Anchorage, to mitigate the current location conflict between the potential anchorage and ANPRM fairway.

C. Establish a New Jersey (NJ) to New York (NY) Connector Fairway (a customary route for vessels transiting along the coast of NJ between the Port of NY/NJ and Delaware Bay).

D. Establish a Hudson Canyon to Ambrose Southeastern Fairway from the entrance/exit of Traffic Separation Scheme Off New York: South-eastern approach to a point 5 NM beyond the Bureau of Ocean Energy Management’s (BOEM) current Area Identification location(s).

E. Establish a Hudson Canyon to Ambrose Eastern Fairway that connects to the Hudson Canyon Southeastern Fairway and extends to a point 5 NM beyond BOEM’s current Area Identification location(s).

F. Establish a single Nantucket to Ambrose Fairway, thereby removing the need for separate Nantucket to Ambrose and Ambrose to Nantucket Fairways as currently exist.

Continued Actions:

A. The Coast Guard will continue to serve as a National Environmental Policy Act (NEPA) cooperating agency to BOEM’s environmental review of each proposed project. In that role, the Coast Guard will evaluate the navigational safety risks of each proposal on a case-by-case basis.

B. The Coast Guard actively monitors all waterways subject to its jurisdiction to ensure navigation safety and will continue to monitor the areas of the New York Bight for evolving conditions, which may require additional studies to ensure navigational safety and minimize impacts to Coast Guard operations.
The First Coast Guard District’s proposed actions are depicted in Figure 1.

Figure 1 NNYBPARS Proposed Actions
II. PURPOSE

The First Coast Guard District conducted the NNYBPARS to examine the port approaches to New York and New Jersey and international and domestic transit areas in the study area. This study evaluates the applicability and need to establish new or modify existing vessel routing measures or shipping safety fairways (fairways) to ensure navigation safety. The Port of New York and New Jersey is an economically significant port which supports military and/or critical national defense operations and related international entry and departure transit areas that are integral to the safe and efficient and unimpeded flow of commerce to/from major international shipping lanes. The goal of the study was to determine whether fairways and/or other ship routing measures can reduce risk of collision, allision and grounding, and their impact on the environment, increase efficiency and predictability for vessel traffic, and preserve the paramount right of navigation while continuing to allow for other reasonable waterway uses.

The First Coast Guard District, while collaborating with waterways management team members from Coast Guard Sector Long Island Sound, Coast Guard Sector New York, Coast Guard Headquarters Assistant Commandant for Prevention, Office of Navigation Systems (CG-NAV), the Coast Guard Navigation Center (NAVCEN), Coast Guard Atlantic Area and the Fifth Coast Guard District, analyzed whether it should revise existing regulations to improve navigation safety in the Northern New York Bight due to factors such as:

a. Increased vessel traffic;
b. Changing vessel traffic patterns;
c. Weather conditions; or
d. Navigational difficulty in the vicinity.

III. BACKGROUND

A. Statutory Authority and Direction:

The Ports and Waterways Safety Act (PWSA) (46 U.S.C. §70003) authorizes the Coast Guard to designate necessary fairways and traffic separation schemes to provide safe access routes for vessels proceeding to and from United States ports. The designation of Fairways and Traffic Separation Schemes (TSS) recognizes the paramount right of navigation over all other uses in the applicable areas, subject however, to certain preexisting rights granted through leases or permits.

The PWSA requires the Coast Guard to conduct a study of port access routes before determining the need for, establishing, or adjusting fairways or TSS. These evaluations are called Port Access Route Studies. The Coast Guard must announce the study through a Federal Register notice and then coordinate with Federal and State agencies (as appropriate), and consider the views of maritime community representatives, environmental groups, and other interested stakeholders. A
primary purpose of this coordination is, to the extent practicable, to reconcile the need for safe access routes with other reasonable waterway uses. Information and analysis developed through the PARS process may also be used to support other routing measures, areas to be avoided or limited access areas.

On April 5, 2017, The Coast Guard completed the ACPARS study [Docket No. USCG–2011–0351 \(82\ FR\ 16510\) April 5, 2017]. The ACPARS study area included the entire Atlantic Coast (Maine to Florida) but was not focused on the port areas from the sea buoy into the port.

On March 15, 2019, CG-NAV published a Notice of Study; request for comments [Docket. No. USCG-2011-0351 \(84\ FR\ 9541\) March 15, 2019] to announce that Coast Guard District Commanders will prioritize and schedule a PARS for specific port approaches and international transit areas associated with proposed ACPARS fairways within their areas of responsibilities (AOR).

On June 19, 2020, CG-NAV issued an ANPRM [Docket No. USCG-2019-0279 \(85\ FR\ 37034\), June 19, 2020], supplemental to the ACPARS, to seek comments regarding the possible establishment of shipping safety fairways along the Atlantic Coast of the United States identified in the ACPARS. The proposed system of fairways are intended to ensure that traditional navigation routes are kept free from obstructions that could impact navigation safety. Within this ANPRM, CG-NAV identified two potential shipping safety fairways within the offshore approaches to the Port of New York and New Jersey; The Cape Charles to Montauk Point Fairway and the Long Island Fairway.

On June 29, 2020, the First Coast Guard District published a notice of study; request for comments [Docket No. USCG–2020–0278 \(85\ FR\ 38907\) June 29, 2020] announcing that the Coast Guard was conducting a PARS to evaluate the adequacy of existing vessel routing measures and determine whether additional vessel routing measures are necessary for port approaches to New York and New Jersey and international and domestic transit areas in the First District Area of Responsibility (AOR). The First Coast Guard District stated the NNYBPARS would consider whether existing or additional routing measures are necessary to improve navigation safety due to factors such as planned or potential offshore development, current port capabilities and planned improvements, increased vessel traffic, existing and potential anchorage areas, changing vessel traffic patterns, effects of weather, or navigational difficulty.

On April 1, 2021 the First Coast Guard District published a notification of inquiry; request for comments [Docket No. USCG–2020–0620 \(86\ FR\ 17090\) April 1, 2021] regarding the potential establishment of an anchorage ground in an area referred to by mariners as the “Ambrose anchorage,” which is an offshore area that has been used by ships awaiting inshore anchorages or berths located approximately 3 nautical miles south of Long Beach, New York, and just north of the Nantucket to Ambrose Traffic Lane. The notification of inquiry sought public comments on the benefits and impacts of establishing a regulated anchorage ground, and if so, what types of requirements should be considered for Coast Guard oversight of the anchorage ground.
On April 12, 2021, the First Coast Guard District published a supplemental notice of study; request for comments [Docket No. USCG–2020–0278 (86 FR 18996) April 12, 2021] announcing that the First Coast Guard District sought additional information related to the notice of study that was published on June 29, 2020.

The NNYBPARS was conducted in accordance with the PWSA, employing the methodology outlined in USCG Commandant Instruction 16003.2B, Marine Planning to Operate and Maintain the Marine Transportation System (MTS) and Implement National Policy.

B. ACPARS Methodology and Standards:

The First Coast Guard District used the PARS process authorized by the PWSA and applicable Coast Guard policies. The planning guidelines address the “port approaches and traffic separation schemes” category which is the category most applicable to the Northern New York Bight as it is applicable to large, deep-draft oceangoing vessel traffic transiting to or from major coastal ports.

The ACPARS Methodology and Standards are to:

1. Determine present and potential traffic density, if existing vessel routing measures are adequate or require modifications.

2. Define and justify any need for new vessel routing measures.

3. Determine the type of new vessel routing measures.

4. Determine if the usage of the vessel routing measures must be mandatory for specific classes of vessels.

C. Study Area:

The study area, as depicted in Figure 2, is described as the Northern New York Bight; an area bounded by a line connecting the following geographic positions:

1. 40° 18′ 00.0″ N, 074° 00′ 00.0″ W;

2. 38° 57′ 00.0″ N, 071° 16′ 00.0″ W;

3. 39° 47′24.0″ N, 069° 40′ 01.2″ W;

4. 41° 07′ 12.0″ N, 071° 34′ 33.6″ W; and

5. 41° 04′ 15.6″ N, 071° 51′ 25.2″ W.
Thence along the coastline back to the origin. All geographic points are based on North American Datum of 1983 (NAD 83). The study area includes the approaches to the Port of New York and New Jersey, the 3rd largest commercial port in the United States.

D. Previous Analyses:

The precautionary area and TSS(s) within this study area were first established in May 1967, and were adopted by the International Maritime Organization (IMO). In 1987 the Coast Guard conducted a PARS prior to establishing two parallel shipping safety fairways off New York entitled “Ambrose to Nantucket Safety Fairway” and “Nantucket to Ambrose Safety Fairway” and published the final results in the Federal Register (52 FR 33589; September 4, 1987). In 2016, the Coast Guard published a notice of its ACPARS in the Federal Register (81 FR 13307; March 14, 2016) and announced the study report as final in the Federal Register (82 FR 16510; April 5, 2017).

In addition to previous PARS conducted, the NNYBPARS study area has undergone several analyses for other purposes.

1. Waterways Analysis Management System (WAMS):
WAMS Reviews are periodically conducted by the Coast Guard to determine the need for modifications to the Aids to Navigation (AtoN) system in United States (U.S.) waterways. The First Coast Guard District examined all past WAMS Reviews of the Northern New York Bight Study Area to determine if there were any past requests for or references to a need for additional traffic routing measures. Since 1985, three WAMS Reviews have been completed to assess the effectiveness of the Federal Aids to Navigation system in the waters of the Northern New York Bight to include access to the Port of New York and New Jersey. There were no requests for or references to a need for additional traffic routing measures in any of the subject WAMS.

2. ACPARS:

The ACPARS addressed potential navigational safety risks associated with developing offshore renewable energy installations. The ACPARS identified customary navigation routes along the Atlantic coast from Maine to Florida with emphasis on waters seaward of existing port approaches that combine the width necessary for navigation and additional buffer areas. It identified deep draft routes to be given priority consideration to navigation over other uses, consistent with the United Nations Convention of the Law of the Sea and alongshore towing routes. The ACPARS clarified necessary sea space for vessels to maneuver in compliance with the International Regulations for Preventing Collisions at Sea that led to the development of the marine planning guidelines. The ACPARS did not consider detailed navigation routes to or from ports or international routes destined for the United States that are integral to a safe and efficient transportation infrastructure.

The Coast Guard is pursuing a rulemaking effort to establish shipping safety fairways as recommended in the ACPARS. The recommendations provided by this study will be considered during the proposed rulemaking.

E. Definition of Terms:

To help readers understand certain terms used in this PARS, definitions are listed in Appendix B.

F. Abbreviations and Acronyms:

1 Navigation Safety Corridor is a term used in the ACPARS final report for areas required by vessels to safely transit along a customary navigation route under all situations. A navigation safety corridor is not a routing measure and should not be confused with fairways, two-way routes, or traffic separation schemes. The ACPARS recommended that the identified navigation safety corridors be considered for designation as fairways or other routing measures.


Fairway or shipping safety fairway is a lane or corridor in which no artificial island or fixed structure, whether temporary or permanent, will be permitted. Temporary underwater obstacles may be permitted under certain conditions described for specific areas. Aids to navigation approved by the Coast Guard may be established in a fairway. See 33 Code of Federal Regulations (CFR) 166.105 (a).
G. Outreach Process:

- A “Notice of study; request for comments” (USCG-2020-0278) was published in the Federal Register (85 FR 38907) on June 29, 2020. A copy of this Federal Register notice is included as Enclosure 2.

- On June 30, 2020, Coast Guard Sector Southeastern New England issued Marine Safety Information Bulletin (MSIB) 20-062 to announce the study. This bulletin was distributed via e-mail to 815 subscribers. A copy of the bulletin is included as Enclosure 3 to this study.

- On July 1, 2020, Coast Guard Sector New York issued MSIB 20-062 to announce the study. This bulletin was distributed via e-mail to 270 subscribers. A copy of the bulletin is included as Enclosure 3 to this study.

- On July 3, 2020, Coast Guard Sector Long Island Sound issued MSIB 20-062 to announce the study. This bulletin was distributed via e-mail to 275 subscribers.

- Notice of the NNYBPARS was published each week for nine consecutive weeks in the First Coast Guard District Local Notice to Mariners (LNM) (more than 5,000 subscribers) from LNM 26/20 to LNM 35/20.

- The First Coast Guard District published a Facebook post, and Twitter post on July 1, 2020 to further disseminate announcement of the study.

- Coast Guard representatives also discussed the NNYBPARS and solicited comments at several public forums:
  - The July 1, 2020, New York and New Jersey Harbor Operations Executive Steering Committee Meeting.
  - The July 15, 2020 meeting of the Offshore Wind Permitting Subgroup.
  - The July 17, 2020 meeting of the Fisheries Technical Working Group sponsored by the New York State Energy Research and Development Authority (NYSERDA).
  - The August 11, 2020 meeting of the Maritime Technical Working Group sponsored by NYSERDA.
  - The September 16, 2020 meeting of the Ocean Offshore Wind Working Group sponsored by the Mid-Atlantic Regional Council.
- The October 29, 2020 public meeting for the Delaware Bay PARS, several comments received on Northern New York Bight approaches including near shore safety fairways.


- The November 4, 2020, New York and New Jersey Harbor Operations Executive Steering Committee Meeting.


- The April 7, 2021, New York and New Jersey Harbor Operations Full Committee Meeting.


- The June 2, 2021 New York and New Jersey Harbor Operations Executive Steering Committee Meeting.

- The June 4, 2021 U.S. Coast Guard & American Waterways Operators (AWO) Safety Partnership Atlantic Regional Quality Steering Committee Meeting.

- The June 14, 2021 Northeast and Mid-Atlantic Port Access Route Studies Presentation for the States of Virginia, Maryland, Delaware, New Jersey & New York.

- In conducting this PARS, the First Coast Guard District communicated and coordinated with appropriate federal and state agencies, non-government organizations, and other public stakeholders listed in Appendix D. Additionally, the First Coast Guard District received input from the National Oceanic Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS).

- A “supplemental notice of study; request for comments” (USCG-2020-0278) was published in the Federal Register (86 FR 18996) on April 12, 2021. A copy of this Federal Register notice is included as Enclosure 4.

- Members of the public that originally provided comment (and included their contact details) to the First Coast Guard District’s Federal Register notice of study, request for comments (85 FR 38907) of June 29, 2020 were notified via email of the First Coast Guard District’s issuance of the supplemental notice of study, request for comments (86 FR 18996) of April 12, 2021.
• On April 19, 2021, Coast Guard Sector New York issued MSIB 21-003 to announce the supplemental notice of study, request for comments. This bulletin was distributed via e-mail to 270 subscribers. A copy of the bulletin is included as Enclosure 5 to this study.

• On April 20, 2021, Coast Guard Sector Long Island Sound issued MSIB 21-003 to announce the supplemental notice of study, request for comments. This bulletin was distributed via e-mail to 275 subscribers.

• The First Coast Guard District published a Facebook post, and Twitter post on April 15, 2021 to seek additional information related to the NNYBPARS.

• Comments and Public Meetings:
  
  o The Federal Register notice (85 FR 38907) of June 29, 2020 (see Enclosure 2) provided for a 60-day period to receive written public comments. Twenty-five (23 written & 2 oral) unique comments were posted to the public docket.
  
  o The First Coast Guard District also held two virtual public meetings to receive public comments directly. Recordings of these public meetings are included in the public docket at the link above. The meetings were held:
    - July 30, 2020 at 9 a.m. EST via webinar and teleconference.
    - August 11, 2020 at 6 p.m. EST via webinar and teleconference.
  
  o The Federal Register supplemental notice (86 FR 18996) of April 12, 2021 provided for a 30-day period to receive written public comments. Five unique comments were posted to the public docket.

IV. THE STUDY

A. Existing Regulations & Pilotage:

Existing regulations that apply to the Northern New York Bight study area include:

• U.S. Army Corps of Engineers (USACE) regulations regarding obstructions and hazards to navigation pursuant to The Rivers and Harbors Appropriation Act of 1899, 33 United States Code (U.S.C.) §403.

• General Coast Guard Captain of the Port (COTP) authority contained in 33 Code of Federal Regulations (CFR) §1.01.

• Vessel Bridge-To-Bridge Radiotelephone Regulations contained in 33 CFR §26.

• U.S. Aids to Navigation System contained in 33 CFR subchapter C.
• The Navigation Rules, International and Inland (“Rules of the Road”) contained in 33 CFR subchapters D and E, respectively.

• Vessel Operating Regulations contained in 33 CFR subchapter F.

• Regulations governing the conduct of regattas and marine parades contained in 33 CFR subchapter G.

• General, explosives, naval, and special anchorages have been prescribed for the Port of New York in 33 CFR §110.1, §110.60, and §110.155.

• A mandatory vessel traffic service has been established in the navigable waters of Lower New York Harbor. Vessel Traffic Services (VTS), as defined by 33 CFR §160.3, improve the safety and efficiency of vessel traffic and protect the environment. The VTS has the capability to interact with marine traffic and respond to traffic situations developing in the VTS area. The New York Traffic Lanes do not constitute part of the VTS New York reporting area, which begins at the entrance to Ambrose, Sandy Hook and Swash Channels. Although regulatory jurisdiction is limited to the navigable waters of the United States, certain vessels will be encouraged or may be required, as a condition of port entry, to report beyond this area to facilitate traffic management within the VTS area. Information on the vessel traffic service, New York, can be found in 33 CFR §161.1 through 33 CFR §161.25

• Regulated Navigation Area (RNA) contained in 33 CFR §165.100. These regulations govern towing vessels engaged in towing tank barges carrying petroleum oil in bulk.

• Off New York Shipping safety fairways contained in 33 CFR §166.500 have been established connecting the eastern approach Off Ambrose of Traffic Separation Scheme Off New York and eastern approach Off Nantucket of Traffic Separation Scheme Off New York.

• Traffic Separation Scheme Off New York has been established in the approaches to New York Harbor from sea. The Traffic Separation Scheme Off New York is contained in 33 CFR §167.1 through 33 CFR §167.155. Three sets of traffic lanes direct traffic in and out of the Precautionary Area.

• Precautionary Area contained in 33 CFR §167.151 – Off New York. A circular precautionary area with radius 7 miles is established centered upon 40°27.50’N, 73°49.90’W.

• The Approaches to New York, Atlantic Ocean Safety and Security Zone within the New York Marine Inspection Zone and Captain of the Port Zone contained in 33 CFR §166.169 (a) (12) (i-iii).

• A designated pilot boarding area is located southeast of the Ambrose Channel Lighted Whistle Buoy A (Light List Number (LLNR) 34785).
• 50 CFR §244.105; Endangered North Atlantic right whales may occur within 30 miles of the New York and New Jersey coasts in the approaches to New York Harbor (peak season: November through April). All vessels 65 feet or greater in length overall (LOA) and subject to the jurisdiction of the United States are restricted to speeds of 10 knots or less in a Seasonal Management Area existing around the Ports of New York/New Jersey between November 1 and April 30. The area is defined as the waters within a 20-nm radius of 40°29′42.2″N., 73°55′57.6″W.

• Pilotage, New York Harbor and approaches; foreign vessels and U.S. vessels under register entering or departing from the Port of New York and New Jersey must employ a pilot licensed by the State of New York or New Jersey. Enrolled vessels must have on board or employ a pilot licensed by the federal government. State and federal pilotage service for vessels entering the Port of New York and New Jersey through Lower Bay and intra-harbor movements is available from the United New York New Jersey Sandy Hook Pilot Association, 201 Edgewater Street, Staten Island, NY 10305, telephone 718–448–3900, Facsimile (FAX) 718–876–8055, e-mail: pilotoffice@sandyhookpilots.com.

The list of federal regulations above is not all-inclusive but cites those regulations most significant to the issues considered in the Northern New York Bight. There are multiple other federal regulations designed to ensure navigation safety that may apply to one or more segments of the maritime community, i.e., passenger-carrying vessels (ferries), excursion vessels. These regulations, generally contained in titles 33 and 46 of the CFR, may require carriage of certain navigation safety equipment such as radar, Automatic Identification System (AIS), Very High Frequency (VHF) communications; may require credentials of crew such as master, mate, engineer; and may prescribe certain vessel construction and operating standards.

B. Existing Routing Measures:

Existing vessel routing measures in the study area include:

1. Precautionary Area contained in 33 CFR §167.151 – Off New York. A circular precautionary area with radius 7 miles is established centered upon 40°27.50′N, 73°49.90′W.

2. Traffic Separation Scheme Off New York has been established in the approaches to New York Harbor from sea. The Traffic Separation Scheme Off New York is contained in 33 CFR §167.1 through 33 CFR §167.155. Three sets of traffic lanes direct traffic in and out of the Precautionary Area.

3. Off New York Shipping safety fairways contained in 33 CFR 166.500 have been established connecting the eastern approach Off Ambrose of Traffic Separation Scheme Off New York and eastern approach Off Nantucket of Traffic Separation Scheme Off New York.

C. Assessing Existing and Future Waterway Uses:
The waterways of the Approaches to New York and New Jersey are used for both recreational and commercial purposes year-round. Table 1, a summary extract from Appendix F, contains unique vessel counts by type that transited the study area in 2017, 2018 and 2019.

<table>
<thead>
<tr>
<th>Vessel Type</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fishing</td>
<td>483</td>
<td>581</td>
<td>613</td>
<td>559</td>
</tr>
<tr>
<td>Other</td>
<td>277</td>
<td>323</td>
<td>333</td>
<td>311</td>
</tr>
<tr>
<td>Pleasure Craft / Sailing</td>
<td>1926</td>
<td>2681</td>
<td>2986</td>
<td>2531</td>
</tr>
<tr>
<td>Cargo</td>
<td>1013</td>
<td>1226</td>
<td>1161</td>
<td>1133</td>
</tr>
<tr>
<td>Tanker</td>
<td>1259</td>
<td>727</td>
<td>814</td>
<td>933</td>
</tr>
<tr>
<td>Tug Tow</td>
<td>545</td>
<td>232</td>
<td>198</td>
<td>325</td>
</tr>
<tr>
<td>Passenger</td>
<td>98</td>
<td>110</td>
<td>119</td>
<td>109</td>
</tr>
<tr>
<td>Not Available</td>
<td>191</td>
<td>257</td>
<td>223</td>
<td>224</td>
</tr>
<tr>
<td>Military</td>
<td>22</td>
<td>29</td>
<td>33</td>
<td>28</td>
</tr>
<tr>
<td>Totals</td>
<td>5814</td>
<td>6166</td>
<td>6480</td>
<td>6153</td>
</tr>
</tbody>
</table>

Table 1 Unique Vessel Count by Type

On average over the course of 2017 to 2019, 1133 Cargo ships, 933 Tankers, and 325 Tug and Tow vessels transited the study area, demonstrating the economic significance of the waterways to the Port of New York and New Jersey, the third largest container port in North America, and the largest port on the East Coast. The Port includes numerous dry and liquid bulk terminals, general cargo and barge facilities, cruise terminals, ferry landings, recreational users, and vessel support facilities. The Port Authority NY NJ 2019 Annual Report\(^4\) communicates that in 2019 the Port handled cargo volumes of more than 7.5 million Twenty Foot Equivalent Units (TEU) and conducted nearly 7,000 rail lifts. The Port of New York & New Jersey 2019 Trade Statistics publication\(^5\) communicates that in 2019, the port handled over 86 million metric tons of cargo worth over $205 billion dollars and 570,000 automotive vehicles passed through the port. The port is expected to continue to grow significantly over the next 30 years, as laid out in the Port of NY NJ Port Master Plan 2050\(^6\).

In addition to being frequently transited by commercial shipping traffic, the study area experiences significant use by multiple other vessel types. Based on AIS data collected from 2017 to 2019, the Northern New York Bight Study Area hosts more Pleasure Craft / Sailing vessels than any other type. Figure 3 shows the predominance of the number of Pleasure Craft / Sailing vessels in the study area. It should also be noted that the study area experiences significant concentrations of fishing vessels, with an average of 559 unique vessels transiting the study area between 2017 and 2019.

\(^4\) Port Authority NY NJ 2019 Annual Report
\(^5\) Port of New York & New Jersey 2019 Trade Statistics
\(^6\) Port NY NJ Master Plan 2050
The following resources were evaluated to determine current and future vessel trends:

1. **Automatic Identification System Data:**

   The Coast Guard Navigation Center provided AIS vessel traffic data for the Northern New York Bight for the years 2017 to 2019. The First Coast Guard District concurs with the Coast Guard Navigation Center’s findings in their Traffic Analysis for the NNYBPARS (Appendix F). While historical AIS data is informative, future traffic volume is complicated to predict. However, AIS data confirms the routes taken by vessels outfitted with this equipment in those areas most frequently transited (see Figure 4). See Appendix F for Traffic Analysis and detailed AIS data.
Also noted in Appendix F (pg. 8, Traffic Composition Analysis), it is useful to look at a subset of the AIS vessel traffic data in smaller time periods (as opposed to per year). Figure 5 shows the track lines from September of 2019, the busiest month of the year with over 15,000 tracks. “Other” and “Not Available” ship types were excluded from this graphic, and “Cargo” and “Tanker” were combined since they have similar transit patterns.

The legend is organized based on the drawing order in the graphic. Pleasure craft were drawn first so those tracks appear underneath the tracks for the other ship types. Cargo and tank ships were drawn last, so their tracks are on top of the tracks for the other ship types. Due to this drawing order, the passenger vessel track lines in the main channels are covered by the cargo ships, and some passenger vessel track lines off the New Jersey coast are hidden by the tow boats. Fishing vessels along the South Shore of Long Island Sound are hidden by the tow boat traffic. The pleasure craft that cross a main transit area for any of the other vessel types are also covered.
Other current and future waterways activities and uses were assessed using:

2. National Marine Fisheries Service Vessel Monitoring System (VMS) Data:

Overall fishing vessel transits decreased over the observation period between 2017 to 2019. This is based on the report in Appendix E, provided by the NMFS Office of Law Enforcement’s Northeast VMS Team. This summary shows the number of VMS-equipped vessel transits of the Northern New York Bight study area for each of the calendar years available.

Table 2 indicates the total counts of VMS vessel transits of the Northern New York Bight by calendar year, from 2017 through 2019. The Permits column in Table 2 indicates how many permits were utilized in the study area, where 1 permit represents 1 unique [fishing] vessel and vice versa. Also shown are counts of permitted VMS vessels conducting the transits. For example, in 2017, 624 different VMS vessels together made 11,062 transits of the study area. The presence of over 500 fishing vessels in the study area for each of the years observed indicates the Northern New York Bight is currently and is likely to continue to be significant to the commercial fishing industry subject to future regulations. VMS data is heavily influenced by fisheries management decisions that often change yearly or even seasonally and make it difficult to ascertain overall traffic patterns.
Accordingly, predictions of future fishing vessel traffic are even more difficult.

<table>
<thead>
<tr>
<th>Vessel Type</th>
<th>Permits</th>
<th>Transits</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>624</td>
<td>11,062</td>
</tr>
<tr>
<td>2018</td>
<td>593</td>
<td>9,788</td>
</tr>
<tr>
<td>2019</td>
<td>575</td>
<td>8,825</td>
</tr>
</tbody>
</table>

Table 2 Counts of Transits and Permits by Year, Northern New York Bight

Analyzing VMS heat map data (Appendix E), the First Coast Guard District concluded that the majority of fishing vessel transits in the study area occur 1) near shore along the coast of Long Island and New Jersey, 2) cut across the New York Bight between Montauk Point to points in Southern New Jersey and beyond, or 3) transit to and from fishing grounds contained within the Northern New York Bight. Figure 6 depicts VMS equipped fishing vessel transits for the year 2019.
3. Port Authority Forecast:

Commercial Shipping traffic in the Port of New York and New Jersey is expected to proportionately increase by vessel type, relevant to the identified market trends:

- Dry bulk demand (cement, salt, and scrap) is projected to increase to between approximately 3.7 million and 5.5 million Metric Tons by 2050. Average annual growth ranges from 1.1 percent under low forecast assumptions to 2.4 percent under high forecast assumptions.\(^7\)

- Auto demand through the Port is projected to increase from 573,000 vehicle units (Car Equivalent Units (CEU)) in 2018 to a range of approximately 800,000 to 1.3 million units by 2050. Average annual growth ranges from 1.6 percent under low forecast assumptions to 3.3 percent under high forecast assumptions.\(^7\)

- Cruise demand captured by the Port Authority of New York and New Jersey (PANYNJ) tenants is projected to increase from 856,000 passengers in 2018 to between 1.3 million and 2.6 million passengers by 2050.\(^7\) Additionally, the NY Cruise Manhattan and Brooklyn terminal cruise demand is projected to increase from 1.1 million passengers in 2019 to between 1.5 to 1.6 million passengers by 2026.\(^8\)

- Container demand at Port Authority facilities is projected to increase from 7.2 million TEU in 2018 to between 12 million and 17 million TEU by 2050. Average annual growth ranges from 2.1 percent under low forecast assumptions to 3.4 percent under high forecast assumptions.\(^7\)

4. Resource Development Activities:

A prominent potential future use of the Northern New York Bight is the proposed BOEM commercial wind lease areas. On March 29, 2021, BOEM identified nearly 800,000 acres as Wind Energy Areas (WEAs) in the New York Bight, between Long Island and the New Jersey coast, as depicted in Figure 7. The announcement\(^9\) came during a White House forum in which Secretary of the Interior Deb Haaland, and the Secretaries of Energy, Commerce, and Transportation, met with representatives from states, the offshore wind industry, and members of the labor community to identify challenges and solutions facing this new industry. The event included a commitment by Interior and the Departments of Energy and Commerce to establish a target to deploy 30 gigawatts (30,000 megawatts) of offshore wind by 2030 nationwide. Regionally, and as part of the States’ sustainability plans, the Governors of New York and New Jersey have committed to the installed capacity of nearly 12.5 gigawatts of wind generated energy by 2030\(^10\).

---

7 NY NJ Port Master Plan 2050
8 First Coast Guard District inquiry to the NY Cruise, 04 June 2021.
9 BOEM Advances Offshore Wind in Major U.S. East Coast Energy Market
10 NY NJ Port Master Plan 2050
In their March 26, 2021 New York Bight Area Identification Memorandum, BOEM found that commercial and recreational fishing were one of the existing uses found to interact most with potential offshore development. An extract of BOEM’s findings are useful in the context of existing resource development activities and their potential interaction with offshore wind development:

“In recognition that all of the Call Areas experience some level of fishing activity, BOEM developed a Relative Use Index (RUI), to determine areas that would have less impact relative to total fishing activity and avoid known unique benthic habitats. Using vessel trip report data from the NMFS for the period 2007-2015, BOEM identified the top six Fisheries Management Plans (FMP) by total revenue in the Call Areas for mapping their relative use. The scallop fishery is by far the highest-value fishery. BOEM is concerned, however, that a strict revenue analysis would result in recommended WEAs that disproportionately impact lower value fisheries. To address concerns from the fishing industry about this disparity in economic value, BOEM created a weighted spatial overlay of multiple factors, including conversion of the fishing revenue, adjusted to weight the relative importance of the NY Bight to that FMP. For instance, an FMP with 5% of its revenue from a potential WEA would be given a higher index number than an FMP where only 0.5% of the revenue came from the area. The RUI also factored in fishing vessel transit...
routes based on 2016 automatic identification system (AIS) data to better understand potential impacts to fisheries access. Although recreational fishing data was not included in determining the RUI, BOEM’s overall analysis considered recreational fishing areas identified in the New Jersey Sport Fishing Atlas. The “cooler” blue areas indicate a lower relative economic importance across the top 6 commercial fisheries”

![Fishing Relative Use Index](image)

Figure 8 BOEM Fisheries Relative Use Index

In addition to the Wind Energy Areas depicted in Figure 7 and Figure 8, two Call Areas within the NNYBPARS study area have been leased for offshore energy development within Outer Continental Shelf (OCS) OCS-A 0512, Empire Wind 1 and Empire Wind 2. The New York State Energy Research and Development Authority awarded Equinor LLC the Empire Wind 1 (816 megawatts) lease area in on July 18, 2019\(^\text{12}\) and Empire Wind 2 (1,260 megawatts) was awarded to Equinor LLC and strategic partner BP plc on January 13, 2021\(^\text{13}\) whereby the companies will partner with the State to transform the South Brooklyn Marine Terminal (SBMT) and the Port of Albany into large-scale offshore wind working industrial facilities.

---

\(^{11}\) New York Bight Area Identification Memorandum Pursuant to 30 C.F.R. § 585.211(b)

\(^{12}\) Equinor offshore wind bid wins in New York States

\(^{13}\) Equinor selected for largest-ever US offshore wind award
Future OCS-A 0512 developments are expected to follow NYSERDA’s “Building a Clean Energy Future, Timeline for 1st Phase of Projects” publication in which lists Construction and Installation activities will commence from 2022 to 2024. Figure 9 identifies the Empire Wind Lease areas.

![Figure 9 Empire Wind 1 and 2 Lease Areas (pictured in dark blue)](image)

Source: Northeast Ocean Data Portal

In addition to utilizing sea space within the NNYBPARS study area, it is important to consider the subsurface considerations that future cable routes may have on other resource development activities and/or traditional and potential new anchorages. Notional cable placement from OCS-A 0512 is included in Figure 10, although not finalized and therefore subject to change.

---

14 Building a Clean Energy Future, Timeline for 1st Phase of Projects
5. United States Army Corps of Engineers (USACE) Dredging Projects:

USACE maintenance and planned dredging projects are another significant indicator about changes in current and future waterways use. The waterways within the Northern New York Bight PARS area have not been requested for any upcoming maintenance dredging. A potential future project is the NY and NJ Harbor Deepening and Channel Improvements (NYNJHDCI) Study. The study is still in the early stages of looking at Port facilities, and the pathways leading to them which might include the Anchorage and Ambrose Channels. The goal of that study is to evaluate the benefits and costs of providing future access to these facilities to a Malacca-max class vessel. This could include dredging to 54 or 55 ft, channel widening, and turning and passing zones. If approved, and funded, construction would likely not start before FY25 or FY26. Additionally, there was a recommendation to Congress to deepen a portion of the Gravesend Anchorage, located outside of our study area but inside the Port of NY and NJ, from -47 ft. Mean Lower Low Water (MLLW) to -50 ft. MLLW.

6. Marine Event Permit Data:

Since 2010, Coast Guard Sector New York received approximately 10 Marine Event Permit Applications each year for regattas and other marine events occurring within the New York Lower Bay in vicinity of the Northern New York Bight. None of these events are predicted to significantly grow in size or scope, nor are they expected to increase marine congestion but are included for consideration in the context of the NNYBPARS.
Such events are normally organized and sponsored by local yacht clubs, swim organizations, national/international regattas or similar organizations, have well-defined schedules, and place certain operating and safety requirements on participants. Most of these events in the Lower New York Bay occur annually. The largest single annual organized marine event in the Lower New York Bay is the Fleet Week Parade of Ships, an event that begins at Ambrose Channel Buoy and proceeds into New York Bay. The sponsor of the event is the U.S. Navy, and there is a Permanent Regulation in 33 CFR 165.163 governing the event.

Other Events:

- “Around Long Island Regatta” is an annual recurring event hosted by National Powerboat Association.
- “Coney Island Fireworks” is a beach-based Fireworks display in close proximity to the area and hosts weekly displays during summer months, annually.
- Multiple swims in vicinity of Coney Island and Brighton Beach (three annual recurring)
- Transatlantic Regattas occur approximately every two years.
- Annual “Celebrate Israel” boat parade starts in the Lower Bay (Rockaway Inlet).
- Annual “Statue of Liberty Race” occurs from Sandy Hook to Upper NY Bay.
- A few other paddle events occur approximately once every two years in that area.

Since 2015, Coast Guard Sector Long Island Sound received an average of four Marine Event Permit Applications each year for fireworks displays and other marine events occurring along the south shore of Long Island. Such events are normally organized and sponsored by local parks departments, yacht clubs, or similar organizations, have well-defined schedules, and place certain operating and safety requirements on participants. Many of these events on the south shore occur annually. The largest single annual organized marine event on the south shore is the Jones Beach Airshow, which attracts more than 400,000 spectators for a three-day event over Memorial Day weekend. The sponsor of the event is the New York State Office of Parks and Recreation, and there are permanent regulations in 33 CFR 165.163 governing the event.

Other Events:

- Jones Beach Air Show
- Jones Beach Fireworks
- Tri America Swim
- Salute to veterans Fireworks
7. Maritime Incident Data:

Maritime incidents are reportable marine casualties as defined in 46 CFR 4.05. These include: loss of main propulsion, injury requiring medical treatment, loss of life, occurrence affecting vessel seaworthiness, allisions, and collisions, all of which could create a hazard to navigation. In the area under review, there were 202 incidents reported from January 2010 – June 2020, on average 20 incidents a year, as shown in Figure 11. Three incidents were duplicates with multiple locations listed. See Table 3 for details by Incident type.

Of these 202 incidents, 170 were reportable marine casualties per 46 CFR Part 4 and could create a hazard to navigation. These 170 reportable marine casualties are comprised of 373 individual timeline events, which are defined as an unwanted occurrence happening to a person or vessel. The "initiating event" is the first unwanted event in a sequence.

Table 3 shows the initiating event for each the 170 reportable marine casualties that occurred in the NNYBPARS Study Area over the past ten years. Table 4 shows all 373 events that were involved in these 170 reportable marine casualties. In analyzing event data, it is important to remember that one incident may involve many events attributed to multiple vessels or people.
<table>
<thead>
<tr>
<th>Incident Type</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abandonment</td>
<td>1</td>
</tr>
<tr>
<td>Allision</td>
<td>2</td>
</tr>
<tr>
<td>Collision</td>
<td>9</td>
</tr>
<tr>
<td>Damage to Cargo</td>
<td>1</td>
</tr>
<tr>
<td>Discharge/Release - Pollution</td>
<td>1</td>
</tr>
<tr>
<td>Fire – Initial</td>
<td>6</td>
</tr>
<tr>
<td>Flooding - Progressive</td>
<td>1</td>
</tr>
<tr>
<td>Fouling</td>
<td>9</td>
</tr>
<tr>
<td>Grounding</td>
<td>1</td>
</tr>
<tr>
<td>Loss of Electrical Power</td>
<td>6</td>
</tr>
<tr>
<td>Loss of Stability</td>
<td>1</td>
</tr>
<tr>
<td>Loss/Reduction of Vessel Propulsion/Steering</td>
<td>15</td>
</tr>
<tr>
<td>Material Failure/Malfunction</td>
<td>99</td>
</tr>
<tr>
<td>Personnel Casualty - Death</td>
<td>2</td>
</tr>
<tr>
<td>Personnel Casualty - Injury</td>
<td>10</td>
</tr>
<tr>
<td>Personnel Casualty - Missing</td>
<td>1</td>
</tr>
<tr>
<td>Personnel Fall into Water</td>
<td>1</td>
</tr>
<tr>
<td>Vessel Maneuver</td>
<td>2</td>
</tr>
<tr>
<td>Wave(s) Strikes/Impacts</td>
<td>2</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>170</strong></td>
</tr>
</tbody>
</table>

Table 3 Reportable Marine Casualty Initiating Events Jan 2010 - Jun 2020
Source: U.S. Coast Guard Marine Information for Safety & Law Enforcement (MISLE) Database
<table>
<thead>
<tr>
<th>Incident Type</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abandonment</td>
<td>7</td>
</tr>
<tr>
<td>Allision</td>
<td>2</td>
</tr>
<tr>
<td>Capsize</td>
<td>2</td>
</tr>
<tr>
<td>Collision</td>
<td>19</td>
</tr>
<tr>
<td>Damage to Cargo</td>
<td>2</td>
</tr>
<tr>
<td>Discharge/Release - Pollution</td>
<td>8</td>
</tr>
<tr>
<td>Fire - Initial</td>
<td>11</td>
</tr>
<tr>
<td>Fire - Reflash</td>
<td>2</td>
</tr>
<tr>
<td>Flooding - Initial</td>
<td>9</td>
</tr>
<tr>
<td>Flooding - Progressive</td>
<td>9</td>
</tr>
<tr>
<td>Fouling</td>
<td>10</td>
</tr>
<tr>
<td>Loss of Electrical Power</td>
<td>21</td>
</tr>
<tr>
<td>Loss of Stability</td>
<td>1</td>
</tr>
<tr>
<td>Loss/Reduction of Vessel Propulsion/Steering</td>
<td>104</td>
</tr>
<tr>
<td>Material Failure/Malfunction</td>
<td>123</td>
</tr>
<tr>
<td>Personnel Casualty - Death</td>
<td>4</td>
</tr>
<tr>
<td>Personnel Casualty - Injury</td>
<td>15</td>
</tr>
<tr>
<td>Personnel Casualty - Missing</td>
<td>2</td>
</tr>
<tr>
<td>Personnel Fall into Water</td>
<td>5</td>
</tr>
<tr>
<td>Set Adrift</td>
<td>2</td>
</tr>
<tr>
<td>Sinking</td>
<td>9</td>
</tr>
<tr>
<td>Vessel Maneuver</td>
<td>4</td>
</tr>
<tr>
<td>Wave(s) Strikes/Impacts</td>
<td>1</td>
</tr>
<tr>
<td>Grounding</td>
<td>1</td>
</tr>
<tr>
<td>Grand Total</td>
<td>373</td>
</tr>
</tbody>
</table>

Table 4: All Reportable Marine Casualty Events Jan 2010 - Jun 2020  
Source: U.S. Coast Guard Marine Information for Safety & Law Enforcement (MISLE) Database
In collecting and analyzing the historical Maritime Incident Data represented in Table 3 and Table 4 and Figure 11, the First Coast Guard District found that existing routing measures did not specifically create, or significantly correlate to, the occurrences and locations of marine casualties. Additionally, the First Coast Guard assessed that the establishment of additional routing measures were not likely to mitigate the occurrence or location of future potential maritime incidents.

8. Native American Tribal Considerations:

Based on outreach associated with this PARS, the Shinnecock Indian Nation tribe did not indicate any current or future navigation safety concerns for the Northern New York Bight.

9. Military and National Security:

The primary military activities occurring in the Northern New York Bight are Coast Guard operations supporting SAR, Aids to Navigation, and Law Enforcement. U.S. Navy patrol craft may also transit the study area on occasion. These military activities remain consistent in volume and frequency over the last decade and are anticipated to remain so in the future.

D. Vessel Traffic Pattern Analysis:

Overall, the Northern New York Bight study area remains a busy offshore area serving a multitude of navigational interests. In general, vessel traffic within the study area tends to transit within the established routing measures as demonstrated in Figure 12, follow coastwise routes as demonstrated in Figure 13, cut across the Bight from points to and from Southern New Jersey and
areas in the vicinity of Montauk Point as demonstrated in Figure 14, and anchor in the port approaches as demonstrated in Figure 15.

Figure 12 2019 Cargo AIS Data
Figure 13 2019 Tug Tow AIS Data
Figure 14 2017 Fishing AIS Data
E. **Weather Conditions:**

Weather is an important consideration for all parties in the Northern New York Bight. The First Coast Guard District examined marine weather information from a variety of sources to gauge historic wind and wave data including from the National Data Buoy Center Stations 44025 (Long Island, 30 nautical miles (NM) South of Islip) and 44065 (New York Harbor Entrance).

- Weekly average wave heights were obtained for two locations in the study area from 2016 to 2019 through the National Data Buoy Center (NDBC) and are contained in Appendix G. Significant wave height (meters) was calculated as the average of the highest one-third of all of the wave heights during the 20-minute sampling period. Average wave heights at Station 44025, 30 NM South of Islip, NY, were 1.4 m and average wave heights at Station 44065, New York Harbor Entrance 15 NM Southeast of Breezy Point, NY, were 1.1 m.

- Monthly mean wind speeds with available data were retrieved from two locations in the study area for 2016 through 2019 are provided in Appendix G. Wind speed (m/s) was averaged over an eight-minute period for buoys. The data retrieved indicate a seasonal fluctuation in wind speed with the highest speeds occurring from October – March. Average wind speeds at
Station 44025, 30 NM South of Islip, NY, were 6.8 m/s and average wind speeds at Station 44065, New York Harbor Entrance 15 NM Southeast of Breezy Point, NY, were 6.5 m/s.

- Typical weather in the Northern New York Bight as reported in authoritative nautical publications, such as NOAA's Coast Pilot, continue to be valid. During the spring and early summer, the NY and NJ Harbor and approaches are susceptible to advection fog.

- The First Coast Guard District examined marine weather information and found that average weather conditions in the Northern New York Bight have not significantly changed over the past 5 years. Additionally, the First Coast Guard District has received no reports from any major users of the Northern New York Bight that sustained changes in weather patterns have prompted a change in operations in the Northern New York Bight.

F. Navigational Difficulty:

The strongest indicators of navigational difficulty within the study area and preferences for mariners are weather conditions, discussed above, and complex traffic routes, which can be seen in AIS vessel density maps of commercial traffic in the years 2017, 2018 and 2019 from the Coast Guard Navigation Center (see Appendix F). The First Coast Guard District found traffic patterns to be highly consistent with aids to navigation marking systems throughout Northern New York Bight waterways. The Port of New York and New Jersey ranks as one of the busiest ports in the world. The New York Traffic Lanes and the precautionary area are essential to the orderly and safe flow of the extensive amount of vessel traffic.

The USACE has no current plans to modify or dredge in the Northern New York Bight. A potential future project is the NY and NJ Harbor Deepening and Channel Improvements (HDCI) Study. The study is still in the early stages of looking at Port facilities, and the pathways leading to them that might include the Anchorage and Ambrose Channels. The HDCI Study can be read about further in section IV.C.3 of this report.

Coast Guard Search and Rescue case analysis provides another risk management data point and is discussed in section G of this report.

G. Military and National Security:

1. United States Coast Guard:

The primary military activities occurring in the Northern New York Bight are Coast Guard operations supporting maritime safety, search and rescue, aids to navigation, pollution response, living marine resource enforcement, and other law enforcement. Search and Rescue (SAR) is discussed in more depth later in this section of the study. Coast Guard Cutters patrol the offshore areas of the Atlantic Coast. Typically, the largest of these are 270-foot medium endurance cutters. They primarily conduct the following missions: law enforcement, drug and migrant interdiction, search and rescue and other homeland security defense operations.
Coast Guard SAR case analysis provides another risk management data point. Coast Guard SAR data shows a notably small number of incidents in 2009 but a relatively steady level of incidents from 2010 to 2019. The data from 2009 is significantly lower than all other years and could skew the average to be lower than it actually is. When 2009 data is excluded, there is an average of 92 cases per year from 2010 to 2019.

Table 5 provides an annual count of SAR cases within the NNYBPARS study area.

<table>
<thead>
<tr>
<th>Incident Type</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>8</td>
</tr>
<tr>
<td>2010</td>
<td>84</td>
</tr>
<tr>
<td>2011</td>
<td>87</td>
</tr>
<tr>
<td>2012</td>
<td>70</td>
</tr>
<tr>
<td>2013</td>
<td>93</td>
</tr>
<tr>
<td>2014</td>
<td>88</td>
</tr>
<tr>
<td>2015</td>
<td>97</td>
</tr>
<tr>
<td>2016</td>
<td>101</td>
</tr>
<tr>
<td>2017</td>
<td>103</td>
</tr>
<tr>
<td>2018</td>
<td>96</td>
</tr>
<tr>
<td>2019</td>
<td>93</td>
</tr>
<tr>
<td>Grand Total</td>
<td>920</td>
</tr>
</tbody>
</table>

Table 5 U.S. Coast Guard SAR Cases 2009-2019
Source: Marine Information for Safety & Law Enforcement (MISLE) Database

Table 6 lists SAR case types within the NNYBPARS study area. An examination of these 920 cases shows that the most frequent need of assistance was from recreational vessels and was due to “disabled vessel” (no propulsion) or “person in the water,” and not due to collisions or groundings.
<table>
<thead>
<tr>
<th>Incident Type</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abandoned/Derelict</td>
<td>6</td>
</tr>
<tr>
<td>Adrift (Unmanned)</td>
<td>38</td>
</tr>
<tr>
<td>Aground</td>
<td>23</td>
</tr>
<tr>
<td>Aircraft Crash</td>
<td>3</td>
</tr>
<tr>
<td>Aircraft Ditch</td>
<td>0</td>
</tr>
<tr>
<td>Aircraft Emergency</td>
<td>3</td>
</tr>
<tr>
<td>Allision</td>
<td>1</td>
</tr>
<tr>
<td>Anchored [Unmanned]</td>
<td>0</td>
</tr>
<tr>
<td>Assist Other Agency</td>
<td>5</td>
</tr>
<tr>
<td>Beset by Weather</td>
<td>25</td>
</tr>
<tr>
<td>Bridge Jumper</td>
<td>1</td>
</tr>
<tr>
<td>Capsized Vessel</td>
<td>25</td>
</tr>
<tr>
<td>Collision</td>
<td>3</td>
</tr>
<tr>
<td>Disabled Vessel</td>
<td>221</td>
</tr>
<tr>
<td>Disoriented Vessel</td>
<td>9</td>
</tr>
<tr>
<td>Distress Alert – situation unknown</td>
<td>92</td>
</tr>
<tr>
<td>Driving Accident</td>
<td>5</td>
</tr>
<tr>
<td>Fire</td>
<td>30</td>
</tr>
<tr>
<td>Flooding</td>
<td>0</td>
</tr>
<tr>
<td>Mass Rescue Ops</td>
<td>0</td>
</tr>
<tr>
<td>MAYDAY Broadcast</td>
<td>10</td>
</tr>
<tr>
<td>MEDEVAC</td>
<td>68</td>
</tr>
<tr>
<td>MEDICO</td>
<td>50</td>
</tr>
<tr>
<td>Non-Maritime EMS Transport</td>
<td>1</td>
</tr>
<tr>
<td>Overdue Person (Non-Maritime)</td>
<td>0</td>
</tr>
<tr>
<td>Overdue Vessel</td>
<td>18</td>
</tr>
<tr>
<td>Person in Water (Ice)</td>
<td>1</td>
</tr>
<tr>
<td>Person in Water (PIW)</td>
<td>122</td>
</tr>
<tr>
<td>Special Operation</td>
<td>0</td>
</tr>
<tr>
<td>Stranded (on ice)</td>
<td>0</td>
</tr>
<tr>
<td>Stranded (on island)</td>
<td>1</td>
</tr>
<tr>
<td>Taking on Water (TOW)</td>
<td>100</td>
</tr>
<tr>
<td>Uncorrelated MAYDAY</td>
<td>51</td>
</tr>
<tr>
<td>Unknown (Legacy)</td>
<td>0</td>
</tr>
<tr>
<td>Unreported Vessel</td>
<td>8</td>
</tr>
<tr>
<td>Vehicle in Water</td>
<td>0</td>
</tr>
<tr>
<td>Grand Total</td>
<td>920</td>
</tr>
</tbody>
</table>

Table 6 U.S. Coast Guard SAR Case Types 2009-2019
Source: Marine Information for Safety & Law Enforcement (MISLE) Database
Additionally, an examination of a scatter plot of all 920 SAR cases within the Northern New York Bight PARS area (see Figure 16) shows a concentration of cases in close vicinity of the shoreline along the study area, such as Long Island and the New Jersey shore.

![Figure 16 Scatter Plot of SAR Cases within NNYBPARS Study Area, 2009-2019](image)

Source: Marine Information for Safety & Law Enforcement (MISLE) Database

2. United States Navy:

The U.S. Navy has no comment regarding possible changes and considers the Traffic Separation Schemes and navigation hazards all well identified visually, by radar (RACONS), and by chart. U.S. Navy activities remain consistent in volume and frequency over the last decade and are anticipated to remain so in the future. Historical activity for U.S. Navy in New York Harbor and Naval Weapons Station Earle is as follows:

In New York Harbor there are 5-10 port visits annually in support of Fleet Week, New York, Veteran’s Day, and namesake visits (i.e. USS NEW YORK, USS THE SULLIVANS). Ships range in size from LHD (845’) to PC (174’). Port visit sites include Manhattan Cruise Ship Terminal, Brooklyn Cruise Ship Terminal, Staten Island Sullivan’s Pier (Front St.), State University of New York (SUNY) Maritime Academy, and United States Merchant Marine Academy at Kings Point, NY.
At Naval Weapons Station Earle, NJ, there are approximately 20 port visits annually conducted by U.S. Navy and U.S. Coast Guard vessels. Ships range in size from LHD (845’) to WLB (225’).

Additionally, the U.S. Navy operates the Narragansett Bay Range Complex off the coasts of Massachusetts, Rhode Island, and New York. A range complex is a designated set of specifically bounded geographic areas and may encompass a water component (above and below the surface) and airspace through established Operating Areas and Special Use Airspace. Portions of the range complex overlaps the study area. Figure 17 and Figure 18 respectively depict the Surface Area Grid and Air Grid for the Narragansett Bay Operating Area.

![Figure 17 Surface Area Grid for Narragansett Bay Operating Area](image)

15 Department of the Navy FACS FAC VACAPES Instruction 3120.1N Manual for the Utilization of Fleet Area Control and Surveillance Facility, Virginia Capes Operating Areas (FASC FAC VACAPES OPERATIONS MANUAL)
3. Foreign Navies:

Various foreign Navies visit New York Harbor, resulting in approximately 6 visits per year. HMS Queen ELIZABETH visited in 2018 and was the largest to conduct a visit recently, at 924’ in length. Typical visitors are DDG’s and FFG’s at under 500’ in length.

H. Aids to Navigation:

- There are 38 federal aids-to-navigation in the NNYBPARS Study Area.
- There are 16 private aids to navigation in the NNYBPARS Study Area.
- AIS data and historical surveys show that mariners continue to use the routing measures as marked and most rely heavily on the aids to navigation in the area. The waterways are adequately marked and provide safe passage for all mariners transiting the area. The New York Traffic Lanes are shown in detail in NOAA charts 12326 and 12300. After validation, the current status of the Ambrose Channel and New York Traffic Lanes waterways for the purposes of AtoN evaluation and discrepancy response time determination remains “Navigationally Critical.” This means that a degradation of the current aids to navigation system would present an unacceptable level of risk to navigation.

- Potential structures in a proposed wind farm, in addition to being obstructions, may serve as aids to navigation. Developers constructing and operating wind farms will mark and light each structure in accordance with Federal regulations and international standards. BOEM may, as a
condition of a construction and operations permit, require the wind energy companies to submit a comprehensive aids-to-navigation plan for First Coast Guard District review.

I. Radar:

The International Regulations for Preventing Collisions at Sea 1972 (COLREGS) Rule 5 requires that “every vessel shall at all times maintain a proper lookout by sight and hearing as well as by all available means appropriate in the prevailing circumstances and conditions so as to make a full appraisal of the situation and risk of collision.” COLREGS Rule 8 requires all vessel operators to avoid collision by using “all available means appropriate to the prevailing circumstances and conditions to determine if risk of collision exists.” Combined, these rules suggest that proper use of a radar is required if the vessel is fitted with one.

Concerning OREI, the potential for interference with marine radar is site specific and depends on many factors including, but not limited to, turbine size, array layouts, number of turbines, construction material(s), and the vessel types. Some of the general types of interference may include radar clutter, radar saturation, and radar shadowing.  

- Radar clutter is unwanted radar returns, including “false targets.”
- Radar saturation occurs when signal levels exceed the dynamic range of the receiver or cause multiple reflections, also known as “ghost targets.”
- Radar shadowing is where an object in the line-of-sight may act to block the radar, reducing the signal strength of a target behind that object.

To better understand the impacts of offshore wind turbine generators (WTG) on marine vessel radar and to identify techniques that can be used to mitigate those impacts, the Coast Guard is participating in the National Academies of Sciences, Engineering, and Medicine Wind Turbine Radar Interference Mitigation (WTRIM) Working Group. The WTRIM Working Group is undertaking a study (commenced June 2021) that will use a combination of literature review and, if informative and practical, apply or adapt existing models to:

- Determine and characterize the impacts of WTG on efficacy of marine vessel radar operated on vessels both within and near existing offshore wind facilities, as well as those facilities anticipated to be installed over the next 15 years on the U.S. outer continental shelf; and
- Identify actions that could be taken to reduce the impacts on marine vessel radar to preserve its use as a navigational aid for vessels both in and near WTG facilities.

16 These types of interference are not limited to wind farms and can be experienced even without the presence of a wind farm. See “Assessment of the Impact of the Proposed Block Island Wind Farm on Vessel Radar Systems”. Also see “Investigation of Technical and Operational Effects on Marine Radar Close to Kentish Flats Offshore Wind Farm, British Wind Energy Association (BWEA), April 2007.”
The analysis of impacts to marine vessel radar will include, but not be limited to, parameters such as radar type, radar height, radar range, vessel type and size (vessel carrying radar and vessels to be detected), vessel speeds, turbine height, and turbine spacing. The study will analyze potential impacts from the WTG on the ability to navigate in adverse weather conditions and to detect small fixed objects such as buoys. The study will estimate the magnitude of clutter, mirroring, shadowing, and any other impacts observed or predicted to be caused by WTGs. Finally, the study will consider a variety of mitigation methods including signal filtering, radar antenna relocation, operational training, and replacement of new radar technology, as well as other possible approaches. The study will examine the feasibility of each proposed mitigation method based on vessel type.

The findings of the study will inform future navigation safety within the NNYBPARS study area.

J. Public Comments:

The First Coast Guard District assessed 25 comments provided by the public in response to the June 29, 2020 Federal Register Notice (85 FR 38907) and other outreach efforts soliciting feedback about the Northern New York Bight PARS to learn about any additional waterway use considerations. The comments received, were provided by multiple entity types including, five from Government entities, five from the Offshore Wind Industry, seven from Marine Transportation System Operators, and eight from Commercial Fishing representatives.

1. Summary of [relevant points to the study] Comments from Government Entities (85 FR 38907):

- The New York State Fisheries Technical Group led by NYSERDA requested transit lanes be established (including Tug and Tow lanes being considered in ANPRM) and allow for up to 4 NM width.

- The New England Fishery Management Council (NEFMC) and Mid-Atlantic Fisheries Management Council (MAFMC) communicated the First Coast Guard District’s MARIPARS report was ambiguous & requested the First Coast Guard District consider all available data to understand patterns of fishing vessel activity in the area including; AIS data, VMS data, vessel trip report (VTR), and fisheries observer data. NEFMC/MAFMC urged the First Coast Guard District to hold in-person meetings with stakeholders & requested 4 NM wide transit lanes.

- The New Jersey Department of Environmental Protection (NJ DEP) requested the First Coast Guard District give particular consideration to the necessity for sea space between WEAs, consult with the fisheries that are most affected as those fisheries may be poorly represented in readily available data sources & that the First Coast Guard District consider operational measures for vessels that may include routing and reporting, speed restrictions, and the potential establishment of areas to avoid.
The New York Department of State (NYDOS) communicated the First Coast Guard District’s conduct of the NNYBPARS is urgently needed to inform offshore planning and design so that developers and regulators can proceed with greater certainty. New York Department of State requested the NNYBPARS describe the established coordination and delineation of responsibilities across the two Coast Guard Districts in the New York Bight so that the entire Bight is covered comprehensively and consistently. Additionally, NYDOS requested undesignated anchorage areas (specifically off Long Beach, NY) be formally designated.

The Department of Interior, Bureau of Energy Ocean Management requested the First Coast Guard District consider planned offshore export cable routes from proposed offshore wind energy facilities identified in the submitted Construction and Operation Plans (COPs), as well as potential cable routes that may be identified in future COPs relative to the establishment of any anchorage areas.

2. Summary of [relevant points to the study] Comments from Offshore Wind Entities (85 FR 38907):

- The American Wind Energy Association (AWEA) and New York Offshore Wind Association (NYOWA) requested that Navigation Safety Risk Assessments (NSRAs) and Construction and Operation Plan reviews be the primary form of adjudication specific to each Wind Energy Area. AWEA/NYOWA stated that existing routing measures are sufficient & no lanes are needed to cut through WEAs, any implemented buffer zones should be 1 NM or less. AWEA/NYOWA requested the First Coast Guard District host public meetings to discuss the contents of the draft PARS and that the before the Coast Guard establishes additional routing measures, it should review the “gap” in VTS coverage between New York & Buzzards Bay. Lastly, AWEA/NYOWA stated the respective organizations cannot comment on unchartered or informal anchorage areas as they are unknown by AWEA/NYOWA

- Equinor expressed concern about the timing of the NNYBPARS as it relates to Lease OCS-A 0512 and the already conducted NSRA which proposes a 1 NM setback from the TSSs.

- Orsted communicated their comments were aligned to the AWEA/NYOWA comment submission. Orsted requested the First Coast Guard District conduct a thorough and comprehensive analysis of economic costs, benefits, effects, and impacts of study recommendations as required by Coast Guard policy. Orsted additionally requested the First Coast Guard District publish a draft of the NNYBPARS, allow for a minimum 120-day comment period on any draft report that may be issued, and host public meetings in sufficient numbers and locations to facilitate a fuller discussion of the draft report among a broad cross-section of stakeholders.

- EDPR Renewables urged the First Coast Guard District to rely on project-specific NSRA as the basis to assess and mitigate risks instead of using the PARS process to impose a
wholesale risk assessment incompatible with existing policy and timeline for the New York Bight lease auction.

- EnBW North America communicated that multiple, concurrent proceedings currently underway by the Coast Guard have the opportunity to be confusing to stakeholders, and it is unclear how the District 5 PARS may interact with and impact this NNYBPARS, and vice versa. Remaining concerns related to navigation safety can be resolved through evaluating individual project NSRAs and COP reviews and conditions on approval.

3. Summary of [relevant points to the study] Comments from Marine Transportation System Entities (85 FR 38907):

- The Harbor Safety Navigation & Operations Committee of the Port of NY & NJ, The Towboat & Harbor Carriers Assoc. of NY & NJ and the Maritime Association of the Port of NY/NJ comments were similar in nature and requested;
  
  - Historic and established waterway port access transit lanes be respected and include National Coastal Tug/Barge Routes as follows: 1) South Shore of Long Island (Ambrose to Montauk), 2) NJ Shore (McCrie Shoal to the Scotland Buoy), and 3) Atlantic City to Montauk as well as International Traffic Separation Systems
  
  - Historic and established custom and practice anchorage areas supporting port operations be advanced to Federal Designated Anchorages
  
  - Setbacks along proposed National Coastal Tug/Barge Safety Fairways and International TSS lanes be consistent along the East Coast and that special consideration be granted for the largest East Coast Port, the Port of NY/NJ.
  
  - National Coastal Tug/Barge Safety Fairways be at least 5-miles wide with 2-mile Safety Margins (Setbacks) on either side as per recommendations of the United States Coast Guard/American Waterway Operators Quality Action Team (QAT)
  
  - A minimum setback of 5 NM be established from all entry/exit points of the TSS
  
  - At least a 2 NM setback be established from all traffic lanes
  
  - To extend all traffic lanes in the NY Bight to the Canyon Edge
  
  - Suitable pass-through fairways be established to allow smaller coastal vessels to transverse any projects. It is recommended that such fairways be 5 miles wide, with a 2-mile setback on either side. A fairway from Atlantic City to Montauk is necessary to accommodate existing traffic
  
  - All continuous developed areas should have allowances for clear “cut-through” passages to allow marine traffic to pass through a field.
The American Waterways Operators requested the First Coast Guard District to widen the proposed Long Island Shipping Safety Fairway to 9 NM.

The Cruise Lines International Association expressed concern that wind turbines may be approved for construction in close proximity, and on both sides of TSSs and requested the establishment of 2 NM buffer zones.

The World Shipping Council asserted the minimum buffer zone be at least 2 NM and 3 NM where vessels operate over 20 knots, support for the proposed fairway south of Long Island & requests the First Coast Guard District address the question of how it will manage the risk of collision between crossing tug and barge vessels and the deep draft vessels operating in the TSSs.

4. Summary of comments from Fishing Entities (85 FR 38907):

- The Responsible Offshore Development Alliance (RODA) communicated the appropriate width of transit lanes should in no circumstances be less than 2 NM, and it is possible that even greater than 4 NM could be required under certain conditions.

- Seafreeze Ltd. expressed concern with the Coast Guard’s lack of completing a comprehensive analysis on marine radar interference. Seafreeze Ltd. referenced the United Kingdom Maritime and Coast Guard Agency Marine Guidance Note (UK MGN) 543 that states that greater than 3.5 NM is the minimum recommended separation distance between turbines when they occur on opposite sides of the route and in some cases the width of the lane could be up to 5.5 NM in width.

- Wallace & Associates Consulting Inc. represents the fishing industry and requests transit lanes possess 4 NM widths.

- The Long Island Commercial Fishing Association (LICFA) communicated the two public meetings were insufficient & field meetings are needed to gather the appropriate information. LICFA expressed concern on the use of AIS data not holistically representing the fishing community and that transit lanes are needed to preserve navigation to and from fishing vessel areas of interest.

- Lund’s Fisheries encourages the First Coast Guard District to specifically evaluate up to 4 NM, 2-way dedicated transit corridors as proposed by RODA. Lund’s also noted that some call areas under consideration within the NNYBPARS study area have yet to be leased for wind development, providing a unique opportunity to design leases with transit lanes between adjacent lease boundaries or otherwise fully incorporated into lease design.

The First Coast Guard District assessed 5 additional comments provided by the public in response to the April 12, 2021 Federal Register Notice (86 FR 18996) and other outreach efforts soliciting feedback about the Northern New York Bight PARS to learn about any additional waterway use considerations. The comments received, were provided by multiple entity types including,
including two from the Offshore Wind Industry and three from Marine Transportation System Operators.

5. Summary of [relevant points to the study] Comments from Offshore Wind Entities (86 FR 18996):

- American Clean Power (ACP) and NYOWA commented that BOEM had published final WEAs in March of 2021, after more than three years of consideration and stakeholder input, to address vessel navigation concerns, including those of commercial fisherman, and that the First Coast Guard District should incorporate the subject accommodations in the NNYBPARS. ACP/NYOWA also provided comment in support of revising the ANPRM USCG-2019-0279 (85 FR 37034) Cape Charles to Montauk shipping safety fairway to accommodate Wind Energy development.

- Equinor commented their wind development in Northern New York Bight will not significantly affect navigation, the existing Traffic Separation Schemes need not be widened or extended, and that establishment of federal anchorages in the Northern New York Bight was necessary, but that there is a realistic need for the future placement of transmission cables nearer the anchorage location closer to shore.

6. Summary of [relevant points to the study] Comments from Marine Transportation System Entities (86 FR 18996):

- The World Shipping Council commented that 800’ to 1,000’ deep draft vessels have a turning radius of more than 1 NM, require more than 2 NM to come to a complete stop, and when anchoring release up to a half-mile of anchor chain generating a swing radius that could easily exceed 1 NM, and thus buffer zones need to be at least 2 NM in width.

- The Towboat & Harbor Carriers Assoc. of NY & NJ requested three shipping safety fairways be established including: 1) New Jersey shore from Delaware Bay to New York Harbor, 2) Long Island shore from New York Harbor, and 3) Atlantic City NJ to Montauk NY “cut across.” Additionally, it was requested that the Marine Planning Guidelines be followed and specific standards for Offshore Structures, Underwater Connectors & Landfall Connectors be adhered to.

- The American Waterways Operators (AWO) commented the First Coast Guard District should establish 9 NM wide shipping safety fairways including 1) the New York Bight “cut-across” fairway from New Jersey to Montauk Point, 2) Long Island Shipping Safety Fairway (expanded from 5 NM to 9 NM), and 3) an inshore fairway, set at 9 NM, from Delaware Bay to New York Harbor.
V. DISCUSSION

A. Data:

The First Coast Guard District reviewed all available data in the course of conducting the NNYBPARS. Based on recent trends and existing uses, neither vessel traffic frequency nor patterns have changed significantly over the past several years. Future changes in traffic frequency and patterns are expected relative to offshore wind development in the New York Bight. The Bureau of Ocean Energy Management New York Bight Wind Energy Areas are pictured in Figure 19. Currently, the only offshore development being undertaken is the Empire Wind OCS-A 0512 located between the Off New York Eastern and South-eastern TSS(s). Areas planned for future development within the NNYBPARS study area, referred to as Wind Energy Areas, include Fairways North, Fairways South, Hudson North, & Central Bight.

![Figure 19 BOEM Wind Lease & Wind Energy Areas as of March 29, 2021](Source: Mid-Atlantic Ocean Data Portal)

If developed as planned, a significant portion of the Bight would be occupied by wind farms, thus changing the majority of vessel traffic patterns to steer clear of the wind farms, whether by utilizing the existing Traffic Separation Schemes, following a near shore route, or transiting up to 60 NM further offshore. It is therefore appropriate to preserve navigation by implementing a routing measure that cuts through the Bight, such as has been proposed by CG-NAV’s ANPRM USCG-2019-0279 (85 FR 37034) Cape Charles to Montauk shipping safety fairway, pictured in Figure 19 in brown.

CG-NAV’s ANPRM USCG-2019-0279 (85 FR 37034) Cape Charles to Montauk Point Fairway is approximately 8 NM in width. At the time of this report, the proposed Cape Charles to Montauk shipping safety fairway has multiple location conflicts with BOEM’s identified New York Bight Call Areas also depicted in Figure 19. It must also be considered that International Maritime
Organization (IMO) rules for fairways direct a path with as few turns as possible. Establishing this fairway before the leases are awarded ensures compliance with this international agreement.

Also proposed in ANPRM USCG-2019-0279 (85 FR 37034), the Long Island Fairway (gold color in Figure 19) preserves navigation for mariners to transit in the near shore area south of Long Island. It is appropriate to establish this fairway to preserve navigation, although it is recommended that the Southern end of the fairway be adjusted to the north of a traditional anchorage, commonly referred to by mariners as “Ambrose Anchorage.” It is also appropriate to formally establish the anchorage as doing so preserves this offshore area for ships awaiting inshore anchorages or berths, improves navigation safety, and enhances the safe and efficient flow of vessel traffic and commerce.

To mitigate the current location conflict between the traditional anchorage and the ANPRM Long Island Fairway (see Figure 20), as discussed in the Approaches to New York notification of inquiry [Docket No. USCG-2020-0620 (86 FR 17090) April 1, 2021], it is recommended that the geometries of both the anchorage and the fairway be adjusted such as depicted in Figure 21. By overlaying 2019 Tug and Tow and Cargo AIS densities (see Figure 22), it can be determined that the recommended adjustments balance traditional navigational practices in this area, whereby Tug and Tow traffic transit north of vessels at anchor.
Figure 21 Modified Ambrose Anchorage & Adjusted Long Island Fairway
In addition to establishing an adjusted version of the Long Island Fairway, it is a finding of this study that navigation needs to similarly be preserved in the near shore areas along the New Jersey coast. AIS data clearly identifies the near shore coastal areas to be the most frequently transited areas, particularly along the New Jersey coast as demonstrated in Figure 23.
In terms of weather and navigation difficulty, the maritime environment in the Northern New York Bight is similar today as it has been for many years, dynamic and frequently transited by a multitude of maritime community stakeholders of various vessel types. The existing routing measures in the Northern New York Bight have been in use since the late 1960’s and AIS data demonstrates that mariners consistently utilize them.

Coast Guard VTS New York has been in continuous operation since the early 1990’s to improve the safety and efficiency of vessel traffic and protect the environment. The current VTS New York area includes the entrance to the harbor via Ambrose and Sandy Hook Channels, through the Verrazano Narrows Bridge to the Throgs Neck Bridge in the East River, to the Holland Tunnel in the Hudson River, the Kill Van Kull including Newark Bay and all of Arthur Kill, and Raritan Bay. 33 CFR §160.3 notes that although regulatory jurisdiction is limited to the navigable waters of the United States, certain vessels will be encouraged or may be required, as a condition of port entry, to report beyond this area to facilitate traffic management within the VTS area. Considering future planned offshore development and predicted effects on changes to navigation within the NNYBPARS study area, VTS New York coverage could be expanded to coordinate vessel traffic movements in the offshore port approaches of New York and New Jersey, if deemed to appropriate to mitigate navigational risk not otherwise addressed by the implementation of additional near shore routing measures.
Between the entry and exit points of the Off New York: Eastern approach off Nantucket\textsuperscript{17} TSS and Off New York: Eastern approach\textsuperscript{18} TSS, AIS data shown in Figure 24 demonstrates that mariners transit in multiple directions, but specifically follow the Ambrose to Nantucket and the Nantucket to Ambrose Safety Fairways contained in 33 CFR §166.500. These safety fairways were created to control the erection of structures therein to provide safe vessel routes along the Atlantic Coast. In practice and as an added navigational benefit, these two fairways have traditionally served the purpose of separating deep draft commercial marine transportation system traffic from other vessel traffic types. To preserve navigation for all vessel types and maintain sufficient sea space for a mix of vessel traffic, it is appropriate to establish a single Nantucket to Ambrose Fairway, thereby removing the need for separate fairways as currently exist.

Beyond the entry and exit points of the Off New York: South-eastern approach\textsuperscript{19} TSS, AIS data shown in Figure 24 demonstrates that mariners transit in multiple different directions, including following the same heading as being followed while in the TSS. It has therefore been deemed appropriate to preserve navigation by establishing fairways to the North and South of the Central Bight Wind Energy Area; 1) Hudson Canyon Eastern Fairway and 2) Hudson Canyon Southeastern Fairway. It is proposed that the Hudson Canyon Southeastern Fairway connects with the off New York Southeastern TSS and extend to a point 5NM south of the Central Bight Wind Energy Area. It is also proposed that the Eastern provide an access point to the Off New York Southeastern TSS and extend to a point 5NM east of the Central Bight Wind Energy Area. Both fairways are also depicted in Figure 24.

\textsuperscript{17} Off New York: Eastern approach defined in 33 CFR §167.152
\textsuperscript{18} Off New York: Eastern approach defined in 33 CFR §167.153
\textsuperscript{19} Off New York: South-eastern approach defined in 33 CFR §167.154
B. Comments:

The First Coast Guard District received 30 total comments in response to notice(s) (85 FR 38907) & (86 FR 18996). All comments are publicly available in Federal Register docket USCG-2020-0278. Of the thirty comments, fourteen requested additional routing measures be established, twelve expressed concerns that wind farm installations will negatively affect vessel’s marine radar performance, eight requested setback/buffer zones, six requested anchorages be designated, six requested additional meetings, three requested alteration of existing routing measures, and three requested expanding Vessel Traffic Services.

C. Marine Planning Guideline Assessment:

In conducting the NNYBPARS, the First Coast Guard District assessed the current routing measures within the Northern New York Bight against the Marine Planning Guidelines\(^\text{20}\) (MPG) criteria to determine whether existing regulations should be revised to improve navigation safety due to factors such as increased vessel traffic, changing vessel traffic patterns, conflicting off-

\(^{20}\) The Marine Planning Guidelines are included in Appendix E of COMDTINST 16003.2B and in Enclosure 3 of NVIC 01-19
shore uses, weather conditions, and other navigational challenges. Being that existing Offshore Renewable Energy Installation (OREI) leases and Wind Energy Areas have been located in proximity to current routing measures, their placement has also been assessed against the MPG criteria.

In the context of assessing existing routing measures within the Northern New York Bight, it is useful to review both the Coast Guard’s roles and responsibilities for OREI and the most relevant sections of the MPG criteria;

Coast Guard’s roles and responsibilities for OREI:
As stated in Navigation and Vessel Inspection Circular (NVIC) NO. 01-19, the Coast Guard’s role is as follows;

The Coast Guard may serve as a Cooperating Agency under the National Environmental Policy Act with the Lead Agency (LA) considering the issuance of a lease, right of use and easement, or right or way for an Offshore Renewable Energy Installation. The Coast Guard will serve as a subject matter expert for its 11 missions. As such, the role of the Coast Guard is limited to providing an LA with an evaluation of the potential impacts of the proposed facility on the MTS, safety of navigation, the traditional uses of the particular waterway and other Coast Guard missions in order for the LA to prepare its required National Environmental Policy Act (NEPA) documentation. The Coast Guard will develop recommendations that address navigation safety and mitigate potential adverse impacts on other Coast Guard missions in and around the proposed installation and provide them to the LA for consideration. The Coast Guard does not have the authority to approve, disapprove, permit nor in any way authorize an OREI application.

Marine Planning Guideline Criteria:
There is no international standard that specifies minimum distances between shipping routes and fixed structures. However, it is widely accepted that fixed structures in the offshore environment should not interfere with navigation. The MPGs provide general guidelines for siting of multiple structures near shipping routes and established ships routing measures. Each project will be assessed during the BOEM NEPA process on a case by case basis using the MPGs. NOTE: as stated in the COMDTINST 16003.2B, “These guidelines are not regulatory. They do not impact the boundaries of any existing leases for site characterization and site assessment activities, but do inform suitability of siting structures within a lease area. These guidelines should be considered during the area identification phase for both unsolicited and solicited development areas and when determining the siting of structures within existing areas.” Thus, it is helpful to understand how the existing lease and the proposed leases currently compare to the MPGs. Below is the First Coast Guard District’s assessment on the applicability of each MPG to the Northern New York Bight:

1. Port Approaches and Traffic Separation Schemes:

Planning Guideline:
• 2 NM from the parallel outer or seaward boundary of a traffic lane. (Assumes 300-400m vessels)
• 5 NM from the entry/exit (terminations) of a TSS

These recommendations are based on generic deep draft vessel maneuvering characteristics and are consistent with existing European guidelines. They account for the minimum distances for larger vessels to maneuver in emergency situations.

The 5 NM mile separation from the entry and exit of a TSS is necessary to enable vessels to detect one another visually and by radar in areas where vessels are converging and diverging from and to multiple directions.

Assessment: Traffic Separation Scheme Off New York has been established in the approaches to New York Harbor from sea. The Traffic Separation Scheme Off New York is contained in 33 CFR §167.1 through 33 CFR §167.155. Three sets of traffic lanes direct traffic in and out of the Precautionary Area. Figure 25 assesses each Traffic Separation Scheme to the Marine Planning Guide criteria. There are numerous instances of deviations from the MPGs when looking at both the current OCS-A 0512 lease (awarded before issuance of the MPGs) and BOEM Wind Energy Areas announced in March 2021.

Marine Planning Guidelines

There are multiple instances within the study area where BOEMs Area Identification locations deviate from the Marine Planning Guideline criteria (in addition to bring in location conflict with ANPRM Cape Charles to Montauk Fairway) as follows;

* OCS-A 0512:
  - less than 2 NM from Hudson Canyon to Ambrose Traffic Lane
  - less than 2 NM from Ambrose to Nantucket Traffic Lane

* Hudson North:
  - less than 2 NM from Hudson Canyon to Ambrose Traffic Lane & entrance
  - less than 2 NM from Ambrose to Nantucket Traffic Lane & entrance

* Fairways South:
  - less than 5 NM from Ambrose to Nantucket Traffic Lane entrance
  - Inconsistent with “Avoid creating an obstruction or hazard on both sides of an existing route”

Figure 25 Marine Planning Guideline Applicability to Traffic Separation Schemes

OCS-A 0512:
It is relevant to note that the OCS-A 0512 lease was awarded before the Coast Guard issued the MPGs, thus the MPGs were not considered during BOEM’s OCS-A 0512 lease award process, but should be considered when determining the siting of structures within existing areas. For the existing OCS-A 0512 lease, the Coast Guard, serving as a cooperating agency to BOEM, will assess and provide input to BOEM on the suitability and appropriateness of navigation risk mitigation measures proposed in the developer’s Navigation Safety Risk Assessment and Construction and Operations Plan as BOEM conducts the Environmental Impact Statement (EIS).
At the time of this publication’s release, the Coast Guard, as a cooperating agency, has not yet provided its final assessment to BOEM specific the subject documents.

**WEAs announced 29Mar21 & Proposed WEA 2021 Lease Sale:**
For future WEA development and lease finalization, the Coast Guard will serve as a cooperating agency to BOEM, which should consider the MPGs. At the time of this publication’s release, the WEAs have not yet been leased, thus the MPGs would be applicable.

On June 14th, 2021, the Department of the Interior published a [Proposed Sale Notice](#) in the Federal register that provided detailed information about potential areas that could be available for leasing, proposed lease provisions and conditions, auction details (e.g., criteria for evaluating competing bids and award procedures), and lease execution. The Proposed Sale Notice includes Hudson North (lease area ID OCS-A 0544), but does not include the Fairways South WEA (not proposed for 2021 lease sale). The current OCS-A 0544 and Fairways South WEA locations, amongst others, are depicted in Figure 26.

![BOEM New York Bight Overview Map](#)

Stakeholders can assess the WEAs (in the NNYBPARS study area) against the MPG criteria for setbacks. If OCS-A 0544 and Fairways South WEA locations are leased as depicted in Figure 26, these OREI locations would deviate from the MPG criteria, as noted in Figure 25.
The MPG Assessment within the NNYBPARS should inform current and future lease activity and also the Coast Guard’s future cooperating agency input.

2. Coastwise or Coastal Shipping Routes:

Vessels that tend to follow the coastline are typically smaller vessels and vessels that cannot safely transit too far offshore due to sea state limitations. The necessary sea space for vessels to safely maneuver is determined by the size and maneuverability of vessels and density of vessel traffic. When determining routes near shore, the depth of water and location of underwater obstructions must be considered, especially if vessel routes will be displaced by the introduction of fixed structures. Vessels of particular concern are those towing astern on a wire. In this configuration, their footprint is large, maneuvering ability is constrained, and the catenary of the tow wire will dictate significantly larger water depths than the drafts of the tug or barge alone.

Planning Guidelines:

- Identify a navigation safety corridor to ensure adequate sea area for vessels to transit safely.
- Provide inshore corridors for coastal ships and tug/barge operations.
- Minimize displacement of routes further offshore.
- Avoid displacing vessels where it will result in mixing vessel types.
- Identify and consider cumulative and cascading impacts of multiple offshore renewable energy installations, such as wind farms.

Assessment: Coastwise Shipping Routes are needed to organize traffic through the Northern New York Bight along the coast of New Jersey and Long Island.

VI. ALTERNATIVES

The First Coast Guard District considered five alternatives:

Alternative 1: Make no regulatory changes to existing vessel routing measures.

Alternative 2: Establish the Shipping Safety Fairways as proposed in the ACPARS ANPRM.

Alternative 3: In addition to the contents of Alternative 2, establish a New Jersey to New York Connector fairway.

Alternative 4: In addition to the contents of Alternative 3, establish a Hudson Canyon to Ambrose Southeastern Fairway, a Hudson Canyon to Ambrose Eastern Fairway, and a single Nantucket to Ambrose fairway.

Alternative 5: In addition to the contents of Alternative 4, establish an Ambrose Anchorage and adjust the Long Island Fairway to mitigate location conflict between the anchorage and fairway.
VII. CONCLUSION

As required by Coast Guard Headquarters per the March 15, 2019 Federal Register Notice of study; request for comments (84 FR 9541), the First Coast Guard District considered whether it should revise existing regulations to improve navigation safety in Northern New York Bight due to factors such as vessel traffic density, vessel traffic patterns, weather conditions, or navigation challenges in the study area. The First Coast Guard District analyzed all available sources of data relevant to this process, including existing and potential traffic patterns, existing regulations, public submissions, and other factors. The First Coast Guard District identified five different alternatives to consider within this study.

Based on our review, the First Coast Guard District recommends that Alternative 5 be implemented. Alternative 5 best preserves the current and predicted future navigational practices of a myriad of user types that transit within the established routing measures, follow coastwise routes, cut across the Bight from points to and from Southern New Jersey and areas in the vicinity of Montauk Point, and anchor in the port approaches awaiting inshore anchorages or berths.

As detailed in the previous section, Alternative 5 recommends that multiple shipping safety fairways be established within the NNYBPARS study area. Shipping safety fairways may be utilized mariners but are not mandatory for any specific class of vessel.

Per 33 CFR § 166.105, the definition of shipping safety fairway or fairway means a lane or corridor in which no artificial island or fixed structure, whether temporary or permanent, will be permitted. Temporary underwater obstacles may be permitted under certain conditions described for specific areas in Subpart B. Aids to navigation approved by the U.S. Coast Guard may be established in a fairway.

The First Coast Guard District actively monitors all waterways subject to its jurisdiction to help ensure navigation safety. As such, the First Coast Guard District will continue to monitor the Northern New York Bight for changing conditions and consider appropriate actions, such as recommend vessel routes or more extensive use of electronic AtoN, to promote waterway and user safety.
APPENDICES
APPENDIX A

Northern New York Bight Study Area
APPENDIX B

Definition of Terms
1. **Area to be avoided** or ATBA means a routing measure comprising an area within defined limits in which either navigation is particularly hazardous or it is exceptionally important to avoid casualties and which should be avoided by all vessels, or certain classes of vessels.

2. **Deep-water route** means a route within defined limits, which has been accurately surveyed for clearance of sea bottom and submerged obstacles as indicated on nautical charts.

3. **Fairway** means a lane or corridor in which no artificial island or structure, whether temporary or permanent, will be permitted so that vessels using U.S. ports will have unobstructed approaches.

4. **Inshore traffic zone** means a routing measure comprising a designated area between the landward boundary of a traffic separation scheme and the adjacent coast, to be used in accordance with the provisions of Rule 10(d), as amended, of the International Regulations for Preventing Collisions at Sea, 1972 (COLREGS), 33 CFR 83.

5. **Marine Environment**, as defined by the Ports and Waterways Safety Act, means the navigable waters of the United States and the land resources therein and thereunder; the waters and fishery resources of any area over which the United States asserts exclusive fishery management authority; the seabed and subsoil of the Outer Continental Shelf of the United States, the resources thereof and the waters superjacent thereto; and the recreational, economic, and scenic values of such waters and resources.

6. **No anchoring area** means a routing measure comprising an area within defined limits where anchoring is hazardous or could result in unacceptable damage to the marine environment. Anchoring in a no anchoring area should be avoided by all vessels or certain classes of vessels, except in case of immediate danger to the vessel or the persons on board.

7. **Precautionary area** means a routing measure comprising an area within defined limits where vessels must navigate with particular caution and within which the direction of traffic flow may be recommended.

8. **Recommended route** means a route of undefined width, for the convenience of vessels in transit, which is often marked by centerline buoys.

9. **Recommended track** means a route which has been specially examined to ensure so far as possible that it is free of dangers and along which vessels are advised to navigate.

10. **Regulated Navigation Area** or RNA means a water area within a defined boundary for which regulations for vessels navigating within the area have been established under 33 CFR part 165.

11. **Roundabout** means a routing measure comprising a separation point or circular separation zone and a circular traffic lane within defined limits. Traffic within the roundabout is separated by moving in a counterclockwise direction around the separation point or zone.
12. **Separation Zone** or *separation line* means a zone or line separating the traffic lanes in which vessels are proceeding in opposite or nearly opposite directions; or from the adjacent sea area; or separating traffic lanes designated for particular classes of vessels proceeding in the same direction.

13. **Traffic lane** means an area within defined limits in which one-way traffic is established. Natural obstacles, including those forming separation zones, may constitute a boundary.

14. **Traffic Separation Scheme** or TSS means a routing measure aimed at the separation of opposing streams of traffic by appropriate means and by the establishment of traffic lanes.

15. **Two-way route** means a route within defined limits inside which two-way traffic is established, aimed at providing safe passage of ships through waters where navigation is difficult or dangerous.

16. **Vessel routing system** means any system of one or more routes or routing measures aimed at reducing the risk of casualties; it includes traffic separation schemes, two-way routes, recommended tracks, areas to be avoided, no anchoring areas, inshore traffic zones, roundabouts, precautionary areas, and deep-water routes.
APPENDIX C

Abbreviations and Acronyms
ACP – American Clean Power
ACPARS – Atlantic Coast Port Access Route Study
AIS – Automatic Identification System
ANPRM – Advanced Notice of Proposed Rule Making
AOR – Area of Responsibility
AtoN – Aids to Navigation
AWEA – American Wind Energy Association
AWO – American Waterways Operators
BOEM – Bureau of Ocean Energy Management
CEU – Car Equivalent Units
CFR – Code of Federal Regulations
CG-NAV – Coast Guard Headquarters Assistant Commandant for Prevention, Office of Navigation Systems
COLREGS – International Regulations for Preventing Collisions at Sea 1972
COP – Construction and Operation Plan
COTP – Captain of the Port
EIS – Environmental Impact Statement
FAX – Facsimile
FMP – Fisheries Management Plan
FR – Federal Register
IMO – International Maritime Organization
LA – Lead Agency
LICFA – Long Island Commercial Fishing Association
LLNR – Light List Number
LNM – Local Notice to Mariners
LOA – Length Overall
MAFMC – Mid-Atlantic Fisheries Management Council
MLLW – Mean Lower Low Water
MPG – Marine Planning Guideline
MSIB – Marine Safety Information Bulletin
MTS – Marine Transportation System
NAD 83 – North American Datum of 1983
NDBC – National Data Buoy Center
NAVCEN – Coast Guard Navigation Center
NEFMC – New England Fisheries Management Council
NEPA – National Environmental Policy Act
NJ – New Jersey
NJ DEP – New Jersey Department of Environmental Protection
NM – Nautical Mile
NMFS – National Marine Fisheries Service
NNYBPARS – Northern New York Bight Port Access Route Study
NOAA – National Oceanic and Atmospheric Administration
NSRA – Navigation Safety Risk Assessment
NVIC – Navigation and Vessel Inspection Circular
NY – New York
NYDOS – New York Department of State
NYNJHDCI – New York and New Jersey Harbor Deepening and Channel Improvements
NYOWA – New York Offshore Wind Association
NYSERDA – New York State Energy Research and Development Authority
OCS – Outer Continental Shelf
OREI – Offshore Renewable Energy Installation
PANYNJ – Port Authority of the New York and New Jersey
PARS – Port Access Route Study
PWSA – Ports and Waterways Safety Act
QAT – Quality Action Team
RNA – Regulated Navigation Area
RODA – Responsible Offshore Development Alliance
RUI – Relative Use Index
SAR – Search and Rescue
SMBT – South Brooklyn Marine Terminal
TEU - Twenty-foot Equivalent Unit
TSS – Traffic Separation Scheme
APPENDIX D

Northern New York Bight
PARS Contact List
<table>
<thead>
<tr>
<th>Company Name</th>
<th>Recipients</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. DiCesare Associates</td>
<td></td>
</tr>
<tr>
<td>AECOM.com (2 recipients)</td>
<td></td>
</tr>
<tr>
<td>Agate Construction</td>
<td></td>
</tr>
<tr>
<td>AIA Inc.</td>
<td></td>
</tr>
<tr>
<td>Alpine Ocean Surveys (7)</td>
<td></td>
</tr>
<tr>
<td>American Petroleum</td>
<td></td>
</tr>
<tr>
<td>Anchor QEA (3 recipients)</td>
<td></td>
</tr>
<tr>
<td>Aqua Survey</td>
<td></td>
</tr>
<tr>
<td>Aquifer Drilling &amp; Testing (2)</td>
<td></td>
</tr>
<tr>
<td>Atlantic Engineering</td>
<td></td>
</tr>
<tr>
<td>Boswell Engineering</td>
<td></td>
</tr>
<tr>
<td>Bouchard Transport</td>
<td></td>
</tr>
<tr>
<td>Breakwater Marine</td>
<td></td>
</tr>
<tr>
<td>Bren Transportation</td>
<td></td>
</tr>
<tr>
<td>Brewster Marine</td>
<td></td>
</tr>
<tr>
<td>Buchanan Marine</td>
<td></td>
</tr>
<tr>
<td>Caldwell Marine (3)</td>
<td></td>
</tr>
<tr>
<td>Cape Liberty Cruise Port: (RCCL)</td>
<td></td>
</tr>
<tr>
<td>CMI Subsurface</td>
<td></td>
</tr>
<tr>
<td>Coeymans Marine Towing</td>
<td></td>
</tr>
<tr>
<td>Con Edison</td>
<td></td>
</tr>
<tr>
<td>Construction &amp; Marine Equipment</td>
<td></td>
</tr>
<tr>
<td>Conway Marine Construction (3)</td>
<td></td>
</tr>
<tr>
<td>Covanta NY MTS</td>
<td></td>
</tr>
<tr>
<td>Dann Ocean Towing (2)</td>
<td></td>
</tr>
<tr>
<td>Donjon (11 recipients)</td>
<td></td>
</tr>
<tr>
<td>D’Onofrio Contractors</td>
<td></td>
</tr>
<tr>
<td>DP Marine Services</td>
<td></td>
</tr>
<tr>
<td>Dryden diving</td>
<td></td>
</tr>
<tr>
<td>Dutra Dredging Group (2)</td>
<td></td>
</tr>
<tr>
<td>E4sciences</td>
<td></td>
</tr>
<tr>
<td>EEA Environmental</td>
<td></td>
</tr>
<tr>
<td>ESS Group</td>
<td></td>
</tr>
<tr>
<td>Express Marine</td>
<td></td>
</tr>
<tr>
<td>FPA Engineers</td>
<td></td>
</tr>
<tr>
<td>Frontz Drilling</td>
<td></td>
</tr>
<tr>
<td>Gellatly &amp; Criscione (3)</td>
<td></td>
</tr>
<tr>
<td>Genesis Marine</td>
<td></td>
</tr>
<tr>
<td>Glas Transportation</td>
<td></td>
</tr>
<tr>
<td>Greater NY Marine Transportation (4)</td>
<td></td>
</tr>
<tr>
<td>Great Lakes Dredge &amp; Dock (7)</td>
<td></td>
</tr>
<tr>
<td>Harley Marine (12)</td>
<td></td>
</tr>
<tr>
<td>H&amp;L Contracting</td>
<td></td>
</tr>
<tr>
<td>HDR LMS (2)</td>
<td></td>
</tr>
<tr>
<td>Hornbeck Offshore</td>
<td></td>
</tr>
<tr>
<td>Hudson Marine (2)</td>
<td></td>
</tr>
<tr>
<td>Hudson Meridian</td>
<td></td>
</tr>
<tr>
<td>Hughes Brothers Marine</td>
<td></td>
</tr>
<tr>
<td>Hunt Tugs &amp; Barges</td>
<td></td>
</tr>
<tr>
<td>IEW Construction</td>
<td></td>
</tr>
<tr>
<td>Jacobs (6)</td>
<td></td>
</tr>
<tr>
<td>Jay Cashman (2)</td>
<td></td>
</tr>
<tr>
<td>J.T. Cleary (2)</td>
<td></td>
</tr>
<tr>
<td>Kiewit Construction (3)</td>
<td></td>
</tr>
<tr>
<td>Kirby Offshore Marine (2)</td>
<td></td>
</tr>
<tr>
<td>Kiska Construction</td>
<td></td>
</tr>
<tr>
<td>KT Marine (2)</td>
<td></td>
</tr>
<tr>
<td>Malcolm Pirnie (2)</td>
<td></td>
</tr>
<tr>
<td>Marine Solutions</td>
<td></td>
</tr>
<tr>
<td>Mark Duffy Commercial Diving</td>
<td></td>
</tr>
<tr>
<td>McAllister Towing (3)</td>
<td></td>
</tr>
<tr>
<td>McLaren Engineering (3)</td>
<td></td>
</tr>
<tr>
<td>Mid-State Construction</td>
<td></td>
</tr>
<tr>
<td>Millers Launch (2)</td>
<td></td>
</tr>
<tr>
<td>Moffat Nichol (2)</td>
<td></td>
</tr>
<tr>
<td>Moran Towing (4)</td>
<td></td>
</tr>
<tr>
<td>MVN Associates (2)</td>
<td></td>
</tr>
<tr>
<td>New York Harbor School</td>
<td></td>
</tr>
<tr>
<td>Norfolk Tug Company</td>
<td></td>
</tr>
<tr>
<td>Normandeau (6)</td>
<td></td>
</tr>
<tr>
<td>Northstar Marine</td>
<td></td>
</tr>
<tr>
<td>NY Oil Heating Assn</td>
<td></td>
</tr>
<tr>
<td>NYC Dept of Environmental Protection (4)</td>
<td></td>
</tr>
<tr>
<td>NYC Dept of Sanitation (9)</td>
<td></td>
</tr>
<tr>
<td>NYC Dept of Transporation</td>
<td></td>
</tr>
<tr>
<td>NYC Economic Development Corp. (2)</td>
<td></td>
</tr>
<tr>
<td>NY State Energy Research &amp; Dev.(2)</td>
<td></td>
</tr>
<tr>
<td>NYS Marine Highway Transportation (2)</td>
<td></td>
</tr>
<tr>
<td>Ocean &amp; Coastal (3)</td>
<td></td>
</tr>
<tr>
<td>Ocean Surveys (3)</td>
<td></td>
</tr>
<tr>
<td>Ocean Ventures (3)</td>
<td></td>
</tr>
<tr>
<td>Parsons Brinckerhoff</td>
<td></td>
</tr>
<tr>
<td>Penfield Marine</td>
<td></td>
</tr>
<tr>
<td>Pennmax Engineering</td>
<td></td>
</tr>
<tr>
<td>Phillips 66 Bayway (2)</td>
<td></td>
</tr>
<tr>
<td>Phoenix Marine</td>
<td></td>
</tr>
<tr>
<td>Poling &amp; Cutler</td>
<td></td>
</tr>
<tr>
<td>Port Authority of NY/NJ (4)</td>
<td></td>
</tr>
<tr>
<td>Company</td>
<td>Company</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>--------------------------------------------</td>
</tr>
<tr>
<td>PSE&amp;G</td>
<td>Uni-Tech Drilling</td>
</tr>
<tr>
<td>Randive</td>
<td>United Nations Plaza</td>
</tr>
<tr>
<td>Reicon – Reinauer Construction</td>
<td>URS Corp (2)</td>
</tr>
<tr>
<td>Reinauer (5)</td>
<td>US Army Corps of Engineers</td>
</tr>
<tr>
<td>Rising Tide Waterfront Solutions</td>
<td>US Concrete (3)</td>
</tr>
<tr>
<td>RS Marine Diving</td>
<td>US Waterways Transportation</td>
</tr>
<tr>
<td>Sea Vision Marine</td>
<td>Vane Bros (7)</td>
</tr>
<tr>
<td>Sea Wolf Marine (3)</td>
<td>Verdant Power</td>
</tr>
<tr>
<td>Shell Northeast U.S.</td>
<td>Village Dock</td>
</tr>
<tr>
<td>Skanska (4)</td>
<td>Vinik Marine</td>
</tr>
<tr>
<td>Spectraserv</td>
<td>Vornado Realty</td>
</tr>
<tr>
<td>Sprague Energy</td>
<td>Walsh Construction (3)</td>
</tr>
<tr>
<td>Thornton Towing and Transportation (2)</td>
<td>Warren George</td>
</tr>
<tr>
<td>TMS Waterfront (2)</td>
<td>Waste Management (2)</td>
</tr>
<tr>
<td>Tow Boat &amp; Harbor Carriers Assn</td>
<td>Watco Terminal</td>
</tr>
<tr>
<td>Trevcon (15)</td>
<td>Weeks Marine (10)</td>
</tr>
<tr>
<td>Underwater Construction (2)</td>
<td>Wittich Brothers (2)</td>
</tr>
</tbody>
</table>
American Styrenics
AMTRAK (2 recipients)
Barnum Landing/BP Ferry
BPPJ Ferry Port Captain
Branford Harbormaster
Bridgeport Harbormaster
Bridgeport Landing Development (2)
Bridgeport Port Authority
Buckeye Partners (2)
Capt Saam's Scuba School
CG Auxiliary CT
Chester Harbormaster
City Pier New London
Clean Harbors (2)
Clinton Harbormaster
Connecticut Port Authority (2)
Cross Sound Ferry (3)
CT DEEP Boating
CT DOT Bridge (5)
CT Marine Trades
CT Maritime Coalition/ Pilot Commission
CT Maritime Commission
CT Maritime Police, Captain
CT Pilots (2)
CT Port Authority (2)
CTDEEP (2)
CTDEEP Navigation
CTDOT (3)
D1 Bridges
Darien Harbormaster
Davis Park Ferry
DDLC Energy
Deep River Harbormaster
East Hartford harbormaster
East Haven Fire Chief
East Haven Fire Department
East Haven Harbormaster
East Lyme Harbormaster
Essex Harbormaster
Fayerweather VC
Fenwick Harbormaster
Fire Island Ferries
Fishers Island Ferry District (4)
Gateway Terminal (4)
Global Bridgeport
Global Oyster Bay (2)
Greenwich Ferry
Greenwich Harbormaster
Groton Harbormaster
Groton Long Point Harbormaster
Guilford Harbormaster
Gulf Oil
Hartford Harbormaster
HNTB
Huntington Lighthouse Preservation Society
Inland Fuels
Interport Pilot (2)
Lyme Harbormaster
Madison Harbormaster
Magellan Midstream
MARAD
Maritime Aquarium (2)
McAllister Towing (3)
Middletown Harbormaster (2)
Moran (2)
Moran Shipping (1)
Motiva FSO
Mt. Vernon and Stamford Terminals
Mystic Harbormaster
Mystic Seaport (2)
National Grid E.f. Barrett Station
National Grid Northport Station
National Grid Port Jeff (2)
Nature Conservancy Connecticut
New England Shipping (2)
New Haven Harbormaster
New Haven Terminal (3)
New London Harbormaster
New London Seafood Distributors
NH Port Authority
NL Maritime Society
NL Port Authority
NOAA (3)
Noank Harbormaster
Norm Bloom & Son/ East Norwalk Blue
Northeast Pilots
Northeastern Regional Association of
Coastal Ocean Observing Systems
Northville (2)
Norwalk Harbormaster
Norwich Harbormaster
NSB New London
NY LI Fisherman's Association
NYSERDA
Old Lyme Harbormaster
Old Saybrook Harbormaster
Orsted (3)
Pilots (2)
Port Security Services (3)
PSEG Power Connecticut
Ram Island Harbormaster
Reinauer Tug
Reinauer/ Tug and Barge Committee
Richard Riggio and Sons
Riverhead
Rotation Administration
S.H. Danntless
Sayville Ferry
Shell (2)
South Ferry (2)
Southampton Town Bay Constables
Southampton Vessel Ops Manager
Southport Harbormaster
Sprague Bridgeport
Stamford Harbormaster (2)
Stonington Harbormaster (2)
Stratford Harbormaster
Sub Base New London
Sunbeam Fleet
Tetra Tech (2)
Thames Towboat
Thayer Mahan (2)
The Valley Railroad Company
Thimble Island Ferry
Towboat and Harbor Carriers Assoc
United Marine
US Waterways Transportation
USACE New England (3)
USACE New York (3)
USCG Bridges
USCG CFV Examiner
USCG D1 Waterways
Vane Brothers
Viking Fleet
Wachtell Lipton Rosen & Katz
West Haven Harbormaster
Westmore Fuel Co. (2)
Westport Harbormaster
Wethersfield Harbormaster
WHPD
Other Mariners (81)
"Interstate Navigation Company - "The Block Island Ferry" (5 recipients)
12 Meter Charters (2)
13th Civil Support Team, Rhode Island National Guard (2)
A & J Boat Corp.
A&R Marine Corp/ DBA Prudence Island & Bay Island Transport
Absolute Sport Fishing
Acushnet - Emergency Mgmt. Agency (2)
Adirondack Sailing Excursions
ALBATROSS
Allen Harbor Marine Service Inc.
Althea K Sport Fishing
America's Cup Charters - Intrepid Charters, LLC - Nefertiti Charters, LLC (2)
ANG 1st WWD-CST
Apponnaug Harbor Marina (Dickerson's Marina, Inc.)
Aquinnah - Fire Department (3)
Arabella Sail Charters
Atlantic Commercial Diving Co
Atlantic Star Lines, LLC (2)
Autonomous Marine Systems
Avondale Boatyard
Bannister's Wharf Marina
Barden's Boat Yard, Inc.
Bareboat Sailing Charters
Barnstable Partnering Agencies (14)
Barrington - Fire Department
Barrington Harbor Master
Barrington Yacht Club
Barrington Yacht Club / US Sailing
Bay Fuel Inc.
Bay Marine, Inc.
Bay Queen Cruises / Spirit of Newport /
Rhode Island Cruise Company (Water Street Dock) (3)
Bayline Boatyard & Transport
Belle Vue Yachting Center (Point Judith Marina)
Beverly Yacht Club (2)
Blackline Midstream / Sea-3
Blackstone Valley Tourism Council
Block Island Boat Basin
Blount Boats, Inc.
Blount Small Ship Adventures (3)
Borden Light Marina (2)
Boston Coastline Pilots (4)
Boston Harbor Cruises *(2)
Boston Harbor Pilot Association, LLC (2)
Bourne Department of Natural Resources (4)
Bowen's Wharf (3)
Brewer Cove Haven Marina
Brewster - Conservation & Natural Resources
Brewster - Fire Department
Bristol - Harbor Master
Bristol - Police Department (2)
Bristol Marine
Bristol Yacht Club
Bucky Barlow's Boat Yard, LLC
Burr Brothers Boats, Inc.
Buzzards Bay Coalition
Cape Cod Bay Sail, Inc
Cape Cod Bay Watersports
Cape Cod Chronicle
Cape Cod Commercial Hook Fishermen's Association - Nantucket Soundkeeper
Cape Cod Duckmobiles
Cape Cod Times
Capt. John Boats (3)
Capt. Leroy's Fishing Parties
Capt. O'Connell's
Casey's Oil
CEE JAY Corporation
Center for Coastal Studies
Centerville-Osterville-Marstons Mills Fire Dept
Champlin's Block Island Marina
Charlestown - Harbor Master
Charlestown - Police Department
Chatham - Fire Department (3)
Chatham - Harbor Master (President - C&I HMA)
Chatham Boat Company
Chatham Yacht Basin
Chilmark - Fire Department
Chilmark - Harbor Master
Chilmark - Police Department
Clean Harbors (3)
Coalition for Buzzards Bay
Coast Line Service
Community Boating Center
Community College of Rhode Island (5)
Conanicut Marine Services, Inc.
Conanicut Yacht Club (2)
Concordia Company, Inc.
Cove Haven Marina (Brewer)
Cranston - Harbor Master
Crosby Yacht Yard, Inc. (2)
Cross Sound Ferry (JESSICA W - New London to BI)
Cruising Club of America, Buzzards Bay Post
Cuttyhunk Boat Lines
Cuttyhunk Ferry Company Inc. (2)
Cuttyhunk Water Taxi
Dartmouth - Harbormaster
Deepwater Wind (2)
Dennis Fire Department (2)
Dennis Harbormaster (2)
Dennis Police Department (Cape Cod Regional Law Enforcement Council)
Department of Environmental Management
Department of Homeland Security (6)
Dog Gone Sailing Charters
Dolphin Fleet of Provincetown (2)
DONG Energy Wind Power
East Bay Newspapers (3)
East Greenwich - Harbor Master
East Greenwich - Police Department
East Greenwich Yacht Club
East Providence - Fire Department - Marine Unit
East Providence - Harbor Master (4)
Eastham - Department of Natural Resources
Eastham - Fire Department
Eastham - Natural Resources Officer (2)
Edgartown - Fire Department
Edgartown - Police Department (2)
Edgartown Yacht Club (2)
ENDEAVOR
Enterprise Terminals and Storage, LLC (EPCO, Inc.) (2)
EPA Region 1
Esco Terminal
ExxonMobil (2)
Fairhaven - Police Department (SEMLEC)
Fairhaven Police
Fairhaven Shellfish Dept./Harbormaster
Fairhaven Shipyard & Marina, Inc.
Fall River - Emergency Management (LEPC)
Fall River Harbor Master
Fall River Herald News
Fall River Line Pier, Inc.
Fall River Police Department (2)
Falmouth - Harbor Master
Falmouth Fire Rescue Department (2)
Falmouth Marine
Federal Air Marshall Service (2)
Federal Bureau of Investigation
Fiddler's Cove Marina (Brewer)
FISHTALES
FLYER Catamaran
Flyer's Boat Rentals
Fortier Boats
Frances Fleet
Frank Corp. Environmental Services
Frogmen Divers, Inc.
G.W. Connors, Inc
Gannon and Benjamin Marine Railway
Gansett Cruises
General Dynamics - Electric Boat (2)
Ginny G Cape Cod Fishing Charters
Global Companies LLC
Global Petroleum - Sandwich
Goat Island Marina
Golden Eagle Deep Sea Fishing
Great Harbor Yacht Club
Great Lakes Dredge & Drydock Co. (2)
Green Pond Tackle and Marina
Greenwich Bay Marina (Brewer)
Harbor Fuel Oil Corporation
Harborside Inn
Harwich - Fire Department (2)
Harwich - Harbor Master (3)
Harwich - Police Department
Harwich Port Boat Yard, Inc.
Hayward Industries, Inc
HEL-CAT II
Helen H Deep Sea Fishing
Hexagon Metrology Inc
High Tides Charter & Guide Service
Holcim US (St. Lawrence Cement Co.)
Holland & Knight LLP
Hospital Association of Rhode Island
Hudson Terminal Corp. / Northeast Petroleum Terminal (NEPT) North & South
Hudson Terminal Corp. / Northeast Petroleum Terminal (NEPT) North & South
Hunt Marine Towing & Transport
Hyannis Marina (2)
Hyannis Pirate Adventures
Hyannis Yacht Club
Hy-Line Cruises (4)
Ida Lewis Yacht Club
Inchcape Shipping Services
Inspire Environmental
International Longshoremen's Association Local 2001
Island Commuter Corp. (2)
J Class Management, Inc.
J.P. Noonan
Jamestown - Fire Department (2)
Jamestown - Harbor Master (2)
Jamestown - Police Department
Jamestown Boat Yard
Jamestown Press
Johnson & Wales University - Safety & Security
Johnson and Wales University
JUST DO IT TOO
Kamelot Marine Services - LNG
Kelly J Sportfishing Charters
Kelly's Marine, Inc.
Kingman Yacht Center
Lawrence Lynch Corp.
Lehigh Northeast Cement
Lincoln - Lime Rock Fire District
Little Compton - Fire Department
Little Compton - Harbor Master
LMS Shipmanagement, INC - MV
ENERGY ENTERPRISE

Machaca Charters
MAKO II
Marine Safety Consultants (4)
Maritime International Inc. (2)
Martha's Vineyard Communications Center
Mashpee - Police Department
Mashpee Harbor Master
Mashpee Wampanoag Tribe (2)
Mass Dept. of Environmental Protection (3)
Mass Division of Fisheries and Wildlife
Mass Division of Marine Fisheries (2)
Mass Emergency Management Agency (3)
Mass Marine Trade Association
Mass Maritime Academy (5)
Mass Maritime - T/S KENNEDY (2)
Mass Office of Coastal Zone Mgmt. (4)
Massachusetts Air National Guard
Massachusetts Clean Energy Center
Massachusetts Environmental Police (3)
Massachusetts Governor's Seaport Advisory Council
Massachusetts Office of Environmental Law Enforcement
Massachusetts State Police (2)
MAT Marine - Hallam Marine Construction, Inc.
Mattapoisett - Fire Department
Mattapoisett - Police Department - Mass Chiefs of Police Association
Mattapoisett Boatyard, Inc.
Mattapoisett Harbor Master (2)
Maverick Charters Ltd.
Mayflower Wind (2)
McAllister Towing Narragansett Bay
Millway Marina (2)
Molchan Marine Services
Monomoy Island Ferry
Moran Environmental Recovery LLC (2)
Moran Shipping (6)
Moran Towing Corp
Moran Towing of New York, New Jersey
Motiva Enterprises LLC
MRW Marine Services
MSP-Critical Infrastructure Program
Nantucket - Harbor Master
Nantucket - Police Department (2)
<table>
<thead>
<tr>
<th>Company/Marina Name</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Kingstown - Fire Department (3)</td>
<td></td>
</tr>
<tr>
<td>North Kingstown - Harbor Master (North Kingstown Town Wharf) (2)</td>
<td></td>
</tr>
<tr>
<td>North Kingstown - Police Department (3)</td>
<td></td>
</tr>
<tr>
<td>North Kingstown Fire Department (2)</td>
<td></td>
</tr>
<tr>
<td>North Shore Charters</td>
<td></td>
</tr>
<tr>
<td>Northeast Marine Pilot (5)</td>
<td></td>
</tr>
<tr>
<td>Northeast Marine Pilots Inc. (5)</td>
<td></td>
</tr>
<tr>
<td>Northeast Regional Ocean Council</td>
<td></td>
</tr>
<tr>
<td>Northern Pelagic Group, LLC</td>
<td></td>
</tr>
<tr>
<td>Northside Marina at Sesuit Harbor</td>
<td></td>
</tr>
<tr>
<td>Norton Lilly</td>
<td></td>
</tr>
<tr>
<td>Norton's Shipyard and Marina Inc.</td>
<td></td>
</tr>
<tr>
<td>Norton's Shipyard and Marina Inc.</td>
<td></td>
</tr>
<tr>
<td>Office of Congressman Jim Langevin</td>
<td></td>
</tr>
<tr>
<td>Office of US Senator Sheldon Whitehouse</td>
<td></td>
</tr>
<tr>
<td>Olmsted Marine Service</td>
<td></td>
</tr>
<tr>
<td>Orleans - Fire Department</td>
<td></td>
</tr>
<tr>
<td>Orleans - Harbormaster</td>
<td></td>
</tr>
<tr>
<td>Orleans - Police Department</td>
<td></td>
</tr>
<tr>
<td>Orsted, Inc</td>
<td></td>
</tr>
<tr>
<td>Oyster River Boat Yard</td>
<td></td>
</tr>
<tr>
<td>P. K. O'Connell Marina</td>
<td></td>
</tr>
<tr>
<td>Parker's Boatyard, Inc.</td>
<td></td>
</tr>
<tr>
<td>Patriot Party Boats, Inc</td>
<td></td>
</tr>
<tr>
<td>Pawtucket - Fire Department</td>
<td></td>
</tr>
<tr>
<td>Pawtucket - Police Department</td>
<td></td>
</tr>
<tr>
<td>Pawtuxet Cove Marina</td>
<td></td>
</tr>
<tr>
<td>Peck's Boats Inc.</td>
<td></td>
</tr>
<tr>
<td>Pettis Boat Yard and Yacht Sales</td>
<td></td>
</tr>
<tr>
<td>Pier Oil Co. - TB 450, TB 451</td>
<td></td>
</tr>
<tr>
<td>Pirate Adventures Orleans</td>
<td></td>
</tr>
<tr>
<td>Plymouth Fire Department (4)</td>
<td></td>
</tr>
<tr>
<td>Plymouth County Sheriff's Department</td>
<td></td>
</tr>
<tr>
<td>Pope's Island Marina</td>
<td></td>
</tr>
<tr>
<td>Portsmouth Fire Department</td>
<td></td>
</tr>
<tr>
<td>Portuguese Princess Excursions</td>
<td></td>
</tr>
<tr>
<td>Providence - Emergency Management Agency</td>
<td></td>
</tr>
<tr>
<td>Providence - Police Department (2)</td>
<td></td>
</tr>
<tr>
<td>Providence Emergency Management (2)</td>
<td></td>
</tr>
<tr>
<td>Providence Emergency Management (2)</td>
<td></td>
</tr>
<tr>
<td>Providence Yacht Club</td>
<td></td>
</tr>
<tr>
<td>Providence Yacht Club</td>
<td></td>
</tr>
<tr>
<td>Providence Yacht Club</td>
<td></td>
</tr>
<tr>
<td>Providence Yacht Club</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Technologies</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yachts</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yacht Club</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yacht Club</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yacht Club</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yacht Club</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yacht Club</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yacht Club</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yacht Club</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yacht Club</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yacht Club</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yacht Club</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yacht Club</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yacht Club</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yacht Club</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yacht Club</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yacht Club</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yacht Club</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yacht Club</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yacht Club</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yacht Club</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yacht Club</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yacht Club</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yacht Club</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yacht Club</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yacht Club</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yacht Club</td>
<td></td>
</tr>
<tr>
<td>Rhode Island Yacht Club</td>
<td></td>
</tr>
</tbody>
</table>
Standish Boat Yard
Steamship Authority (6)
Stonebridge Marina - Atlantic Boats
Striper Marina
Sun Tan Yacht Charters
Tabor Academy (2)
TAKE IT E-Z
Tall Ships RI
Tetra Tech
The Black Dog Tall Ships - a.k.a. The Coastwise Packet Company
The Inquirer and Mirror
The Nature Conservancy
The Sunken Ship - Diving and Salvage
Three Flags Holding Company
Tisbury - Fire Department
Tisbury Harbor Master
Tisbury Towing and Transportation
Tiverton - Harbor Master
Tomohawk Charters
Town of Barrington (2)
Town of Chatham
Town of Nantucket
Transportation Security Administration
Tripps Boatyard & Marina - F. L. Tripp & Sons, Inc.
Truro - Fire Department
Truro Harbor Master
Tucker-Roy Marine Towing & Salvage (2)
U.S. Army Corps of Engineers (CCC) (5)
U.S. Customs and Border Protection (3)
U.S. Department of Commerce - NOAA - Office of Coast Survey (6)
U.S. Department of Homeland Security - FEMA Region 1-Rhode Island
U.S. Department of Homeland Security - Transportation Security Administration - Providence
U.S. Department of Interior - National Park Service - Cape Cod National Seashore
U.S. Environmental Protection Agency - Region I

U.S. Navy - Naval Station Newport - Fire Department/Emergency Management Coordinator
U.S. Rep James Lanqevin
U.S. Senator Jack Reed's Office
U.S. Senator Sheldon Whitehouse
United States Coast Guard Auxiliary (35)
United States Coast Guard Marine Safety Detachment New Bedford
United States Coast Guard Maritime Safety and Security Team (MSST) (3)
United States Coast Guard Sector Southeastern New England (10)
United States Coast Guard (3)
United States Naval Station Newport
Univar (4)
University of Rhode Island School of Oceanography
URI College of the Environment and Life Sciences
URI Graduate School of Oceanography - Coastal Resource Center
US Army Corps of Engineers (2)
US Coast Guard Investigation Service
US Coast Guard Station Castle Hill
US Department of Homeland Security
US Naval Station Newport
US Naval War College Center on Irregular Warfare & Armed Groups (CIWAG)
US Navy Region Atlantic
US Navy Underwater Weapons Center
USCG D1 (dpi) (7)
USCG MSD Cape Cod (2)
USCG STA Castle Hill
Viking Fleet Ferry (Montauk, NY to BI & MV)
Vineyard Fast Ferry (2)
Vineyard Gazette
Vineyard Haven Marina
Vineyard Porthole / Dockside Marina
Vineyard Sound Charters, Inc.
Vineyard Wind (3)
Wampanoag Tribe of Gay Head (3)
Waquoit Bay National Estuarine Research Reserve
Wareham - Emergency Management
Wareham - Harbor Master (2)
Wareham - Police Department
Wareham Boat Yard & Marina
Warren - Harbor Master
Warrior Fuel Corp. - MORGAN NO. 6
Warwick - Fire Department
Warwick - Harbor Master
Warwick - Police Department
Warwick Fire Dept. Marine/Dive Ops
Warwick Police Department (2)
Watch Hill Boat Yard
Watch Hill Yact Club
Wauwinet Inn, LLC
Wellfleet - Fire Department
Wellfleet – Harbormaster (2)
Wellfleet - Police Department
Wequassett Inn
West Dennis Yacht Club
West Tisbury - Fire Department
West Tisbury - Police Department
West Warwick - Fire Department - Chief
Westerly - Civil Defense
Westerly - Watch Hill Fire Department
Westport - Fire Department
Westport - Harbormaster
Westport - Police Department
Wickford Cove Marina (Brewer)
Wickford Marina
Woods Hole Group
Woods Hole Marine
Woods Hole Oceanographic Institution (6)
YANKEE Deep Sea Fishing
Yarmouth - DNR & Harbormaster Dept. (2)
Yarmouth - Police Department
Federal and State Agencies Contacted

Bureau of Ocean Energy Management (BOEM)
Bureau of Safety and Environmental Enforcement (BSEE)
Council on Environmental Quality (CEQ)
Environmental Protection Agency (EPA)
Department of Energy (DOE)
Federal Aviation Administration (FAA)
Federal Communications Commission (FCC)
Federal Permitting Improvement Steering Council (FPISC)
National Park Service (NPS)
National Oceanic and Atmospheric Administration (NOAA)
New York State Energy Research and Development (NYSERDA)
Small Business Administration (SBA)
State of Connecticut, Office of Governor Ned Lamont
State of New Jersey, Office of Governor Phil Murphy
State of New York, Office of Governor Andrew Cuomo
United States Department of Defense (DOD)
United States Army Corps of Engineers (USACE)
APPENDIX E

NMFS Vessel Monitoring System (VMS) Data
This report summarizes traffic by VMS-equipped vessels in and through the Northern New York Bight Study Area in recent years. The information requested by the First Coast Guard District Waterways Management Division was for counts of VMS vessel transits per year from calendar year 2017 through 2019. Information provided by the Northeast VMS Team, NMFS Office of Law Enforcement.

Data Description:

*Note: Due to masking of cell values with less than 3 contributing permits, all vessel activity may NOT be shown in some cases.

- **Sources:**
  - Vessel Monitoring System (VMS) positions
    - Only includes positions with STATUS: TPREP, PWRDN, PWRUP, and QASPR
  - GARFO AMS database (defines trip duration and declaration)

- **Temporal Resolution:**
  - 2017-2019

- **Spatial Resolution**
  - VMS positions
  - All speeds
  - Inside and outside VMS demarcation line
  - Bounding box: -75.0585, -68.8809, 37.74533, 42.51533
  - Trip must have reported >=2 positions inside the NNYB PARS

- **Included Fishery Management Plans (as defined by first 3 VMS declaration characters)**
  - DOF: Declared out of Fishery
  - HER: Herring
  - MNK: Monkfish
  - NMS: Northeast Multispecies
  - SCO: Surf Clam/Ocean Quahog
  - SES: Atlantic Sea Scallop
• SMB: Squid-Mackerel-Butterfish

• Analysis
  • VMS positions grouped by sail and land dates from AMS system
  • Grouped by year for each transit map
  • Outlier VMS positions that were > 2.5 hours since last poll were removed (~0.04% of positions)
  • Poll locations where binned into a raster grid with a cell size of 3 nautical miles, which approximates the spatial uncertainty of polls with an upper speed bound of 3 knots
  • Grid cells with < 3 permits contributing to the cell value were masked to preserve confidentiality
  • Counts of trips in each non-confidential cell value were then summed to generate the transit heat maps

Results:
Table 1 below gives the counts of VMS vessel transits of the Northern New York Bight Study Area by calendar year from 2017-2019.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>TRANSITS</th>
<th>PERMITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>11,062</td>
<td>624</td>
</tr>
<tr>
<td>2018</td>
<td>9,788</td>
<td>593</td>
</tr>
<tr>
<td>2019</td>
<td>8,825</td>
<td>575</td>
</tr>
</tbody>
</table>

Table 1. Counts of Transits and Permits by Year
Estimated VMS Transit in NNYB Port Access Route Study Area
YEAR: 2017 | PERMITS: 624 | TRIPS: 11062
APPENDIX F

Vessel Traffic Analysis
USCG AIS Data
Vessel Traffic Analysis for NNYB PARS

Analysis conducted by the USCG Navigation Center (NAVCEN) in Alexandria, VA

LCDR Ian Hanna, Division Head, Waterways Risk Assessment and Support Division, NAVCEN

LTJG Sydney Wagner, Waterways Risk Assessment Project Officer, NAVCEN

September 2020
Contents

Introduction and Background ........................................................................................................ 4
Materials and Data ......................................................................................................................... 4
   Nationwide Automated Identification System (NAIS) Data .......................................................... 4
   Software ....................................................................................................................................... 5
Methodology ................................................................................................................................... 5
   Traffic Composition Analysis ...................................................................................................... 5
   Passage Line Analysis .................................................................................................................. 6
   Comparing Traffic Composition and Passage Line Analyses ..................................................... 7
Vessel Length and Draft Distributions ............................................................................................. 8
Traffic Densities ............................................................................................................................. 8
Results ........................................................................................................................................... 8
Analysis .......................................................................................................................................... 8
   Traffic Composition Analysis ...................................................................................................... 8
      Traffic Composition Details ....................................................................................................... 9
      Trends From Year to Year ......................................................................................................... 12
      Observations About Some Vessel Types .................................................................................. 13
   Passage Line Analysis ................................................................................................................ 13
      Traffic Lane Analyses .............................................................................................................. 18
      Long Island Near Shore Analysis ........................................................................................... 18
      NJ Near Shore Analysis ........................................................................................................... 18
Vessel Length Distributions .......................................................................................................... 18
Vessel Draft Distributions .............................................................................................................. 22
Traffic Densities ............................................................................................................................ 23
   All Vessels .................................................................................................................................. 24
   Cargo and Tanker ....................................................................................................................... 24
   Fishing .......................................................................................................................................... 24
   Not Available .............................................................................................................................. 24
   Other .......................................................................................................................................... 24
   Passenger .................................................................................................................................... 25
   Pleasure Craft / Sailing ................................................................................................................ 25
   Tug / Tow ..................................................................................................................................... 25

Figures, Tables, and Charts

Figure 1: Passage Line Analysis Outline ....................................................................................... 7
Figure 2: September 2019 Vessel Tracks ......................................................................................... 9
Figure 3: Number of Vessel Transits and Unique Vessels by Type - 2017 ..................................... 10
Figure 4: Number of Vessel Transits and Unique Vessels by Type - 2018 .................................... 10
Figure 5: Number of Vessel Transits and Unique Vessels by Type - 2019 .................................... 11
Figure 6: Average Number of Annual Transits of Unique Vessels, by Vessel Type ..................... 12
Figure 7: Total Crossings .............................................................................................................. 13
Figure 8: Nantucket to Ambrose Crossings ................................................................................... 14
Figure 9: Ambrose to Nantucket Crossings ................................................................................. 14
Figure 10: Hudson Canyon to Ambrose Crossings ..................................................................... 15
Figure 11: Ambrose to Hudson Canyon Crossings ..................................................................... 15
Figure 12: Barnegat to Ambrose Crossings ................................................................................. 16
Figure 13: Ambrose to Barnegat Crossings

Figure 14: Long Island Near Shore Crossings

Figure 15: NJ Near Shore Crossings

Figure 16: Distribution of Vessel Lengths in 2017

Figure 17: Distribution of Vessel Lengths in 2018

Figure 18: Distribution of Vessel Lengths in 2019

Figure 19: Distribution of Vessel Drafts in 2017

Figure 20: Distribution of Vessel Drafts in 2018

Figure 21: Distribution of Vessel Drafts in 2019

Figure 22: Tug/Tow Vessel Partial Traffic Density

Table 1: AIS Data Overview

Table 2: AIS Ship Types to Vessel Groups

Table 3: Traffic Density Labels
Introduction and Background

This traffic analysis examines data from 2017-2019 to identify trends and unique or significant variations of vessel transits and characteristics in the Northern New York Bight (NYYB). The study area for this traffic analysis is the same as the study area previously defined for the NYYB PARS.

Materials and Data

Nationwide Automated Identification System (NAIS) Data

Traffic data from 01 January 2017 to 31 December 2019 is from NAIS collected by the USCG. Column headings are included in Table 1. Dimensions are all originally reported in meters, then draft and length were converted to feet for this report.

<table>
<thead>
<tr>
<th>Column Header</th>
<th>User-Defined?</th>
<th>Explanatory Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSG_TYPE</td>
<td>No</td>
<td>Identifies AIS unit as either Class A or Class B</td>
</tr>
<tr>
<td>MMSI</td>
<td>No</td>
<td>Maritime Mobile Service Identity, unique identifier for the ship, can change over time</td>
</tr>
<tr>
<td>IMO_NUMBER</td>
<td>Yes</td>
<td>International Maritime Organization Number, remains the same for the vessel’s life, Not used in this report.</td>
</tr>
<tr>
<td>CALL_SIGN</td>
<td>Yes</td>
<td>Not used</td>
</tr>
<tr>
<td>LAT_AVG</td>
<td>No</td>
<td>Aggregate of latitude reports for 2.5 min on either side of time in PERIOD field.</td>
</tr>
<tr>
<td>LONG_AVG</td>
<td>No</td>
<td>Aggregate of longitude reports for 2.5 min on either side of time in PERIOD field.</td>
</tr>
<tr>
<td>PERIOD</td>
<td>No</td>
<td>Date/Time Stamp of AIS transmission.</td>
</tr>
<tr>
<td>SPEED_KNOTS</td>
<td>No</td>
<td>Speed of vessel at time of transmission</td>
</tr>
<tr>
<td>COG_DEG</td>
<td>No</td>
<td>Course over ground of vessel at time of transmission</td>
</tr>
<tr>
<td>HEADING_DEG</td>
<td>No</td>
<td>True heading of vessel at time of transmission if fitted with gyro compass</td>
</tr>
<tr>
<td>SHIP_AND_CARGO_TYPE</td>
<td>Yes</td>
<td>A numerical value between 10 and 99, delineating the vessel’s service</td>
</tr>
<tr>
<td>DRAUGHT</td>
<td>Yes</td>
<td>Vessel Draft</td>
</tr>
<tr>
<td>DIM_BOW</td>
<td>Yes</td>
<td>“Bow Dimension” Distance from transceiver antenna to bow. Used to calculate Length</td>
</tr>
<tr>
<td>DIM_STERN</td>
<td>Yes</td>
<td>“Stern Dimension” Distance from transceiver antenna to stern. Used to calculate Length</td>
</tr>
<tr>
<td>DIM_PORT</td>
<td>Yes</td>
<td>“Port Dimension” Distance from transceiver antenna to port side. Used to calculate beam.</td>
</tr>
<tr>
<td>DIM_STARBOARD</td>
<td>Yes</td>
<td>“Starboard Dimension” Distance from transceiver antenna to starboard side. Used to calculate beam.</td>
</tr>
<tr>
<td>DESTINATION</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

Table 1: AIS Data Overview
As indicated above, AIS data include fields that are user-defined; thus they are prone to error and often missing inputs. Additionally, while AIS accepts ship types 1-99, for this analysis, these ship types are aggregated into 10 categories, included in Table 2.

<table>
<thead>
<tr>
<th>AIS Ship Type Code</th>
<th>Vessel Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>70-79</td>
<td>Cargo</td>
</tr>
<tr>
<td>30</td>
<td>Fishing</td>
</tr>
<tr>
<td>0/ Null</td>
<td>Not Available</td>
</tr>
<tr>
<td>1-20, 23-29, 33-34, 38-51, 53-59, 90-99</td>
<td>Others</td>
</tr>
<tr>
<td>60-69</td>
<td>Passenger</td>
</tr>
<tr>
<td>36,37</td>
<td>Pleasure Craft / Sailing</td>
</tr>
<tr>
<td>35</td>
<td>Military</td>
</tr>
<tr>
<td>80-89</td>
<td>Tanker</td>
</tr>
<tr>
<td>31-32, 52</td>
<td>Tug / Tow</td>
</tr>
</tbody>
</table>

*Table 2: AIS Ship Types to Vessel Groups*

The type “Not available” means either the type was not recorded by NAIS correctly or the user defined a ship type that is invalid. The type “Others” includes ships transmitting ship type “Other” (90-99) and various other specified ship types such as dredging, diving, and law enforcement vessels.

AIS traffic does not capture all of the vessels that operate in the study area. Certain vessels are required to broadcast on AIS in accordance with US or international regulations. This includes, but is not limited to, vessels of 65 feet or greater, towing vessels of 26 feet or greater, vessels certificated for 150 or more passengers, dredging vessels near a channel, fishing vessels, and vessels over 300 gross tons on an international voyage. Reference 33 CFR 164.46 for a full description of general US requirements and vessel types required to broadcast on AIS in US waters.

Despite these limitations, AIS traffic data does provide a good representation of the traffic in the study area. Larger and deep draft vessels are required to broadcast; the counts of these vessels as well as their geographic locations is accurate. Even for the vessel types that are undercounted because they are not required to use AIS, such as smaller recreational craft, the common transit areas for these boats are still apparent in the data. Overall, since not all vessels are required to broadcast on AIS, the number of actual vessels in the study area is larger than what is shown in this report.

**Software**

Track lines were constructed in the International Lighthouse Association’s Risk Assessment (IALA) Software, IWRAP. Track line data extracted from IWRAP were used to create the charts in Microsoft Excel. Traffic densities and charts with track lines displayed were created in ArcGIS, ArcMap 10.5.

**Methodology**

**Traffic Composition Analysis**

The traffic composition section provides counts of vessel tracks anywhere in the study area. AIS transmission data was used in IWRAP to construct and enumerate these tracks. In this report, a trip or
track is defined as a continual passage through the study area which starts when the vessel enters the area and ends when either it exits the area or stays stationary for more than 6 hours.

The traffic composition section includes counts of all tracks by vessel type in an area over a given year. This means that if a ship transits in the area multiple times, each transit is counted as a track. For example, if the container ship CGALLTHEWAY transits into New York, moors, unloads cargo, proceeds to anchor for greater than 6 hours, and finally transits out of the study area, three tracks are tallied under the type “Cargo.” The first is for the entrance transit, the second for the transit to anchorage, and the third is for the exit transit.

In addition to these track counts, unique vessel counts are also provided. This tally indicates the number of unique vessels by type. For the unique vessel counts, CGALLTHEWAY is counted only once under “Cargo,” regardless of the number of transits it makes in the study area. Overall, these counts provide a broad overview of the vessels present in the study area.

Passage Line Analysis
While transit counts give a broad idea of traffic composition over the total study area, they dilute the information because the area evaluated is very large. A passage line analysis allows for more specific study of the major routes present. This is accomplished by counting the transits across a line placed over the areas with the highest traffic density, perpendicular to the general traffic flow. A transit is counted every time a vessel crosses a passage line chosen for the study. These tracks are enumerated and then reported by vessel type.

Figure 1 outlines the passage line analysis conducted for this study. The high density areas are shown in red, and the passage lines are shown in green. The majority of the passage lines in this study span the width of the traffic lanes and are named for the lanes as they appear on the nautical charts. “New Jersey Near Shore” and “Long Island Near Shore” are the exceptions; they were selected due to the high volume of traffic in those areas and do not represent a designated traffic lane.

Continuing the above example, for the passage line analysis conducted for NNYB, the CGALLTHEWAY is counted every time it crosses one of the passage lines. If they transit from Ambrose to Hudson Canyon and Hudson Canyon to Ambrose, those tracks are tallied separately for each of those passage lines and counted under “Cargo.” If the vessel transits from Hudson Canyon to Ambrose in January, March, and October in 2019, three tracks are recorded under this passage line for “Cargo” for that year.
Comparing Traffic Composition and Passage Line Analyses

The traffic composition figures (under the “Analysis” section titled “Traffic Composition Analysis”) look at the study area as a whole, while the passage line analysis looks at subsets of the area that are of particular interest. These subsets do not together encompass the entire study area. In other words, passage lines were not drawn that encapsulate every portion of the study area, just selected locations. Vessels transit not only across the passage lines, but also in the areas surrounding these lines. Thus, the number of transits recorded in the passage line analysis section will not add up to the total number of transits in the traffic composition section which does take into account every vessel track.

Consider fishing vessels as an example. While some fishing vessels transit in the traffic lanes, many do not. Because of this, a large portion of the total number of fishing vessels that pass through the study area will not be captured by the passage lines in this analysis. In the passage line analysis section, if across all passage lines there are a total of 200 fishing vessel transits in 2018, there will be more than 200 transits recorded in the traffic composition section for this vessel type. Overall, it is informative to compare the traffic that crosses a passage line to the traffic composition of the whole study area. However, it is not expected that taken together the traffic crossing the passage lines will reflect all the traffic in the study area.
Vessel Length and Draft Distributions

The vessel length distributions report the sizes of vessels that transited the study area. These distributions show the count of the number of transits recorded by vessels of particular lengths. The vessel length from every track line is counted, so a vessel that visits the study area multiple times is counted each time. The draft distributions are the same, using draft as the metric.

Traffic Densities

The charts in the traffic density section were created in ArcMap using the line density function. The same data used in the traffic composition section were used to create track lines then density plots. The density graphics show all vessel traffic for the listed attribute over the course of a year. For example, the All Vessels density shows the conglomerate of the track lines of all the vessel groups combined, while the Cargo Ship density shows only the track lines associated with cargo ships. Densities are calculated by enumerating the length of transits per square mile \( \frac{\text{Miles transited (year)}}{\text{mile}^2} \), and are represented on a blue, yellow, red scale where low density is blue and high density is red.

Results

Results for this analysis are maintained by NAVCEN in Word, Excel, PDF, ArcMap and IWRAP documents. For more information, please contact NAVCEN:

<table>
<thead>
<tr>
<th>General</th>
<th>LCDR Ian Hanna</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Coast Guard Navigation Center</td>
<td><a href="mailto:Ian.S.Hanna@uscg.mil">Ian.S.Hanna@uscg.mil</a></td>
</tr>
<tr>
<td>7323 Telegraph Rd</td>
<td>(703) 313-5858</td>
</tr>
<tr>
<td>Stop 7310</td>
<td>LTJG Sydney Wagner</td>
</tr>
<tr>
<td>Alexandria, VA 20598-7310</td>
<td><a href="mailto:Sydney.E.Wagner@uscg.mil">Sydney.E.Wagner@uscg.mil</a></td>
</tr>
<tr>
<td>(703) 313-5900</td>
<td>(703) 313-5645</td>
</tr>
<tr>
<td><a href="https://navcen.uscg.gov/">https://navcen.uscg.gov/</a></td>
<td></td>
</tr>
</tbody>
</table>

Analysis

Traffic Composition Analysis

Thousands of track lines are recorded every year in the study area. In 2019, there were over 60,000 transits. Plotted individually on a chart, these track lines overlap and cover each other, hiding much relevant data from view. While as a whole it is not optimal to view the study area by charting all the track lines, taken in smaller time periods, the general traffic mix can be inferred. Figure 2 shows the track lines from September of 2019, the busiest month of the year with over 15,000 tracks. “Other” and “Not Available” ship types were excluded from this graphic, and “Cargo” and “Tanker” were combined since they have similar transit patterns.

The legend is organized based on the drawing order in the graphic. Pleasure craft were drawn first so those tracks appear underneath the tracks for the other ship types. Cargo and tank ships were drawn last, so their tracks are on top of the tracks for the other ship types. Due to this drawing order, the passenger vessel tracks in the main channels are covered by the cargo ships, and some passenger vessel track lines off the NJ coast are hidden by the tow boats. Fishing vessels along the shore of Long
Island Sound are hidden by the tow boat traffic. The pleasure craft that cross a main transit area for any of the other vessel types are also covered.

Figure 2: September 2019 Vessel Tracks

This graphic shows that cargo vessels and tankers primarily transit within the channels. Fishing vessels are often depicted crossing channels or operating in a variety of areas outside the channels, while much of the tow boat traffic is concentrated near Long Island and the NJ coast.

Traffic Composition Details

Number of Vessel Transits and Unique Vessels by Vessel Type (Figure 3-Figure 5) show how many transits a certain vessel type made in the study area over the identified year. These charts also show a count of the number of unique vessels in the identified year by type. For example, in 2018, 232 unique Tug Tow vessels conducted 4,716 total transits in the study area.
Figure 3: Number of Vessel Transits and Unique Vessels by Type - 2017

Total Unique Vessels: 5814  Total Transits: 68,178

Figure 4: Number of Vessel Transits and Unique Vessels by Type - 2018

Total Unique Vessels: 6166  Total Transits: 63,825
Another way to combine and visualize the transit and unique vessel information is to consider the number of tracks attributed to each unique vessel. This is approximated by dividing the total number of transits by the total number of unique vessels for each category, resulting in a value indicating transits per vessel, shown in Figure 6. For example, in 2019 each unique cargo ship in the data set made on average 7.5 transits. In practice, some vessels visit the study area more frequently than others. However, these values still show the average number of transits conducted by each unique vessel by type in the study area per year, providing a comparison point for the traffic patterns between the years.
The number of transits by each type of vessel as well as the number of unique vessels appear to remain consistent between the years of data for pleasure craft, passenger, other, not available, military, and cargo vessels. This indicates that at least over the short period of three years, the traffic for these types has not significantly increased or decreased. Tug tow, fishing, and tanker tracks have some noticeable differences. The number of tug tow transits decreased from 2018 to 2019 by almost 1000 tracks. Additionally, although the number of transits from 2017 to 2018 were close, the number of unique vessels dropped by almost 300. In 2017, despite significantly more fishing vessel tracks, there are fewer unique fishing vessels. Data between 2018 and 2019 for this vessel type remained consistent. For tankers, the number of unique vessels decreased from 2017 but remained similar between 2018 and 2019.

The number of trips per vessel appears to remain consistent across most types. This indicates that, even if the number of transits change between years, the change is proportional to the number of unique vessels that transit in the area. In other words, the distribution of each type of vessel remains consistent. Fishing, especially in 2017, is the only type that appears to contradict this conclusion.

Although these observations are informative, data across a longer timeframe is needed to make definitive conclusions about the traffic trends for this area over the years.
Observations About Some Vessel Types

The most tracks fall under the vessel type Fishing, even though there are fewer unique fishing vessels than tankers, pleasure craft, or cargo vessels. Fishing vessels make frequent, short transits and vary their transit locations based on the season and catch thus this result was expected.

Military vessels appear to make up the smallest portion of the total traffic. However, these values are likely undercounted since military vessels often do not transmit their locations for security reasons.

Passage Line Analysis

The Total Crossings chart (Figure 7) shows the number of crossings across all vessel types for each of the designated passage lines shown in Figure 1. Charts for each individual passage line showing the number of crossings by type are also provided in Figure 8-Figure 15.
Figure 8: Nantucket to Ambrose Crossings

Figure 9: Ambrose to Nantucket Crossings
Figure 10: Hudson Canyon to Ambrose Crossings

Number of Crossings: Hudson Canyon to Ambrose

Figure 11: Ambrose to Hudson Canyon Crossings

Number of Crossings: Ambrose to Hudson Canyon
**Figure 12: Barnegat to Ambrose Crossings**

- **Other**: 89 (2017), 89 (2018), 89 (2019)
- **Fishing**: 54 (2017), 54 (2018), 54 (2019)

**Figure 13: Ambrose to Barnegat Crossings**

- **Pleasure Craft/Sailing**: 100 (2017), 89 (2018), 73 (2019)
Figure 14: Long Island Near Shore Crossings

Figure 15: NJ Near Shore Crossings
Traffic Lane Analyses

For the six passage lines that pass through traffic lanes, the majority of the recorded trips are cargo vessels and tankers, with some passenger and fishing vessels. Fewer tank ships transit from Ambrose to Barnegat or Barnegat to Ambrose than in the other traffic lanes, although the majority of the traffic in all lanes is still cargo or tank vessels. Fishing vessel tracks remain largely consistent, although there are more tracks for this vessel type from Ambrose to Hudson Canyon, especially in 2017.

The number of passenger vessel tracks for each passage line is also similar across all traffic lanes. To determine more specifically what type of passenger vessels transit in the traffic lanes, a sample of 116 passenger track lines in 2019 was selected in the Ambrose to Hudson lane for further examination. These tracks were created by 18 unique vessels, all with valid IMO numbers. The naming conventions of these ships (ADVENTURE OF THE SEAS, CARNIVAL TRIUMPH, and DISNEY MAGIC, for example) indicate they are cruise ships. Thus, within the traffic lanes, the type “Passenger” is understood to mean mostly larger passenger vessels such as cruise ships.

In terms of total crossings, Ambrose to Barnegat and Nantucket to Ambrose have the greatest number (except for NJ Near Shore, discussed below). Additionally, Ambrose to Barnegat has a slightly higher volume of pleasure craft transits, likely due to its close proximity to the Jersey Shore.

Long Island Near Shore Analysis

Overall, Long Island Near Shore traffic is comprised of Fishing, Tug / Tow, and Other vessels with a few Pleasure Craft / Sailing. There are almost no passenger, military, tanker, or cargo ships in this traffic mix. In 2018, there were more fishing vessel transits than in any other year.

NJ Near Shore Analysis

New Jersey Near Shore has by far the most crossings. This result is not surprising for several reasons. This passage line spans a wide area of two way traffic, while several of the other passage lines only cover one way deep draft traffic. The traffic near the NJ shore is largely Pleasure Craft, Tug / Tow, and Passenger vessels, which tend to concentrate in the in-shore areas. The cargo traffic that approaches New York is distributed across the traffic lanes; smaller pleasure craft and towing vessels tend to stay closer to shore and thus are concentrated in this area.

Based on a sample of 369 passenger track lines near the NJ shore in 2019, the passenger vessels in this area are largely certificated small passenger vessels. This contrasts the vessels represented by the type “Passenger” in the main traffic lanes. In the track line sample, there were 56 unique vessels, the majority of which are head boats that carry passengers, dinner or sunset cruises, whale watching tours, and other types of passenger vessels that operate near shore.

Vessel Length Distributions

The vessel length distributions are reported by year in Figure 16, Figure 17, and Figure 18. The vast majority of the vessels in the study area are between zero and 150 feet in length, which remained consistent over the years. In these figures, bins are defined by the highest value counted. For example, Bin 50 counts vessel lengths less than or equal to 50 feet, and Bin 100 counts vessel lengths greater than 50 and less than or equal to 100 feet.
Figure 16: Distribution of Vessel Lengths in 2017
Figure 17: Distribution of Vessel Lengths in 2018
Figure 18: Distribution of Vessel Lengths in 2019
Vessel Draft Distributions

The reported drafts are displayed in Figure 19, Figure 20, and Figure 21. They remained consistent between 2018 and 2019 in the NNYB study area. However, these draft distributions only report the draft values that were present in the data set. Approximately 70% of the vessels were missing draft values. This is expected because it is a user defined input and optional for many vessels. There were several thousand fewer draft values reported in 2017 than the other two years, which may explain the difference between this distribution and the other two. Bins are defined the same way as for length, by the highest value counted (ex: Bin 5 counts vessel drafts less than or equal to 5 feet and Bin 10 counts vessel lengths greater than 5 and less than or equal to 10 feet).

![Distribution of Vessel Drafts 2017](image-url)

*Figure 19: Distribution of Vessel Drafts in 2017*
Traffic Densities

The traffic density charts are organized by year and type, as listed in Table 3. Observations from these densities about each vessel type are below. Even though only the study area as previously defined was considered in this analysis, these densities show a larger area to assist in visualization of the traffic adjoining the study area to the south.
Table 3: Traffic Density Labels

<table>
<thead>
<tr>
<th>Vessel Type</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All Vessels</strong></td>
<td>A.1</td>
<td>A.2</td>
<td>A.3</td>
</tr>
<tr>
<td><strong>Cargo</strong></td>
<td>B.1</td>
<td>B.2</td>
<td>B.3</td>
</tr>
<tr>
<td><strong>Fishing</strong></td>
<td>C.1</td>
<td>C.2</td>
<td>C.3</td>
</tr>
<tr>
<td><strong>Not Available</strong></td>
<td>D.1</td>
<td>D.2</td>
<td>D.3</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>E.1</td>
<td>E.2</td>
<td>E.3</td>
</tr>
<tr>
<td><strong>Passenger</strong></td>
<td>F.1</td>
<td>F.2</td>
<td>F.3</td>
</tr>
<tr>
<td><strong>Pleasure Craft / Sailing</strong></td>
<td>G.1</td>
<td>G.2</td>
<td>G.3</td>
</tr>
<tr>
<td><strong>Tankers</strong></td>
<td>H.1</td>
<td>H.2</td>
<td>H.3</td>
</tr>
<tr>
<td><strong>Tug / Tow</strong></td>
<td>I.1</td>
<td>I.2</td>
<td>I.3</td>
</tr>
</tbody>
</table>

**All Vessels**

The highest traffic density is in the traffic lanes, and along the coast near Long Island Sound and the New Jersey Shore. This remains consistent from 2017-2019 (Charts A.1-A.3).

**Cargo and Tanker**

Consistent with the passage line analysis and as expected, cargo ships and tankers transit mainly in the designated traffic lanes. See Charts B.1-B.3 and H.1-H.3.

**Fishing**

Between 2017, 2018, and 2019, fishing vessels consistently transit near the shore of Long Island Sound (Charts C.1-C.3). There are also more fishing vessels near the NOAA buoy ODAS “44017,” north of the Nantucket to Ambrose lane. Traffic crosses this lane as well. A concentrated fishing effort is also found between the Barnegat to Ambrose and Ambrose to Hudson Canyon lanes, with traffic crossing the Ambrose to Hudson Canyon lane.

In general, the fishing traffic varies from year to year. Fishing vessels make many short trips that vary in location based on the season and best catch at the time, which partially accounts for the variation. In 2017 and 2018, there are more patches of high density fishing traffic near the center of the study area, while in 2019 there appears to be less traffic overall.

**Not Available**

In 2017, 2018, and 2019, the traffic pattern for each year is similar to what is visible in the All Vessels densities for the same years (Charts D.1, D.2, D.3, A.1, A.2, and A.3). While we cannot determine the exact vessel types represented, they are probably a mixture of all vessel types based on this information.

**Other**

Often, “Other” includes research and survey vessels that do not match more specific AIS ship types. These vessels remain near shore and do not usually transit into the traffic lanes. In 2018, the yellow triangle showing mid-level traffic density between the Hudson Canyon to Ambrose and Ambrose to Nantucket lanes is caused by surveys conducted around wind lease areas in this location (Chart E.2).
Passenger

Passenger ships in the traffic lanes, mostly cruise ships, transit on consistent routes, as visible in all years of data (Charts F.1-F.3). There is also heavy passenger vessel traffic near the NJ shore, consisting of many small passenger vessels that conduct day trips. Additionally, there are hotspots along the coast of New York and New Jersey at locations with larger marinas, passenger boarding zones, or inlets to more protected waters.

Pleasure Craft / Sailing

Pleasure craft noticeably do not transit in the traffic lanes; they are concentrated near the shore as seen in Charts G.1-G.3 and as noted in the passage line analysis. While many of these boats pass through the traffic lanes, generally higher density traffic that is offshore is concentrated outside the lanes. Similar to passenger ships, hotspots can be seen along the shoreline either at large marinas or entrance or exit points from more protected bays near NY and NJ.

Tug / Tow

Tug / tow vessels, consistent with the passage line analysis, are concentrated near the shore (Charts I.1-I.3). There is also an area near the Ambrose to Barnegat traffic lane (shown in Figure 22 for 2019) with a consistently high concentration of tug and tow vessels using the designated dumping site.

Figure 22: Tug/Tow Vessel Partial Traffic Density
Northern NY Bight PARS

Legend
- NNYB Study Area
- Wind Energy Areas
- Wind Lease Areas

Not Available 2019

Value
- High Traffic Density
- Low Traffic Density

NOAA Chart 12300
Data Source: NAIS
Prepared by the USCG Navigation Center

Coordinate System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Northern NY Bight PARS

Legend
- NNYB Study Area
- Wind Energy Areas
- Wind Lease Areas

Value
- High Traffic Density
- Low Traffic Density

Other 2017

NOAA Chart 12300
Data Source: NAIS
Prepared by the USCG Navigation Center

Coordinate System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Northern NY Bight PARS

Legend
- NNYB Study Area
- Wind Energy Areas
- Wind Lease Areas

Tanker 2018
- Value
  - High Traffic Density
  - Low Traffic Density

NOAA Chart 12300
Data Source: NAIS
Prepared by the USCG Navigation Center

Coordinate System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Northern NY Bight PARS

Legend
- NNYB Study Area
- Wind Energy Areas
- Wind Lease Areas

Tug Tow 2017

Value
- High Traffic Density
- Low Traffic Density

NOAA Chart 12300
Data Source: NAIS
Prepared by the USCG Navigation Center

Coordinate System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
APPENDIX G

Weather Data
Monthly Average Wind Speed (m/s) - 2018
Station 44025 - Long Island, 30 NM South of Islip
Source: National Data Buoy Center

Monthly Average Wind Speed (m/s) - 2019
Station 44025 - Long Island, 30 NM South of Islip
Source: National Data Buoy Center
ENCLOSURES
ENCLOSURE 1

Marine Planning Guidelines
APPENDIX E. MARINE PLANNING GUIDELINES

1. Recommended Navigational Safe Distances.

a. Purpose. These guidelines assist offshore developers and marine planners with their evaluation of the navigational impacts of any projects with multiple permanent fixed structures. The coastal areas include multiple users such as commercial shipping, tug and barge operations, commercial and recreational fishing, research vessels, offshore support vessels, oil and gas exploration and production, sand and gravel mining, offshore wind farms, and aquaculture apparatus. The guidelines consider sea space necessary for ships to maneuver safely, and discuss other factors to be considered when determining appropriate separation distances for the siting of offshore structures near shipping routes and other multiple use areas.

These guidelines are not regulatory. They do not impact the boundaries of any existing leases for site characterization and site assessment activities, but do inform suitability of siting structures within a lease area. These guidelines should be considered during the area identification phase for both unsolicited and solicited development areas and when determining the siting of structures within existing areas. These guidelines also serve as one of the references to inform the Navigation Safety Risk Assessments (NSRA) conducted by developers. As a cooperating agency in the National Environmental Policy Act (NEPA) process, the Coast Guard will request, through the Lead Federal Agency, that the developer complete an NSRA to evaluate potential impacts to navigational safety.

b. Discussion. There is no international standard that specifies minimum distances between shipping routes and fixed structures. However, it is widely accepted that fixed structures in the offshore environment should not interfere with navigation. Specifically, the following standards were used in the development of the U.S. guidelines:


(2) The Confederation of European Shipmasters' Associations (CESMA);

(3) The World Shipping Council (WSC); and


c. Planning Guidelines. This Appendix provides the general guidelines for the placement of multiple structures near shipping routes and established ships routing measures, and other multiple use areas. These guidelines will result in the lowest level of acceptable risk reduction because they are based on minimum distances for the largest vessels to maneuver safely. Additional mitigation measures should be considered to achieve a low level of navigational safety risk.
2. **Recommended Guidelines for General Assessment of Areas for Potential Development.**

   a. **Port Approaches and Traffic Separation Schemes (TSS).**

      (1) **Planning Guidelines:**

         (a) 2NM from the parallel outer or seaward boundary of a traffic lane; and  
         (b) 5NM from the entry/exit (terminations) of a TSS.

      **Note.** These recommendations are based on the maneuvering characteristics of a generic deep-draft vessel of approximately 300-400 meters in length. They are consistent with existing European guidelines. They account for the minimum distances for such larger vessels to maneuver in emergency situations.

      **Note.** The 5 NM mile separation from the entry and exit of a TSS is necessary to enable vessels to detect one another visually and by radar in areas where vessels are converging and diverging from and to multiple directions.

   b. **Coastwise or Coastal Shipping Routes.** Vessels that tend to follow the coastline are typically smaller vessels that cannot safely transit too far offshore due to sea state limitations. The necessary sea space for vessels to safely maneuver is determined by the size and maneuverability of vessels and density of vessel traffic. When determining routes near shore the depth of water and location of underwater obstructions must be considered, especially if vessel routes will be displaced by the introduction of fixed structures. Towing vessels towing astern on a wire are of particular concern. For these vessels, the catenary of the tow wire will dictate significantly larger required safe water depths than the drafts of the tug or barge. Also, such a vessel-and-tow configuration has a large footprint and the resulting maneuvering ability is constrained.
Appendix E to COMDTINST 16003.2B

(1) **Planning Guidelines:**

(a) Identify a navigation safety corridor to ensure adequate sea area for vessels to transit safely;

(b) Provide inshore corridors for coastal ships and tug/barge operations;

(c) Minimize displacement of routes further offshore;

(d) Avoid displacing vessels where it will result in mixing vessel types; and

(e) Identify and consider cumulative and cascading impacts of multiple Offshore Renewable Energy Installations (OREIs), such as wind farms.

c. **Offshore Deep Draft Routes.** Offshore deep draft routes can be more flexible in terms of the location of the routes. It is still necessary to have adequate sea area for safe navigation, but less critical to preserve existing routes to achieve safe conditions.

(1) **Planning Guidelines:**

(a) Avoid creating an obstruction or hazard on both sides of an existing route; and

(b) If not practicable to avoid structures or hazards on both sides of a route, a navigation safety corridor should be of sufficient size to provide for the safe transit of the largest vessels. Large ocean-going ships often operate a high speeds that effect maneuvering response time. This should be accounted for when making the determination.

d. **Navigation Safety Corridors.** Navigation safety corridors identify the amount of area necessary for vessels to safely transit along a route under all situations. These corridors are not considered routing measures by the Coast Guard or the International Maritime Organization (IMO), but are a tool to delineate areas where no offshore development should be considered. These corridors should not be confused with shipping safety fairways, two-way routes, or Traffic Separation Schemes, which are routing measures that identify specific inshore traffic areas. Density plots ("heat maps") of Automatic Identification System (AIS) information are useful in determining the location of a route, but are less useful in determining the appropriate size of a route where multiple vessels may be required to pass one another safely. Navigation safety corridors should be given priority consideration over other potential uses of the same water space. In determining the appropriate size of navigation safety corridors, the following factors must be considered for the largest and least maneuverable vessels expected to use a route:

(1) **Cross Track Error (CTE).** CTE is the difference between the intended and actual track. Factors leading to a vessel deviating from intended track include:

(a) Environmental Forces - include wind, currents, and sea state:

1) Wind forces can set a vessel in the downwind direction. The impacts of the wind will vary according to the size and shape of the vessel;
2) Currents, particularly cross currents, can significantly affect the maneuverability of a vessel and space required to navigate safely; and

3) Sea state, including size and direction of waves, can cause vessels to pitch, heave, and roll. Yawing motions could result in the vessel drifting off course. Following seas can impact the ability of the vessel to steer a steady course.

(b) Swept Path - (the sum of various factors to determine the total width of the tug and barge path) will depend on the abilities of the vessel operator and the maneuvering characteristics of the vessel and are a secondary cause of CTE:

1) Vessel Operator Response - the time for the vessel operator to recognize deviation from an intended track and to take corrective action; and

2) Vessel Response - the speed that the vessel responds to rudder and main engines.

(2) Closest Point of Approach (CPA). CPA is the safe distance at which a vessel can pass a fixed or moving hazard accounting for existing conditions. In complying with the International Regulations for Preventing Collisions at Sea 1972 (COLREGS), the captain of a vessel is required to consider all dangers of navigation and collision and any special circumstances, including limitations of the vessels involved, which may make a departure from the COLREGS necessary to avoid immediate danger per Rule 2, Responsibility. When determining an appropriate CPA, all factors of weather, maneuvering capability, visibility, etc., must be considered, as well as potential emergency situations. Under ideal conditions with low sea states, good visibility, and good communications between vessels to arrange a passing agreement, a CPA of $\frac{1}{2}$ to 1 NM may be acceptable. Under less ideal weather and sea conditions and/or higher vessels speeds, a CPA of 2 NM or more may be necessary to ensure safe passage. By increasing the planned CPA, the chance of a collision or allision will be decreased.

(3) Density of Traffic. The amount of traffic along a route will dictate the likelihood of vessels sharing sea space in meeting, overtaking, or crossing situations. With good communications and early actions, vessels can make arrangements to limit the number of vessels interacting with each other. However, there will be times when multiple vessels converge on the same location, such as in a cluster of OREIs, and additional sea space is necessary to maneuver safely and maintain appropriate CPAs for all vessels. The longer the route is constrained, the more likely multiple vessels will meet along a route. Crossing traffic, such as fishing vessels or offshore support vessels transiting to/from offshore installations, will further complicate vessel interactions. A navigation safety corridor should be designed to accommodate an appropriate number of vessels passing abeam of one another and other vessel operations in the area. In low density situations such as offshore, a minimum of two vessels may be appropriate. For moderate vessel density situations a minimum of three vessels should be used for planning purposes.

Note. The factors are interrelated and should be considered in the context of the maximum most probable weather and sea state conditions. The types of operations requiring the most sea space for maneuvering under normal and emergency situations should be used as the reference point.
e. **Other Site-specific Considerations.**

(1) **Potential contributions to risk:**

(a) High density traffic areas with converging or crossing routes. Similar to port entrances, areas where vessels are approaching from different directions into a smaller area will produce complex vessel interactions and increase navigational safety risk. This could occur in natural choke points or off shore of a cape, peninsula, or other obstruction that vessels must go around;

(b) Obstructions/hazards on opposite side of a route. If hazards or obstructions are present on the opposite side of a route from a development area, the impact will be the constriction of vessel traffic and elimination of collision assessment time and avoiding action of vessels in an emergency situation;

(c) Severe weather/sea state conditions. Predominant severe weather and sea state conditions can impact visibility, maneuverability, and navigation, all of which would negatively impact navigational safety;

(d) Severe currents. Severe currents will impact maneuverability of a vessel and ability to maintain intended track, thus negatively impact navigational safety;

(e) Mixing of vessel types. Vessels of differing types will naturally segregate not only due to vessel requirements for a safe transit, such as depth of water and sea state limitations, but also to avoid each other for safety reasons. Smaller or slow moving vessels will tend to avoid major shipping lanes containing larger, faster moving vessels. When these vessels are displaced into the routes of other vessel types the number of overtaking situations will increase, thereby increasing risk, particularly if sea space is limited;

(f) Complexity of vessel interactions. In areas where interactions are more complex, impacts due to new obstructions could be amplified. Complexity can be driven by a number of factors, such as those previously discussed above where routes are converging/crossing or mixing of vessel types. Complexity could also be driven by other operations being conducted in the area such as fishing, recreational traffic, or pilot boarding areas;

(g) Large distances along a route. The longer the distance obstructions are present along a route, the greater the risk. Increased distance equates to increased exposure to the navigational hazard; and

(h) Undersized routing measures. If an existing TSS or other routing measure was not designed to accommodate existing or future density and size of vessels, additional separation may be appropriate.
(2) Potential mitigations of risk:

(a) Mitigating factors such as pilotage areas, vessel traffic services, precautionary areas, areas to be avoided, anchorages, limited access areas, and routing measures. Mitigating factors can be used to lower risk in many ways, such as increasing predictability of vessel traffic, increasing local knowledge and expertise, increasing situational awareness, or improving navigation. Proper marking and lighting of the structures of a wind farm can be used for navigation purposes improving the ability to fix a vessel’s position and avoid the hazard;

(b) Low traffic density. Low traffic density will decrease vessel interactions and allow for more space for transiting vessels to maneuver;

(c) Predominantly smaller vessels. If only smaller vessels call on a port or if large vessel transits are very infrequent, smaller planning distances may be appropriate; especially if other mitigations are in place for the large vessel transits, such as tug escorts or moving safety zones;

(d) Distance from ports, shoals, and other obstructions. If there are large distances to other hazards, vessels will be able to adjust their route to ensure safe transits; and

(e) Aids to Navigation. Enhanced Aids to Navigation may assist vessels in more accurately determining their position as well as identifying potential hazards.

(3) Other Critical Routes. This refers to routes that may not be obvious when looking at regular traffic patterns and may involve specific or unique requirements of particular vessels:

(a) Natural Deepwater Approaches. Natural deep water approaches may not be used by the majority of vessels but may be necessary for some deep-draft vessels to safely enter or depart port at present or in the future.

(b) Unique Transits. Other requirements such as sea space, draft, lack of maneuverability, necessary for the safe transit of infrequent, but important vessel transits, such as periodic provisioning of remote communities.
Federal Register Notice
(85 FR 38907)
and Transplantation Research; 93.856, Microbiology and Infectious Diseases Research, National Institutes of Health, HHSS)


Tyeshia M. Roberson,
Program Analyst, Office of Federal Advisory Committee Policy.

[FR Doc. 2020–13884 Filed 6–26–20; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Eunice Kennedy Shriver National Institute of Child Health & Human Development

Pursuant to section 10(d) of the Federal Advisory Committee Act, as amended, notice is hereby given of the following meeting.

The meeting will be closed to the public in accordance with the provisions set forth in sections 552b(c)(4) and 552b(c)(6), Title 5 U.S.C., as amended. The purpose of this meeting is to evaluate requests for preclinical development resources for potential new therapeutics for the treatment of cancer. The outcome of the evaluation will provide information to internal NCI committees that will decide whether NCI should support requests and make available contract resources for development of the potential therapeutic to improve the treatment of various forms of cancer. The research proposals and the discussions could disclose confidential trade secrets or commercial property such as patentable material, and personal information concerning individuals associated with the grant applications, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Name of Committee: National Cancer Institute Special Emphasis Panel; JUN2020 Cycle 35 NExT SEP Committee Meeting.

Date: October 19, 2020.

Time: 9:00 a.m. to 3:00 p.m.

Agenda: To evaluate the NCI Experimental Therapeutics Program Portfolio.

Place: NIH/NICHD, 6710 B Rockledge Drive, Bethesda, MD 20817 (Virtual Meeting).

Contact Person: Helen Huang, Ph.D., Program Analyst, Office of Federal Advisory Committee Policy.

 setDate: June 22, 2020.

Ronald J. Livingston, Jr.,
Program Analyst, Office of Federal Advisory Committee Policy.

[FR Doc. 2020–13835 Filed 6–26–20; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Cancer Institute; Notice of Closed Meeting

Pursuant to section 10(d) of the Federal Advisory Committee Act, as amended, notice is hereby given of the following meeting.

The meeting will be closed to the public in accordance with the provisions set forth in sections 552b(c)(4) and 552b(c)(6), Title 5 U.S.C., as amended. The purpose of this meeting is to evaluate requests for preclinical development resources for potential new therapeutics for the treatment of cancer. The outcome of the evaluation will provide information to internal NCI committees that will decide whether NCI should support requests and make available contract resources for development of the potential therapeutic to improve the treatment of various forms of cancer. The research proposals and the discussions could disclose confidential trade secrets or commercial property such as patentable material, and personal information concerning individuals associated with the grant applications, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Name of Committee: National Cancer Institute Special Emphasis Panel; JUN2020 Cycle 35 NExT SEP Committee Meeting.

Date: August 5, 2020.

Time: 9:00 a.m. to 3:00 p.m.

Agenda: To evaluate the NCI Experimental Therapeutics Program Portfolio.

Place: National Institutes of Health, 9000 Rockville Pike, Building 31, Room 3A44, Bethesda, MD 20892 (Teleconference Call).

Contact Persons: Barbara Mroczkowski, Ph.D., Executive Secretary, Discovery Experimental Therapeutics Program, National Cancer Institute, NIH, 31 Center Drive, Room 3A44, Bethesda, MD 20817, (301) 496-4291, mroczkoskb@mail.nih.gov.

Toby Hecht, Ph.D., Executive Secretary, Development Experimental Therapeutics Program, National Cancer Institute, NIH, 9609 Medical Center Drive, Room 3W110, Rockville, MD 20850, (240) 276-5683, toby.hecht2@nih.gov.

(Catalogue of Federal Domestic Assistance Program Nos. 93.864, Population Research; 93.865, Research for Mothers and Children; 93.929, Center for Medical Rehabilitation Research; 93.209, Contraception and Infertility Loan Repayment Program, National Institutes of Health, HHSS)


Melanie J. Pantoja,
Program Analyst, Office of Federal Advisory Committee Policy.

[FR Doc. 2020–13834 Filed 6–26–20; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

[Docket No. USCG–2020–0278]

Port Access Route Study: Northern New York Bight

AGENCY: Coast Guard, DHS.

ACTION: Notice of study and public meetings; request for comments.

SUMMARY: The Coast Guard is conducting a Port Access Route Study (PARS) to evaluate the adequacy of existing vessel routing measures and determine whether additional vessel routing measures are necessary for port approaches to New York and New Jersey and international and domestic transit areas in the First District area of responsibility. The Northern New York Bight PARS (NNYBPARS) will consider whether existing or additional routing measures are necessary to improve navigation safety due to factors such as planned or potential offshore development, current port capabilities and planned improvements, increased vessel traffic, existing and potential anchorage areas, changing vessel traffic patterns, effects of weather, or navigational difficulty. Vessel routing measures, which include traffic separation schemes, two-way routes, recommended tracks, deep-water routes, precautionary areas, and areas to be avoided, are implemented to reduce the risk of maritime casualties. The recommendations of the study may subsequently be implemented through rulemakings or in accordance with international agreements.

DATES: Comments and related material must be received on or before August 28, 2020. Although the Coast Guard prefers and highly encourages all comments and related material be submitted directly to the electronic docket, two virtual public meetings will be held via webinar and teleconference to provide an opportunity for oral comments about the NNYBPARS on Thursday, July 30, 2020, beginning at 9 a.m. EST, and on Tuesday, August 11, 2020, beginning at 6 p.m. EST. All comments and related material submitted must be received by the Coast Guard on or before August 28, 2020.
Commenters should be aware that the electronic Federal Docket Management System will not accept comments after midnight Eastern Daylight Time on the last day of the comment period.

**ADDRESSES:** You may submit comments identified by docket number USC–2020–0278 using the Federal eRulemaking Portal [http://www.regulations.gov](http://www.regulations.gov). See the “Public Participation and Request for Comments” portion of the SUPPLEMENTARY INFORMATION section for further instructions on submitting comments.

The virtual public meeting on Thursday, July 30, 2020, beginning at 9 a.m. EST, will be held via webinar and teleconference.

The virtual public meeting on Tuesday, August 11, 2020, beginning at 6 p.m. EST, will be held via webinar and teleconference.

Access information for these virtual public meetings will be posted at [https://www.navcen.uscg.gov/?pageName=PARS](https://www.navcen.uscg.gov/?pageName=PARS) by July 23, 2020.

**FOR FURTHER INFORMATION CONTACT:** If you have questions about this notice of study, call or email Mr. Craig Lapijeko, First Coast Guard District (dpw), U.S. Coast Guard; telephone (617) 223–8351, email craig.d.lapijeko@uscg.mil.

**SUPPLEMENTARY INFORMATION:**

I. **Table of Abbreviations**

ACPARS Atlantic Coast Port Access Route Study

AIS Automatic Identification System

COMDTINST Commandant Instruction

DHS Department of Homeland Security

EEZ Exclusive Economic Zone

IMO International Maritime Organization

MTS Marine Transportation System

NAD83 North American Datum of 1983

NNYB Northern New York Bight

PARS Port Access Route Study

PWSA Ports and Waterways Safety Act

TSS Traffic Separation Scheme

USCG United States Coast Guard

II. **Background and Purpose**

A. **Requirements for Port Access Route Studies:** Under Section 70003 of Title 46 of the United States Code, the Commandant of the U.S. Coast Guard may designate necessary fairways and traffic separation schemes (TSSs) to provide safe access routes for vessels proceeding to and from U.S. ports. The designation of fairways and TSSs recognizes the paramount right of navigation over all other uses in the designated areas.

Before establishing or adjusting fairways or TSSs, the Coast Guard must conduct a PARS, i.e., a study of potential traffic density and the need for safe access routes for vessels. Through the study process, the Coast Guard must coordinate with federal, state, and foreign state agencies (where appropriate) and consider the views of maritime community representatives, environmental groups, and other interested stakeholders. The primary purpose of this coordination is, to the extent practicable, to reconcile the need for safe access routes with other reasonable waterway uses such as anchorages, construction, and operation of renewable energy facilities, marine sanctuary operations, commercial and recreational activities, and other uses.

In addition to aiding the Coast Guard in establishing new or adjusting fairways or TSSs, this PARS may recommend establishing or amending other vessel routing measures. Examples of other routing measures include two-way routes, recommended tracks, deep-water routes (for the benefit primarily of ships whose ability to maneuver is constrained by their draft), precautionary areas (where ships must navigate with particular caution), and areas to be avoided (for reasons of exceptional danger or especially sensitive ecological and environmental factors).

B. **Previous Port Access Route Studies within this Study Area:** The original precautionary area and TSSs within this study area were first established in May, 1967, and were approved by the International Maritime Organization (IMO).

In 1987 the Coast Guard conducted a PARS prior to establishing two parallel shipping safety fairways off New York entitled “Ambrose to Nantucket Safety Fairway” and “Nantucket to Ambrose Safety Fairway” and published the final results in the [Federal Register](https://www.federalregister.gov) (52 FR 33589; September 4, 1987).

In 2016, the Coast Guard published a notice of its Atlantic Coast Port Access Route Study (ACPARS) in the [Federal Register](https://www.federalregister.gov) (81 FR 13307; March 14, 2016) and announced the study report as final in the [Federal Register](https://www.federalregister.gov) (82 FR 16510; April 5, 2017). The ACPARS analyzed the Atlantic Coast waters seaward of existing port approaches within the U.S. Exclusive Economic Zone (EEZ). This multiyear study began in 2011, included public participation, and identified the navigation routes customary followed by ships engaged in commerce between international and domestic U.S. ports. The study is available at [https://www.navcen.uscg.gov/?pageName=PARS](https://www.navcen.uscg.gov/?pageName=PARS) and will

III. **Information Requested**

The New York Bight encompasses a very large area starting along the coasts of New York and New Jersey, from Montauk Point, NY, to Cape May, NJ, and then offshore to the outer edge of the Continental Shelf. The purpose of this notice is to announce the commencement of this PARS to examine the First District’s portion of the New York Bight which includes the port approaches to New York and New Jersey and the international and domestic entry and departure transit areas in conjunction with the implementation of recommendations of the ACPARS, and to solicit public comments. Similar to the ACPARS, this PARS will focus on and use AIS data and information from stakeholders to identify and verify customary navigation routes as well as routes between port approaches and international entry and departure transit areas. The Coast Guard encourages participation in the study process by submitting comments in response to this notice. Comments should address impacts to navigation within the study area resulting from factors such as:

- Planned or potential offshore development, current port capabilities and planned improvements, increased vessel traffic, changing vessel traffic patterns, effects of weather, potential conflicts or disruptions in uncharted or informal anchorage areas, or navigational difficulties or concerns in general.

IV. **Public Participation and Request for Comments**

We encourage you to participate in this study by submitting comments and related materials. All comments received will be posted without change to [https://www.regulations.gov](https://www.regulations.gov) and will
public meeting is not required. We will provide a written summary of the oral comments received and will place that summary in the online public docket.

The first virtual public meeting on Thursday, July 30, 2020, beginning at 9 a.m. EST, will be held via webinar and teleconference.

Access information for this virtual public meetings will be posted at https://www.navcen.uscg.gov/?pageName=PARS by July 23, 2020.

The second virtual public meeting on Tuesday, August 11, 2020, beginning 6 p.m. EST, will be held via webinar and teleconference.

Access information for this virtual public meetings will be posted at https://www.navcen.uscg.gov/?pageName=PARS by July 23, 2020.

C. Viewing Comments and Documents: To view the comments and documents mentioned in this preamble as being available in the online public docket, go to http://www.regulations.gov, click on the “read comments” box, which will then become highlighted in blue. In the “Keyword” box insert “USCG–2020–02782” and click “Search.” Click the “Open Docket Folder” in the “Actions” column.

D. Privacy Act: We accept anonymous comments. All comments received will be posted without change to https://www.regulations.gov and will include any personal information you have provided. For more about privacy and submissions in response to this document, see DHS’s Correspondence System of Records notice (84 FR 48645, September 26, 2018). Documents mentioned in this notice as being available in the docket, and all public comments, will be in our online docket at https://www.regulations.gov and can be viewed by following that website’s instructions. Additionally, if you go to the online docket and sign up for email alerts, you will be notified when comments are posted or a final rule is published.

V. Northern New York Bight PARS: Timeline, Study Area, and Process

The First Coast Guard District, Coast Guard Sector New York, and Coast Guard Sector Long Island Sound will conduct this PARS. The study will commence upon publication of this notice and may take 12 months or more to complete.

The study area is described as an area bounded by a line connecting the following geographic positions: 40 18′00.0″ N 074 00′00.0″ W 38 57′00.0″ N 071 16′00.0″ W 39 47′24.0″ N 069 40′01.2″ W 41 07′12.0″ N 071 34′33.6″ W 41 04′15.6″ N 071 51′25.2″ W thence along the coast line back to the origin. All geographic points are based on North American Datum of 1983 (NAD 83).

This area extends approximately 150 nautical miles seaward and covers approximately 25,000 square nautical miles including the offshore area of New Jersey and New York used by private, commercial, and public vessels transiting to and from these ports. An illustration showing the study area is below with additional illustrations available in the online public docket where indicated under ADDRESSES.
This PARS will identify and analyze the customary navigation routes between the port approaches of New York and New Jersey and the international and domestic transit areas and connecting them to the potential fairways identified in the ACPARS final report.

Analyses will be conducted in accordance with COMDTINST 16003.2B, Marine Planning to Operate and Maintain the Marine Transportation System (MTS) and Implement National Policy. Instruction is available at https://media.defense.gov/2019/Jul/10/2002155400/-1/-1/0/CI_16003_2B.PDF.

We will publish the results of the PARS in the Federal Register. It is possible that the study may validate the status quo (no additional fairways or routing measures) and conclude that no changes are necessary. It is also possible that the study may recommend one or more changes to address navigational safety and the efficiency of vessel traffic management. The recommendations may lead to future rulemakings or international agreements.

This notice is published under the authority of 5 U.S.C. 552(a).


T.G. Allan Jr.,
Rear Admiral, U.S. Coast Guard, Commander, First Coast Guard District.

[FR Doc. 2020–13901 Filed 6–26–20; 8:45 am]
BILLING CODE 9110–04–P

DEPARTMENT OF HOMELAND SECURITY
Federal Emergency Management Agency


Assistance to Firefighters Grant Program; Fire Prevention and Safety Grants


ACTION: Notice of guidance.

SUMMARY: This Notice provides guidelines that describe the application process for Fire Prevention and Safety (FP&S) grants and the criteria the Federal Emergency Management Agency (FEMA) will use to award these grants for Fiscal Year (FY) 2019. It explains the differences, if any, between these guidelines and those recommended by representatives of the Nation’s fire service leadership during the annual Criteria Development meeting, which was held Dec. 12–13, 2018. The application period for the FY 2019 FP&S Grant Program was April 27, 2020, to May 29, 2020, and was announced on the Assistance to Firefighters Grant (AFG) website (www.fema.gov/firegrants), www.grants.gov, and the U.S. Fire Administration website (www.usfa.fema.gov).

DATES: Grant applications for the FP&S Grant Program were accepted electronically at https://go.fema.gov from April 27, 2020, at 8:00 a.m. ET to May 29, 2020, at 5:00 p.m. ET.

ADDRESSES: Assistance to Firefighters Grants Branch, DHS/FEMA, 400 C Street SW, 3N, Washington, DC 20572–3635.

FOR FURTHER INFORMATION CONTACT: Catherine Patterson, Chief, Assistance to Firefighters Grants Branch, (866) 274–0960.

SUPPLEMENTARY INFORMATION: The purpose of the FP&S Grant Program is to enhance the safety of the public and firefighters by assisting fire prevention programs and supporting firefighter health and safety research and development. The FEMA Grant Programs Directorate administers the
ENCLOSURE 3

Marine Safety Information
Bulletin 20-062
Port Access Route Study: Northern New York Bight

This bulletin addresses the notice of study for the Northern New York Bight Port Access Route Study.

1. The U. S. Coast Guard (USCG) is conducting a Port Access Route Study (PARS) to evaluate the adequacy of existing vessel routing measures and determine whether additional vessel routing measures are necessary for port approaches to New York and New Jersey and international and domestic transit areas in the First District area of responsibility. The Northern New York Bight PARS (NNYBPARS) will consider whether existing or additional routing measures are necessary to improve navigation safety due to factors such as planned or potential offshore development, current port capabilities and planned improvements, increased vessel traffic, existing and potential anchorage areas, changing vessel traffic patterns, effects of weather, or navigational difficulty. Vessel routing measures are implemented to reduce the risk of marine casualties. Examples of potential measures include traffic separation schemes, two-way routes, recommended tracks, deep-water routes, precautionary areas, and areas to be avoided. The recommendations of the study may subsequently be implemented through rulemakings or in accordance with international agreements.

2. The Notice of Study is available at Federal Register docket number USCG-2020-0278, the federal portal at https://www.regulations.gov/docket?D=USCG-2020-0278.

3. To submit your comment online, go to https://www.regulations.gov, and insert “USCG-2020-0278” in the “search box.” Click “Search” and then click “Comment Now.” We will consider all comments and material received on or before August 28, 2020.

4. For questions regarding this Marine Safety Information Bulletin contact Mr. Craig Lapiejko, Waterways Management at First Coast Guard District, telephone (617) 223-8351, e-mail craig.d.lapiejko@uscg.mil.

Captain Richard J. Schultz, First Coast Guard District Chief of Prevention, sends
Federal Register
Supplemental Notice
(86 FR 18996)
In response to your comments, we may revise this ICR or decide not to seek an extension of approval for the Collection. We will consider all comments and material received during the comment period.

We encourage you to respond to this request by submitting comments and related materials. Comments must contain the OMB Control Number of the ICR and the docket number of this request, [USCG–2021–0190], and must be received by June 11, 2021.

**Submitting Comments**

We encourage you to submit comments through the Federal eRulemaking Portal at https://www.regulations.gov. If your material cannot be submitted using https://www.regulations.gov, contact the person in the FOR FURTHER INFORMATION CONTACT section of this document for alternate instructions. Documents mentioned in this notice, and all public comments, are in our online docket at https://www.regulations.gov and can be viewed by following that website’s instructions. Additionally, if you go to the online docket and sign up for email alerts, you will be notified when comments are posted.

We accept anonymous comments. All comments received will be posted without change to https://www.regulations.gov and will include any personal information you have provided. For more about privacy and submissions in response to this document, see DHS’s eRulemaking System of Records notice (85 FR 14226, March 11, 2020).

**Information Collection Request**

**Title:** Official Logbook  
**OMB Control Number:** 1625–0018.  
**Summary:** The Official Logbook contains information about the voyage, the vessel’s crew, drills, watches, and operations conducted during the voyage. Official Logbook entries identify particulars of the voyage, including the name of the ship, official number, port of registry, tonnage, names and merchant mariner credential numbers of the master and crew, the nature of the voyage, and class of ship. In addition, it also contains entries for the vessel’s drafts, maintenance of watertight integrity of the ship, drills and inspections, crew list and report of character, a summary of laws applicable to Official Logbooks, and miscellaneous entries.

**Need:** Title 46, United States Code (U.S.C.) sections 11301, 11302, 11303, and 11304 require applicable merchant vessels to maintain an Official Logbook. The Official Logbook contains information about the vessel, voyage, crew, and watch. Lack of these particulars would make it difficult for a seaman to verify vessel employment and wages, and for the Coast Guard to verify compliance with laws and regulations concerning vessel operations and safety procedures. The Official Logbook serves as an official record of recordable events transpiring at sea such as births, deaths, marriages, disciplinary actions, etc. Absent the Official Logbook, there would be no official civil record of these events. The courts accept log entries as proof that the logged event occurred. If this information was not collected, the Coast Guard’s commercial vessel safety program would be negatively impacted, as there would be no official record of U.S. merchant vessel voyages. Similarly, those seeking to prove that an event required to be logged occurred would not have an official record available.

**Forms:**
- Respondents: Shipping companies.
- Frequency: On occasion.
- **Hour Burden Estimate:** The estimated burden remains at 1,750 hours a year.


**Dated:** April 6, 2021.

**Kathleen Claffie,**  
Chief, Office of Privacy Management, U.S. Coast Guard.

**[FR Doc. 2021–07440 Filed 4–9–21; 8:45 am]**

**BILLING CODE 9110–04–P**

**DEPARTMENT OF HOMELAND SECURITY**

**Coast Guard**  
**[Docket No. USCG–2020–0278]**

**Port Access Route Study: Northern New York Bight**

**AGENCY:** Coast Guard, DHS.

**ACTION:** Supplemental notice of study, request for comments.

**SUMMARY:** The Coast Guard is seeking additional information related to the notice of study that was published on June 29, 2020, regarding the Northern New York Bight Port Access Route Study (NNYPARS). Following a review of the comments and materials received, we identified several areas of additional inquiry related to the study. We invite your comments and responses to the proposed questions and information requests.

**DATES:** Comments and related material must be received on or before May 12, 2021. Commenters should be aware that the electronic Federal Docket Management System will not accept comments after midnight Eastern Daylight Time on the last day of the comment period.

**ADDRESSES:** You may submit comments identified by docket number USCG–2020–0278 using the Federal eRulemaking Portal http://www.regulations.gov. See the “Public Participation and Request for Comments” portion of the SUPPLEMENTARY INFORMATION section for further instructions on submitting comments.

**FOR FURTHER INFORMATION CONTACT:** If you have questions about this supplemental notice of study, call or email Mr. Craig Lapiejko, First Coast Guard District (dpw), U.S. Coast Guard; telephone (617) 223–8351, email craig.d.lapiejko@uscg.mil.

**SUPPLEMENTARY INFORMATION:**

**I. Table of Abbreviations**

ACPRS Atlantic Coast Port Access Route Study  
ANPRM Advance Notice of Proposed Rulemaking  
AIS Automatic Identification System  
COMDTINST Commandant Instruction  
DHS Department of Homeland Security  
NNYPARS Northern New York Bight Port Access Route Study  
OCS Outer Continental Shelf  
PARS Port Access Route Study  
TSS Traffic Separation Scheme  
USCG United States Coast Guard  
VMS Vessel Monitoring System  
VTR Vessel Trip Report

**II. Background and Purpose**

On June 29, 2020, the Coast Guard published a Notice of Study and public meetings; request for comments entitled “Port Access Route Study (PARS): Northern New York Bight” in the Federal Register (85 FR 38907) to evaluate the adequacy of existing vessel routing measures and determine whether additional vessel routing measures are necessary for port approaches to New York and New Jersey and international and domestic transit areas in the First Coast Guard District area of responsibility. This undertaking is required by 46 U.S.C. 70003, which calls for the Coast Guard to conduct a PARS prior to establishing fairways or traffic separation schemes (TSSs). The public was afforded a 60-day comment period, and two public meetings were held via teleconference and webinar to receive public input. The Coast Guard received 24 comments in response to our Federal Register Notice, public meetings and other outreach efforts. A preliminary review of the comments and related materials.
received identified additional opportunities for inquiry. For instance, obtaining additional vessel traffic and activities data would help inform several aspects of the study. In this notice, we also seek responses supplying quantitative data or suggesting other authoritative sources that specifically address the items listed in section III.

All comments and supporting documents are available in a public docket and can be viewed at http://www.regulations.gov, In the “Search” box insert “USCG–2020–0278” and click “Search.” Click the “Open Docket Folder” in the “Actions” column.

III. Information Requested

Where possible and pertinent, please provide sources, citations and references to back up or justify your responses. Also, for all pertinent responses, please provide a detailed explanation of how you arrived at your conclusion and the underlying assessment that supports your conclusion. Finally, for all numerical responses please provide us with sufficient information to recreate your calculations. We seek public feedback on the following items:

a. The Coast Guard is conducting the NNYBPARS in accordance with COMDTINST 16003.2B, Marine Planning to Operate and Maintain the Marine Transportation System (MTS) and Implement National Policy. The instruction is available at https://media.defense.gov/2019/Jul/10/2002155400-1-1/OC/16003_2B.PDF.

The Coast Guard requests information applicable to 1) PARS objectives and 2) data and other information to assist the Coast Guard conduct the NNYBPARS.

1. PARS Objectives;
   i. Determine present traffic density;
   ii. Determine potential traffic density;
   iii. Determine if existing vessel routing measures are adequate;
   iv. Determine if existing vessel routing measures require modifications;
   v. Determine the type of modifications;
   vi. Define and justify the needs for new vessel routing measures;
   vii. Determine the type of new vessel routing measures; and
   viii. Determine if the usage of the vessel routing measures must be mandatory for specific classes of vessels.

2. Data and other information;
   i. Vessel traffic characteristics and trends (both existing and potential), including traffic volume, size and types of vessels, potential interference with the flow of commercial traffic, presence of any unusual cargoes, and other similar information;
   ii. Fishing activity;
   iii. Recreational boating traffic;
   iv. Commercial ferry traffic;
   v. Military activities;
   vi. Existing and potential outer continental shelf (OCS) resource development activities;
   vii. Environmental information and factors which may be impacted by potential or amended vessel routing measures;
   viii. Underway and projected dredging projects;
   ix. Port development activities;
   x. Native American Tribal activities and impacts of potential or amended vessel routing measures;
   xi. Economic (costs and benefits) effects and impacts; and
   xii. Any additional information that arises as a result of public comments.

b. The Coast Guard is utilizing automatic information system (AIS) data, vessel monitoring system (VMS) data, vessel trip report (VTR) data, and fisheries observer data to conduct the NNYBPARS. The Coast Guard requests maritime community representatives provide any additional info that may assist the Coast Guard conduct the NNYBPARS.

c. Do maritime community representatives anticipate impacts to navigation as a result of planned or potential future developments, whether in port, inshore or offshore in the areas within or directly adjacent to the Northern New York Bight (please explain and be specific as possible)?

1. How will vessel navigation routes change as a result of planned or potential future developments? Do maritime community representatives request additional routing measures other than those that currently exist or are being proposed via the Advanced Notice of Proposed Rulemaking (ANPRM) in the Federal Register (85 FR 37034, June 19, 2020) related to planned or potential future developments (please explain and be as specific as possible)?

d. The Coast Guard received numerous comments in response to our Federal Register Notice, public meetings and other outreach efforts requesting various fairway widths (i.e. 4 NM, 5 NM, 9 NM), to extend current traffic separation schemes, or to identify historical anchorage locations.

1. The Coast Guard requests maritime community representatives provide evidence of why routing measures need to be of the requested width.

2. The Coast Guard requests maritime community representatives provide evidence for the need to extend traffic separation schemes in the Northern New York Bight area out to the OCS.

3. The Coast Guard requests maritime community representatives specifically identify historical anchorages that are requested to be federally recognized. Please provide coordinates.

IV. Public Participation and Request for Comments

We encourage you to participate in this study by submitting comments and related materials through the Federal portal at https://www.regulations.gov. In your submission, please include the docket number for this notice of inquiry and provide a reason for each suggestion or recommendation. If your material cannot be submitted using https://www.regulations.gov, contact the person in the FOR FURTHER INFORMATION CONTACT section of this document for alternate instructions.

We accept anonymous comments. Comments we post to https://www.regulations.gov will include any personal information you have provided. For more about privacy and submissions in response to this document, see DHS’s eRulemaking System of Records notice (85 FR 14226, March 11, 2020).

Documents mentioned in this notice of inquiry as being available in the docket, and public comments, will be in our online docket at https://www.regulations.gov and can be viewed by following that website’s instructions. We review all comments received, but we may choose not to post off-topic, inappropriate, or duplicate comments that we receive. If you visit the online docket and sign up for email alerts, you will be notified when comments are posted or if a final rule is published.

This notice is published under the authority of 5 U.S.C. 552(a).


T.G. Allan Jr.,
Rear Admiral, U.S. Coast Guard, Commander, First Coast Guard District.

[FR Doc. 2021–07469 Filed 4–9–21; 8:45 am]

BILLING CODE 9110–04–P

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency


Proposed Flood Hazard Determinations

ENCLOSURE 5

Marine Safety Information
Bulletin 21-003
Port Access Route Study: Northern New York Bight

This bulletin addresses the April 12, 2021 supplemental notice of study; request for comments for the Northern New York Bight Port Access Route Study.

1. On June 29, 2020, the First Coast Guard District published a notice of study; request for comments (85 FR 38907) announcing that the Coast Guard was conducting a Port Access Route Study (PARS) to evaluate the adequacy of existing vessel routing measures and determine whether additional vessel routing measures are necessary for port approaches to New York and New Jersey and international and domestic transit areas in the First District Area of Responsibility (AOR). The Coast Guard stated the Northern New York Bight PARS (NNYBPARS) would consider whether existing or additional routing measures are necessary to improve navigation safety due to factors such as planned or potential offshore development, current port capabilities and planned improvements, increased vessel traffic, existing and potential anchorage areas, changing vessel traffic patterns, effects of weather, or navigational difficulty. Vessel routing measures, which include traffic separation schemes, two-way routes, recommended tracks, deep-water routes, precautionary areas, and areas to be avoided, are implemented to reduce the risk of marine casualties.

2. On April 12, 2021 the First Coast Guard District published a supplemental notice of study; request for comments seeking additional information related to the notice of study that was published on June 29, 2020. Following a review of the comments and materials received, the First Coast Guard District identified several areas of additional inquiry related to the study. We invite your comments and responses to the proposed questions and information requests. In this notice, we also seek responses supplying quantitative data or suggesting other authoritative sources that specifically address the questions posed in the subject notice of study; request for comments.


4. To submit your comment online, go to https://www.regulations.gov, and insert “USCG-2020-0278” in the “search box.” Click “Search” and then click “Comment.” We will consider all comments and material received on or before May 12, 2021.

5. For questions regarding this Marine Safety Information Bulletin contact Mr. Craig Lapiejko, Waterways Management at First Coast Guard District, telephone (617) 223-8351, e-mail craig.d.lapiejko@uscg.mil.

Captain Richard J. Schultz, First Coast Guard District Chief of Prevention, sends