

Commercial Fishing And the VA Wind Energy Area

VA Coastal Partners Workshop
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Richmond, VA

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COLLABORATIVE FISHERIES PLANNING FOR VIRGINIA'S OFFSHORE WIND ENERGY AREA

Project Objective

Mitigate potential conflicts between fishing and wind energy development by:

- Establishing a collaborative process for information sharing with the fishing community
- Developing fine-scale maps of commercial and recreational fishing areas
- Refining best management options to the needs of Virginia fishermen



What are best management practices?

- BOEM held eight stakeholder meetings from Oct. 2012 to Feb. 2013 from Maine to North Carolina
- Developed best management practices (BMPs) and mitigation measures to address potential use conflicts between commercial wind and commercial fishing

OCS Study
BOEM 2014-654

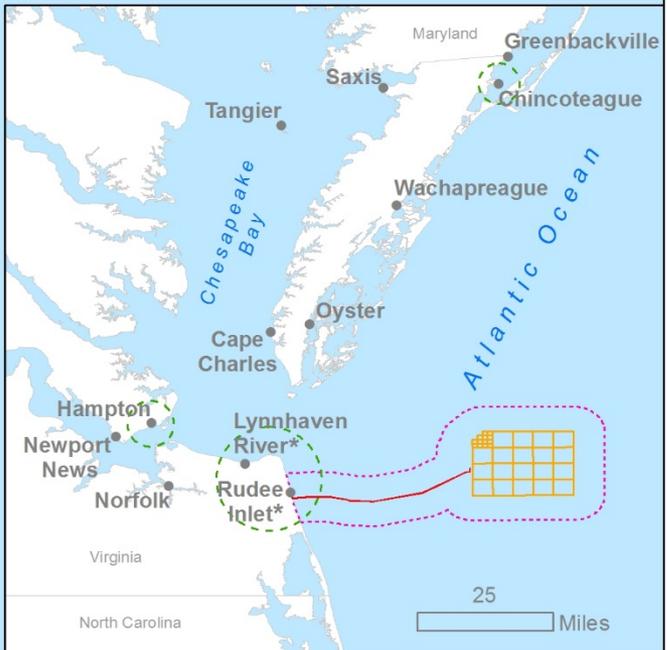
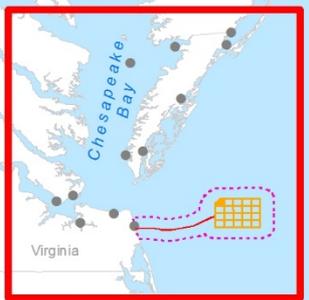
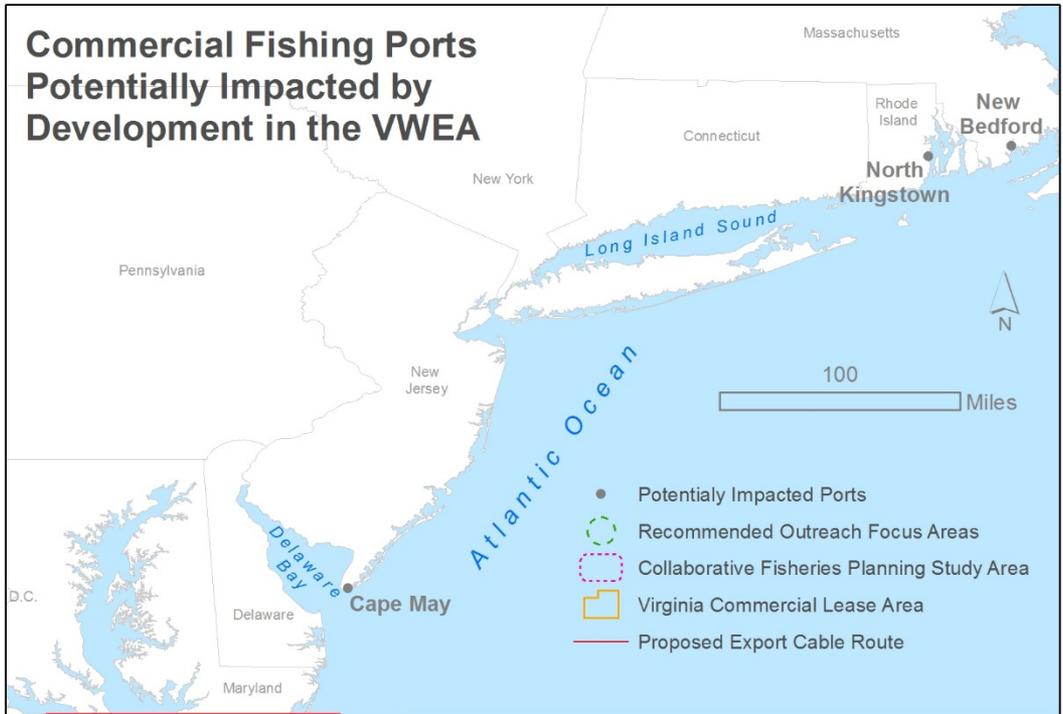
Development of Mitigation Measures to Address Potential Use Conflicts between Commercial Wind Energy Lessees/Grantees and Commercial Fishermen on the Atlantic Outer Continental Shelf

Final Report on Best Management Practices and Mitigation Measures



U.S. Department of the Interior
Bureau of Ocean Energy Management
Office of Renewable Energy Programs

Commercial Fishing Ports Potentially Impacted by Development in the VWEA



*Lynnhaven River and Rudee Inlet constitute the ports in Virginia Beach

Benefits to Fishermen of Participating in Collaborative Fisheries Planning

- Regular communication to inform expectations as wind energy projects progress
- Inform the project team of the best ways to communicate with industry
- Participation to inform decisions about aspects of design, construction, operation infrastructure, and construction timing
- To reduce conflicts during the development of wind energy facilities

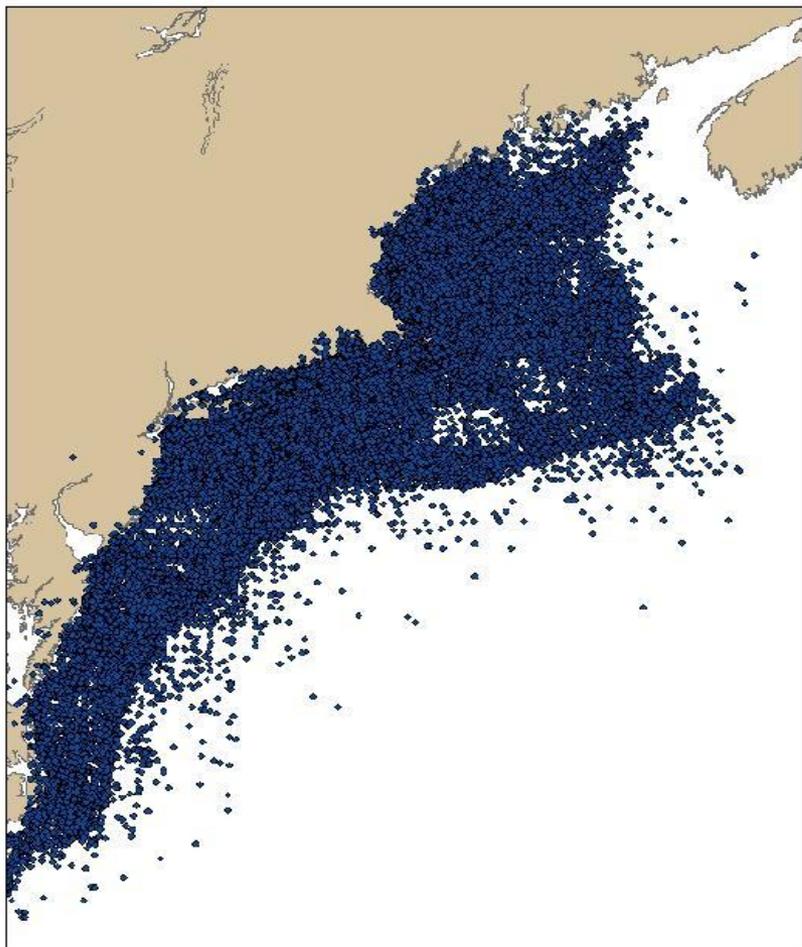


Mapping Commercial Fishing

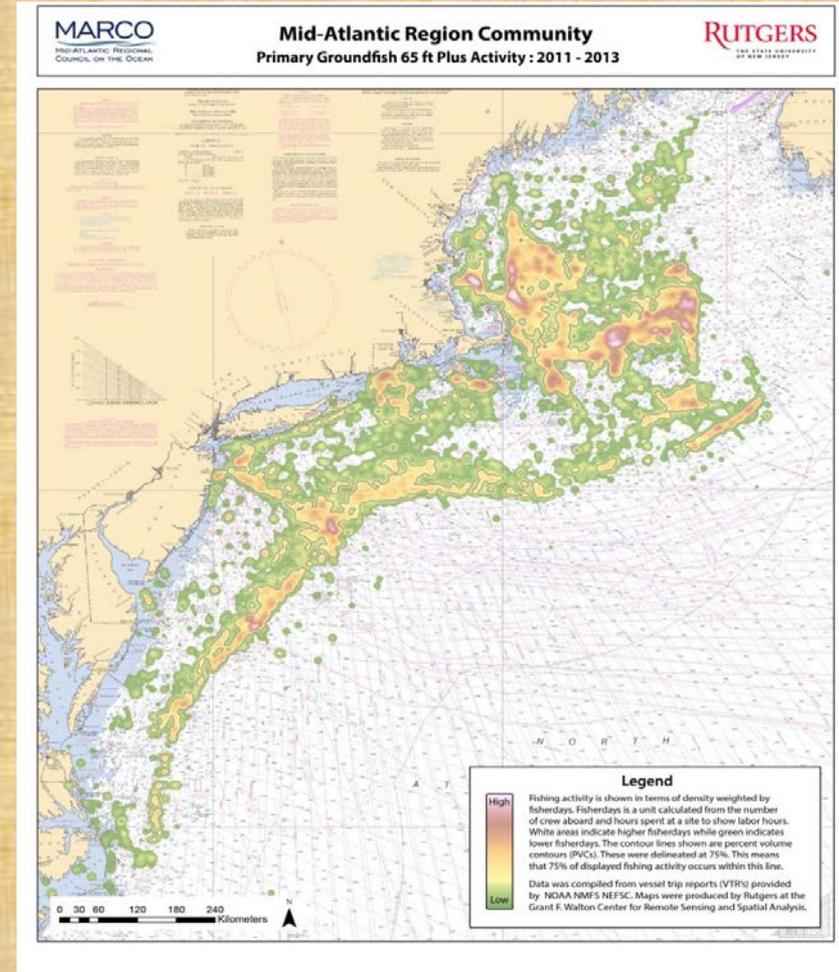


Combining NOAA Vessel Trip Report data with vessel permit data and working with commercial fishermen to verify where most “fisher days” are spent– the “Communities at Sea” approach.

Mapping Commercial Fishing



Vessel Trip Report (VTR)



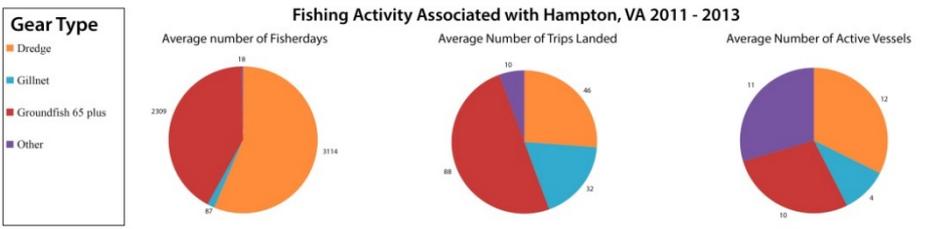
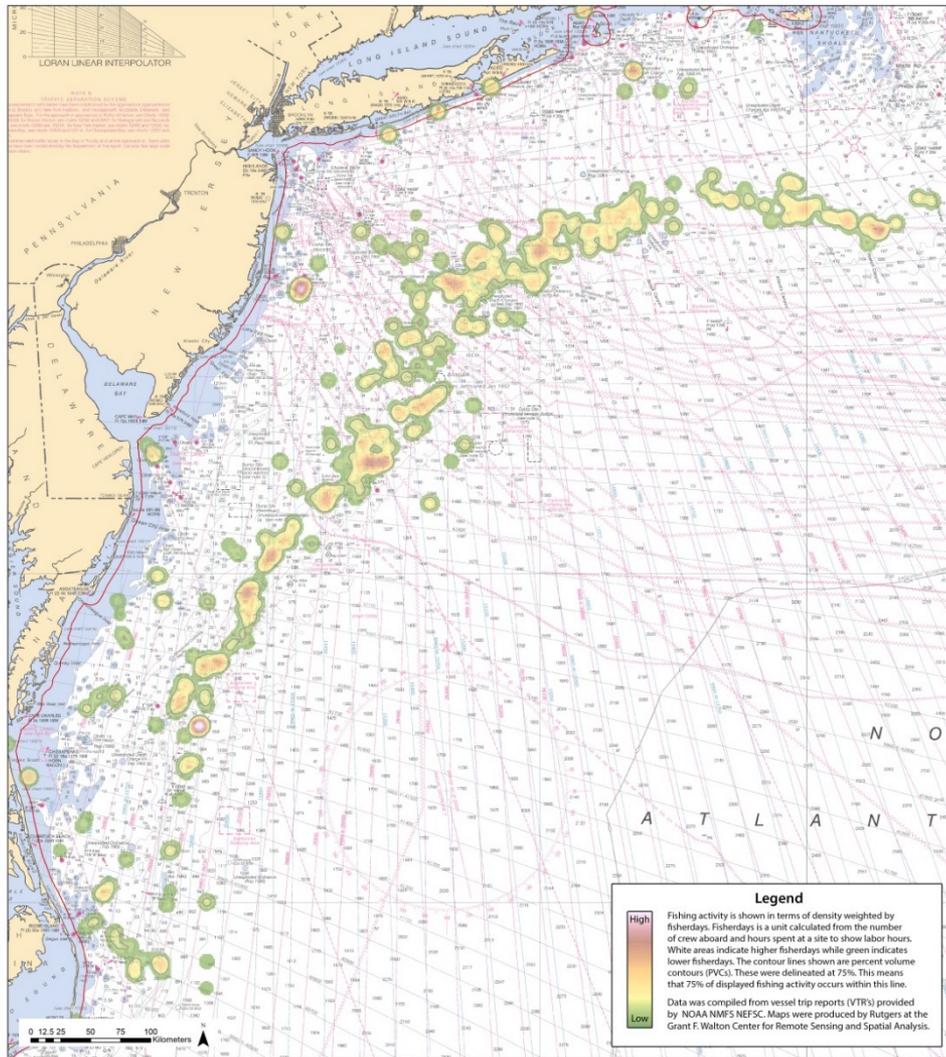
Communities at Sea



Maps were further refined by fishing community and gear type

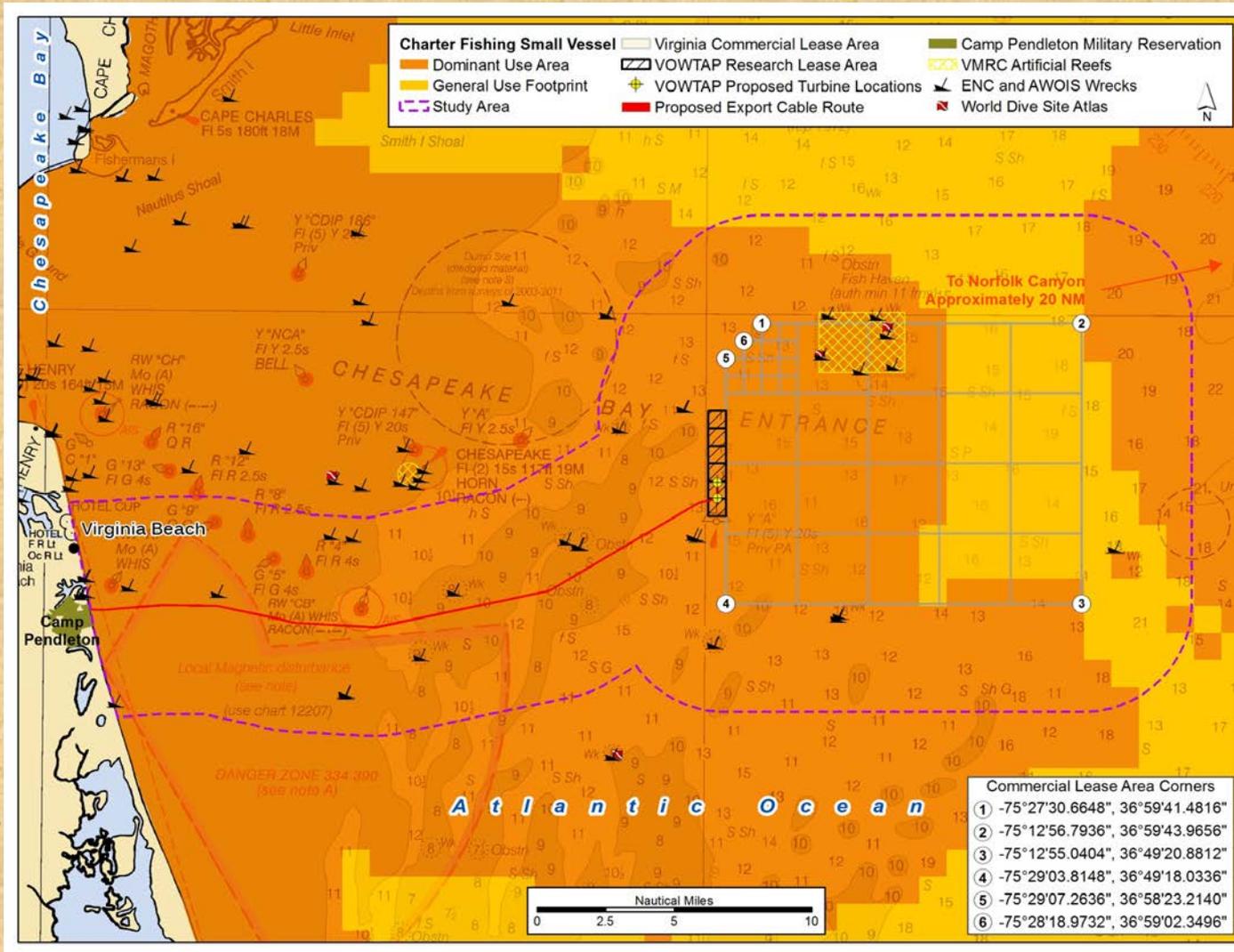
Smaller ports were not individually mapped because of confidentiality concerns

These maps were taken into the field for validation



Participatory GIS

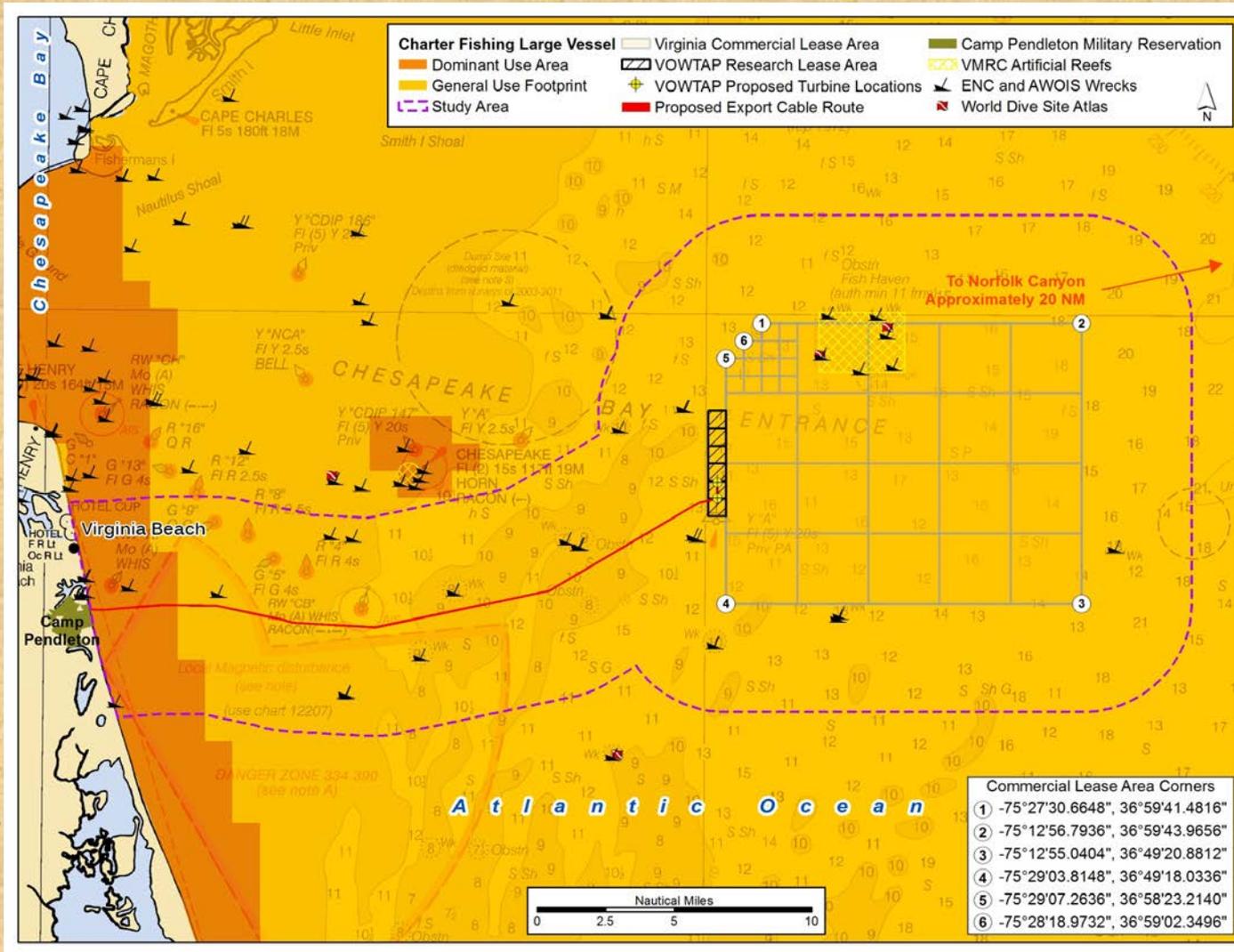
Charter Fishing Small Vessels



www.coastalgems.org

Participatory GIS

Charter Fishing Large Vessels

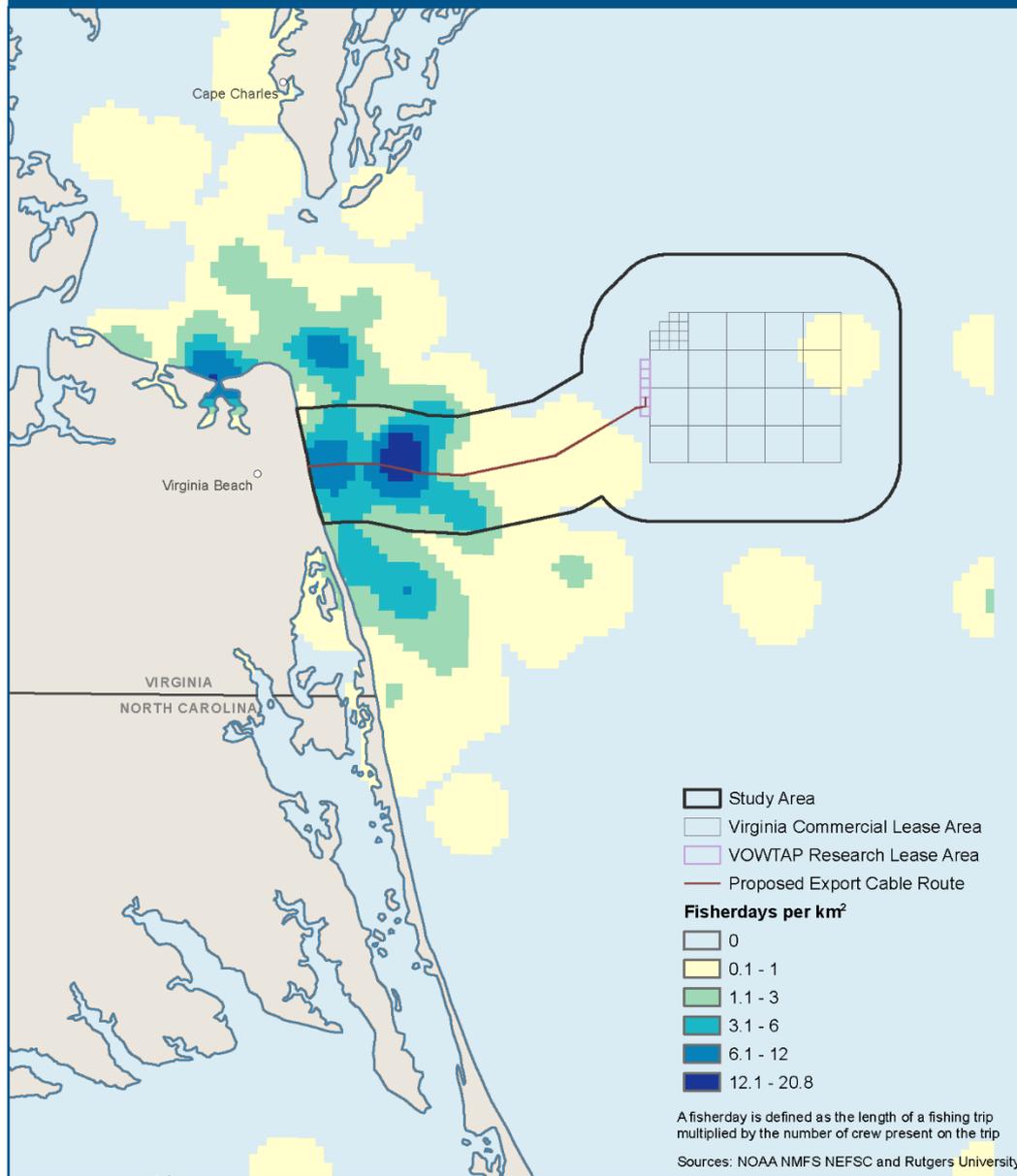


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Communities at Sea - Commercial Fishing Activity (2011-2014)

Port: Virginia Beach, VA Gear: Gillnets

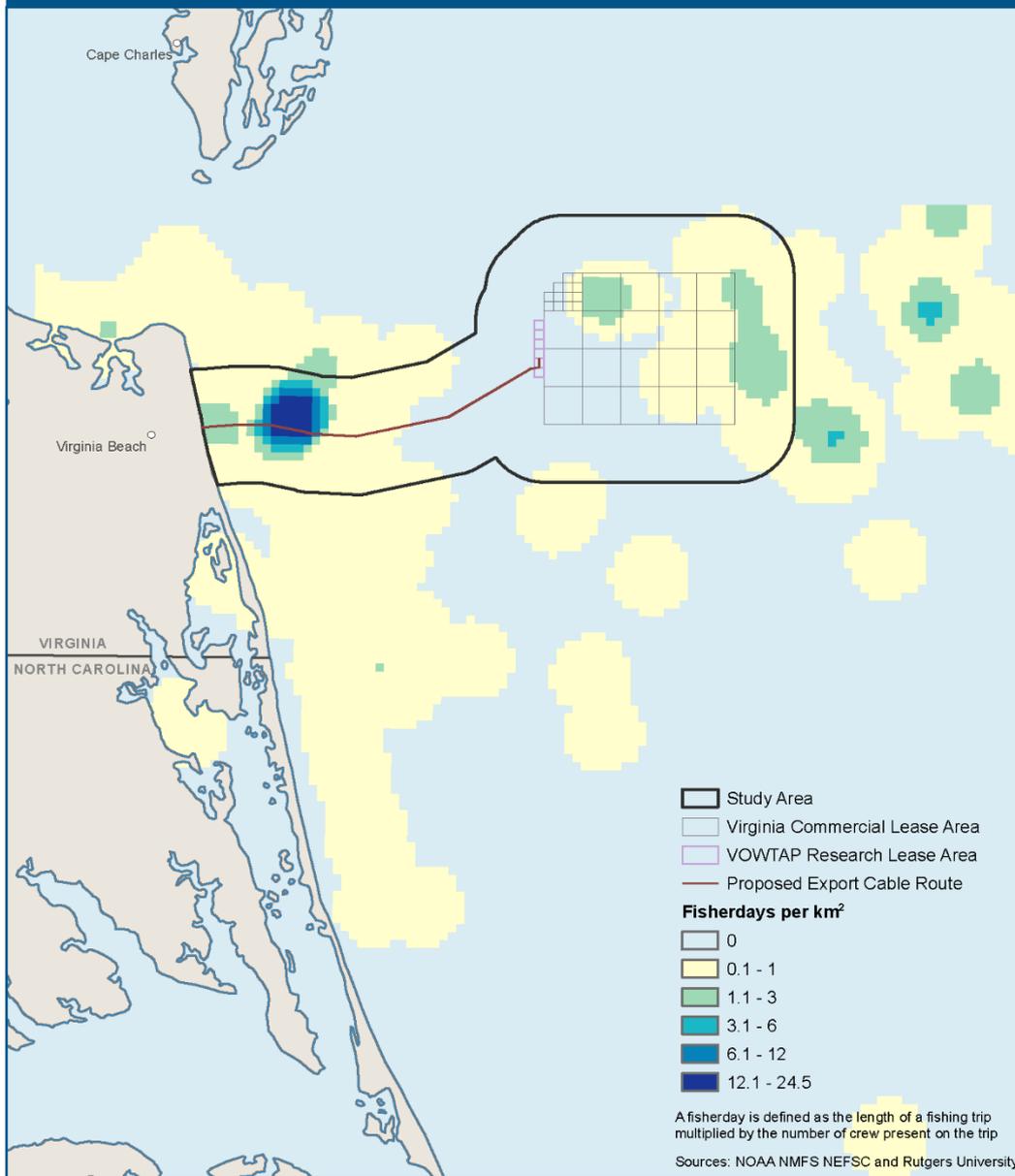
Total fisherdays in study area: 1,805



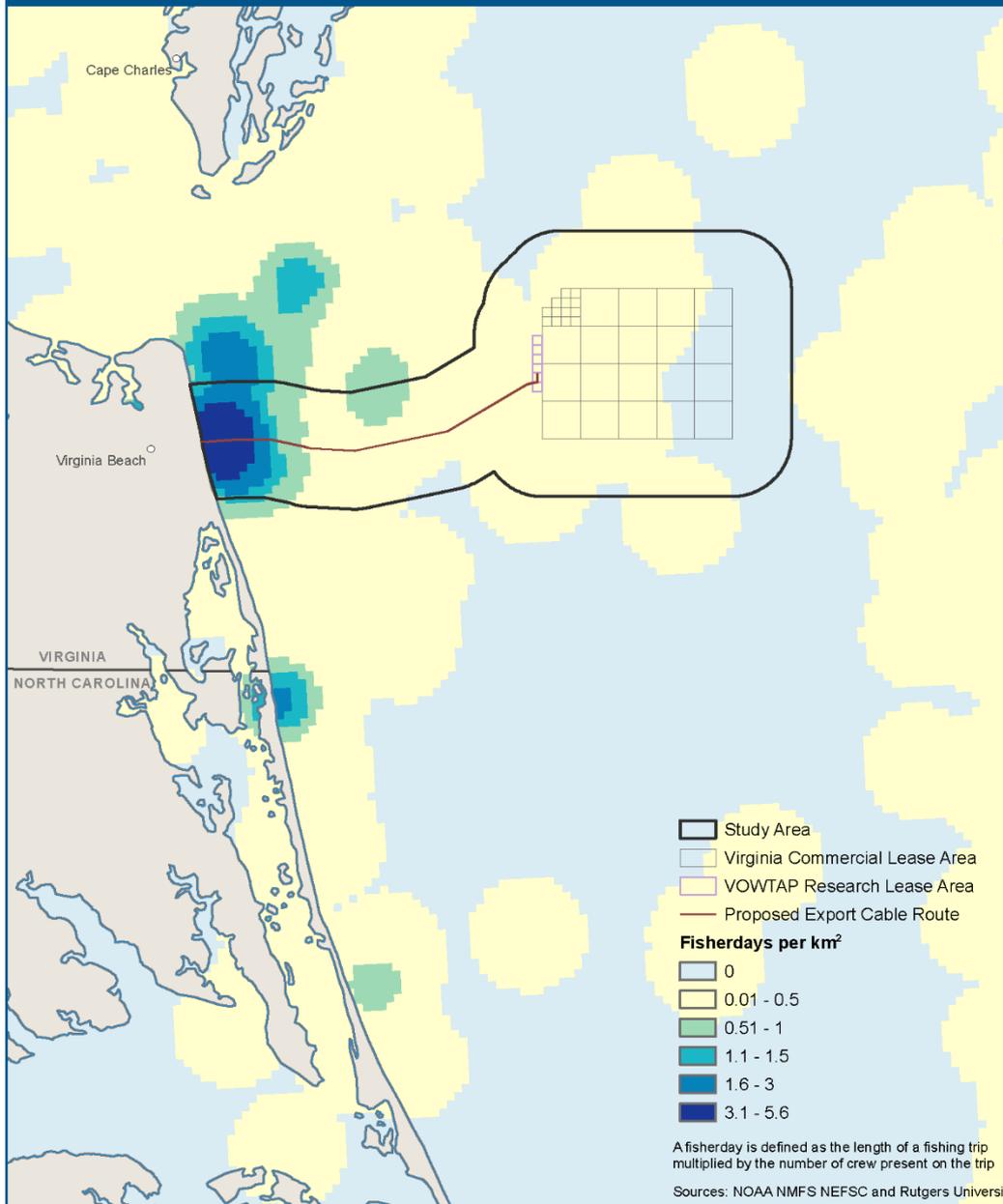
Communities at Sea - Commercial Fishing Activity (2011-2014)

Port: Virginia Beach, VA Gear: Pots & Traps

Total fisherdays in study area: 1,113

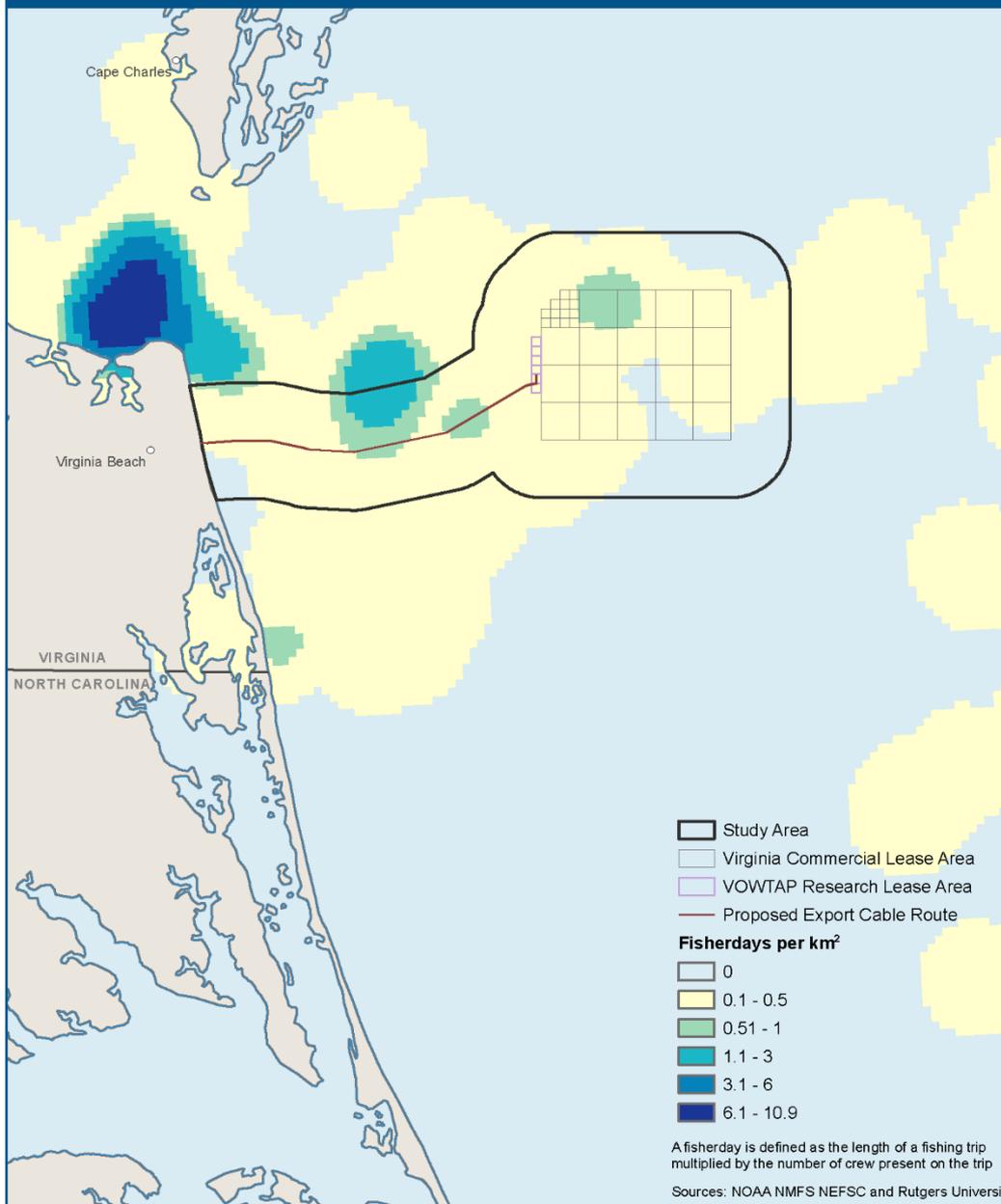


Communities at Sea - Recreational Fishing Activity (2011-2014) Virginia Beach, VA Charter Boats

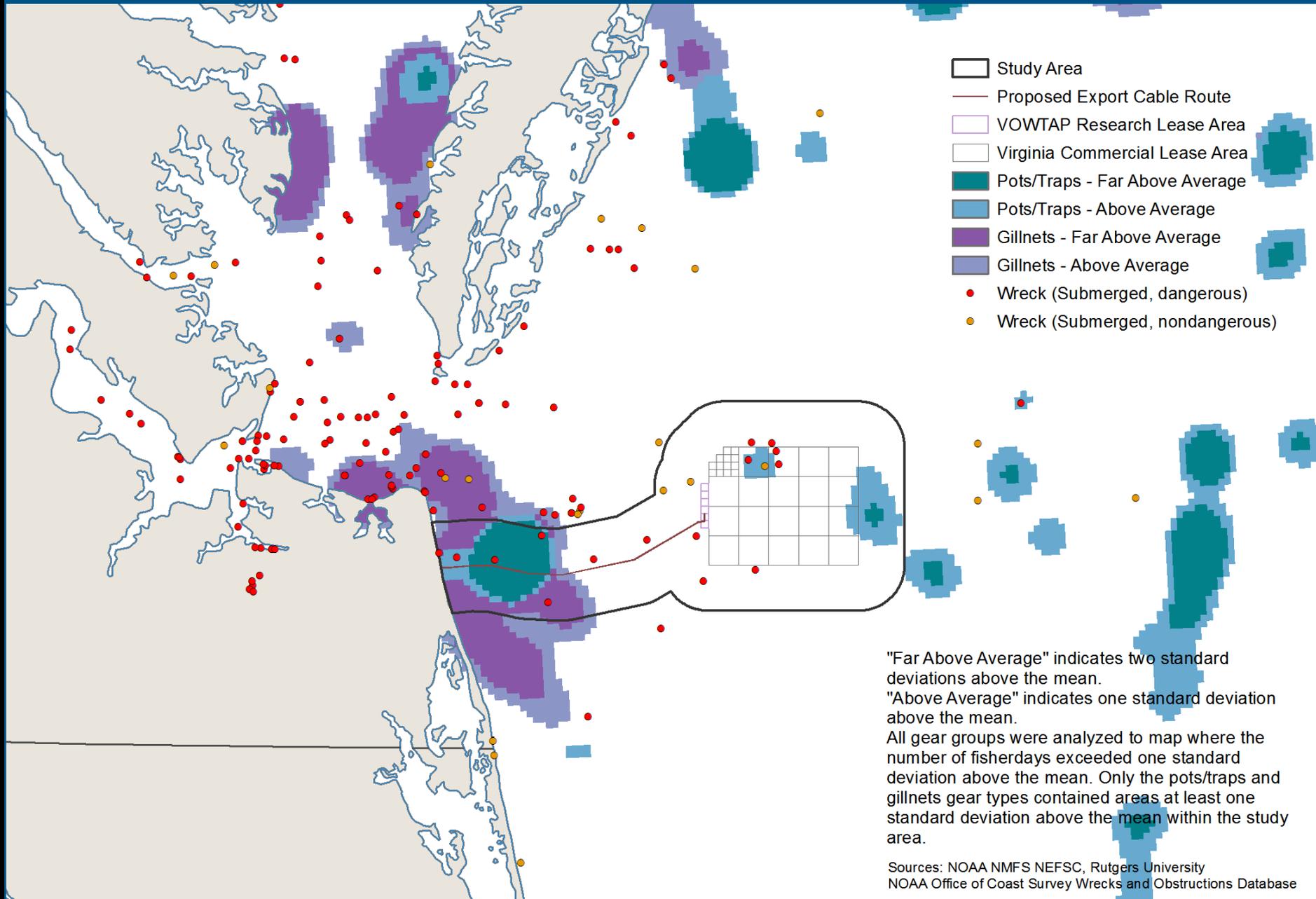


Communities at Sea - Recreational Fishing Activity (2011-2014)

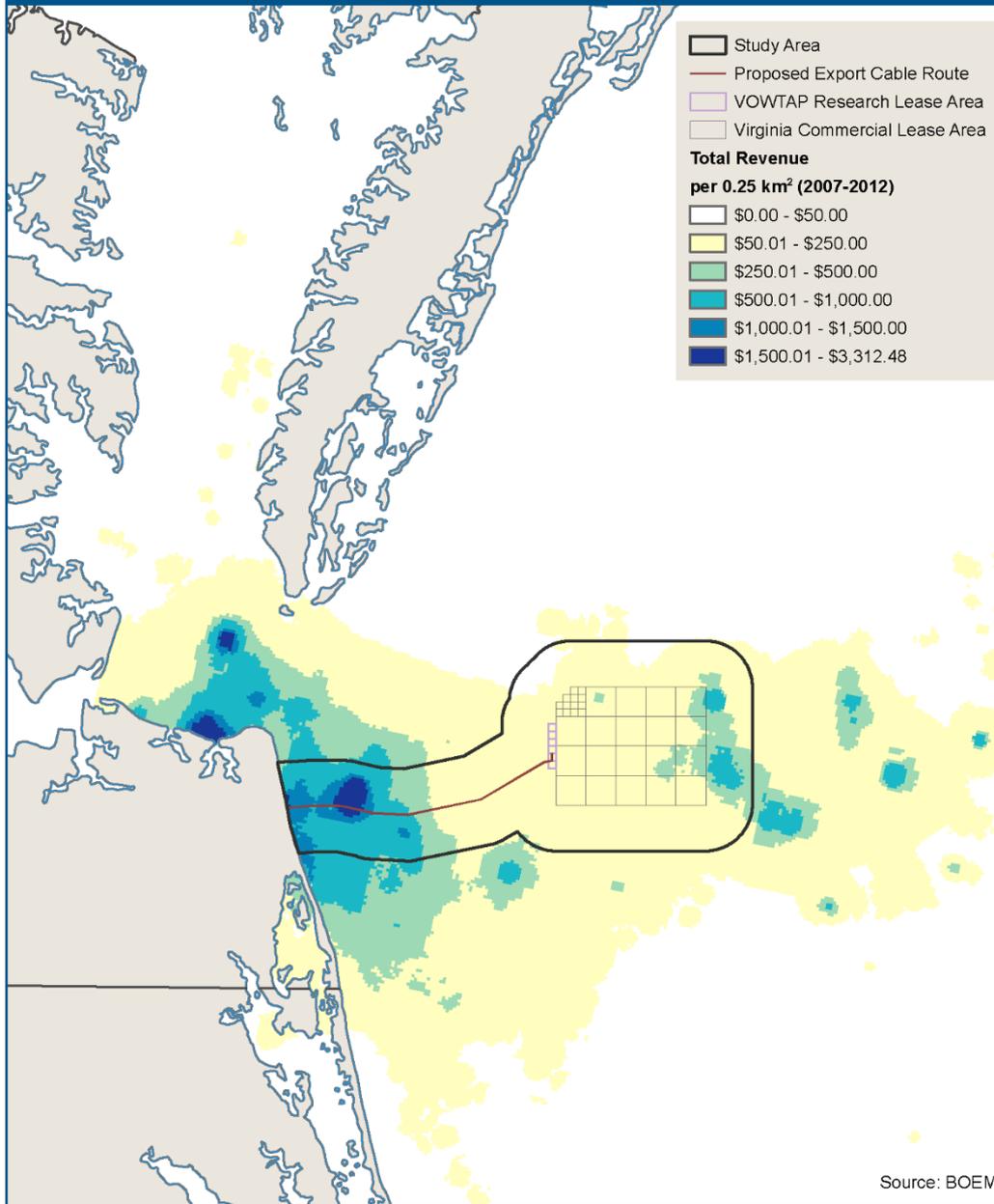
Virginia Beach, VA Party Boats



Communities at Sea - Commercial Fishing Activity Highest Use Areas within Study Area (2011-2014)



Revenue Intensity from Commercial Fishing Activity: Virginia Beach Port



Source: BOEM



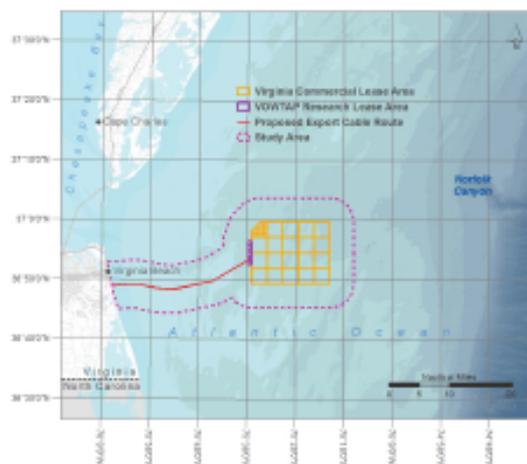
Collaborative Fisheries Planning for Virginia's Offshore Wind Energy Area

Photo of fishing vessel navigating wind farm in Sweden. Distances between turbines in Virginia would be greater than shown.

To prepare for future development of wind energy facilities off the coast of Virginia, the Bureau of Ocean Energy Management (BOEM), Virginia Department of Mines, Minerals, and Energy (DMME), and Virginia Coastal Zone Management (VA CZM) Program are working with the recreational and commercial fishing communities to share information through a collaborative process. Our objectives include developing fine-scale maps of commercial and recreational fishing areas; identifying recommendations to mitigate use conflicts between fishermen and wind energy development; and developing a plan for communicating with fishermen about wind development activities.

Value for Participating Fishermen

- Your participation will provide regular communication to let you know what to expect as the wind energy projects progress
- You can inform the project team of the best ways to communicate with all fishermen under various circumstances, such as notifications about temporary closures or other messages that need to be communicated during construction and operation
- Your fishing data and other information can help with decisions about some aspects of design, construction, and operation of the commercial wind energy project infrastructure, and construction timing, to reduce conflict with the fishing community during the development of wind energy facilities



Virginia's Wind Energy Area

Virginia's designated offshore commercial wind energy area is 24 nautical miles off the coast of Virginia Beach. The Virginia Offshore Wind Technology Advancement Project (VOWTAP) Research Lease Area (purple grid) will include two 6 megawatt ocean scale wind turbines and a buried transmission cable. Commercial and recreational fisheries data in and around the research and commercial (yellow grid) lease area are being sought, collected, and analyzed to minimize use conflicts with offshore wind energy development. This area is approximately 176 square miles.

For more information, please contact:

Virginia Coastal Zone Management Program, Laura McKay (Laura.McKay@deq.virginia.gov);
 For ports in Virginia Beach, Hampton, or Newport News, Todd Janeski (tjaneski@vcu.edu); For ports on Virginia's Eastern Shore, Connie Morison
 (cmorison@a-npdc.org); Recreational Fishing Contact, Jeff Deem (jeff.deem2@gmail.com); Commercial Fishing Contact,
 Rick Robins (richardbrobins@gmail.com); Bureau of Ocean Energy Management, <http://www.boem.gov/Renewable-Energy/>

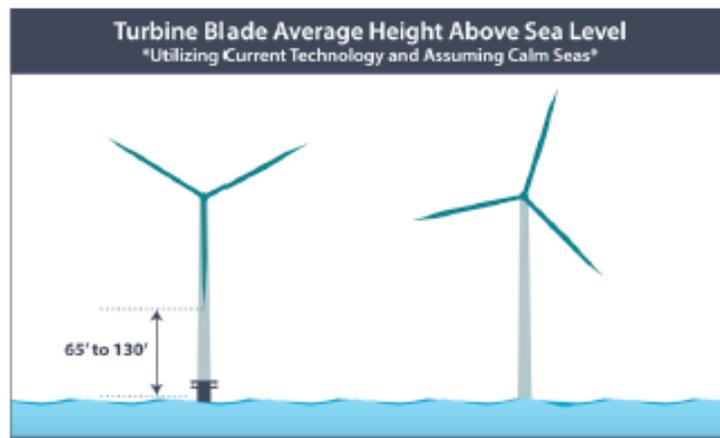
Frequently Asked Questions Related to Wind Energy on
the Outer Continental Shelf – Virginia – March 2015

- In its evaluation of offshore wind facilities and their potential impacts, does BOEM consider other marine uses that may also impact the fishing community?*

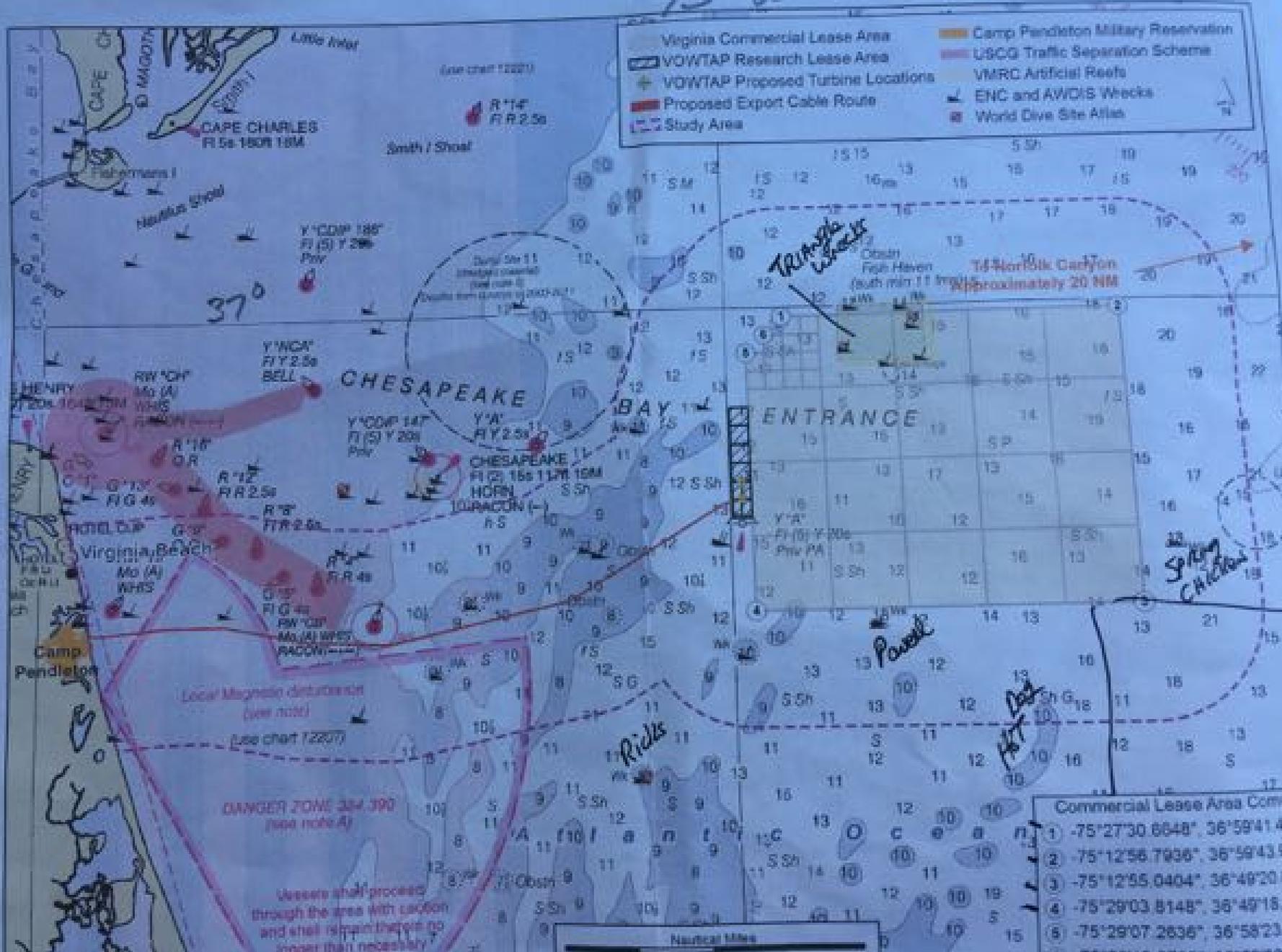
 - Yes. As part of our analysis of potential impacts for construction, operation and maintenance, and decommissioning of offshore wind energy facilities, BOEM will evaluate impacts to existing and likely future uses of the coastal and ocean environment.
 - Examples include fishing; oil and gas exploration and development; military activities; marine mineral extraction; and commercial, recreational, and military vessel traffic.
- Are there siting considerations to address potential impacts to fisheries and habitat (e.g., turbine configuration to minimize navigational impacts; turbine design options to provide habitat)?*

 - BOEM held a series of workshop in 2012 and 2014 with the fishing community to solicit input for the *Development of Mitigation Measures to Address Potential Use Conflicts Between the Wind and Commercial Fishing Industries*. BOEM's cooperative project (M14AC00029) with the Commonwealth of Virginia, *Collaborative Fisheries Planning for Virginia's Offshore Wind Energy Area* is designed to further refine the proposed options to meet the needs of Virginia fishermen.
- What is the average height above sea surface and distance between wind turbines?*

 - Based on the current technology, the lowest point of the rotor sweep would be 65 to 100 feet (ft) above the sea surface. The minimum gap for the Virginia Offshore Wind Technology Advancement Project (VOWTAP) on the proposed research lease is 89 feet above mean sea level.



75° W

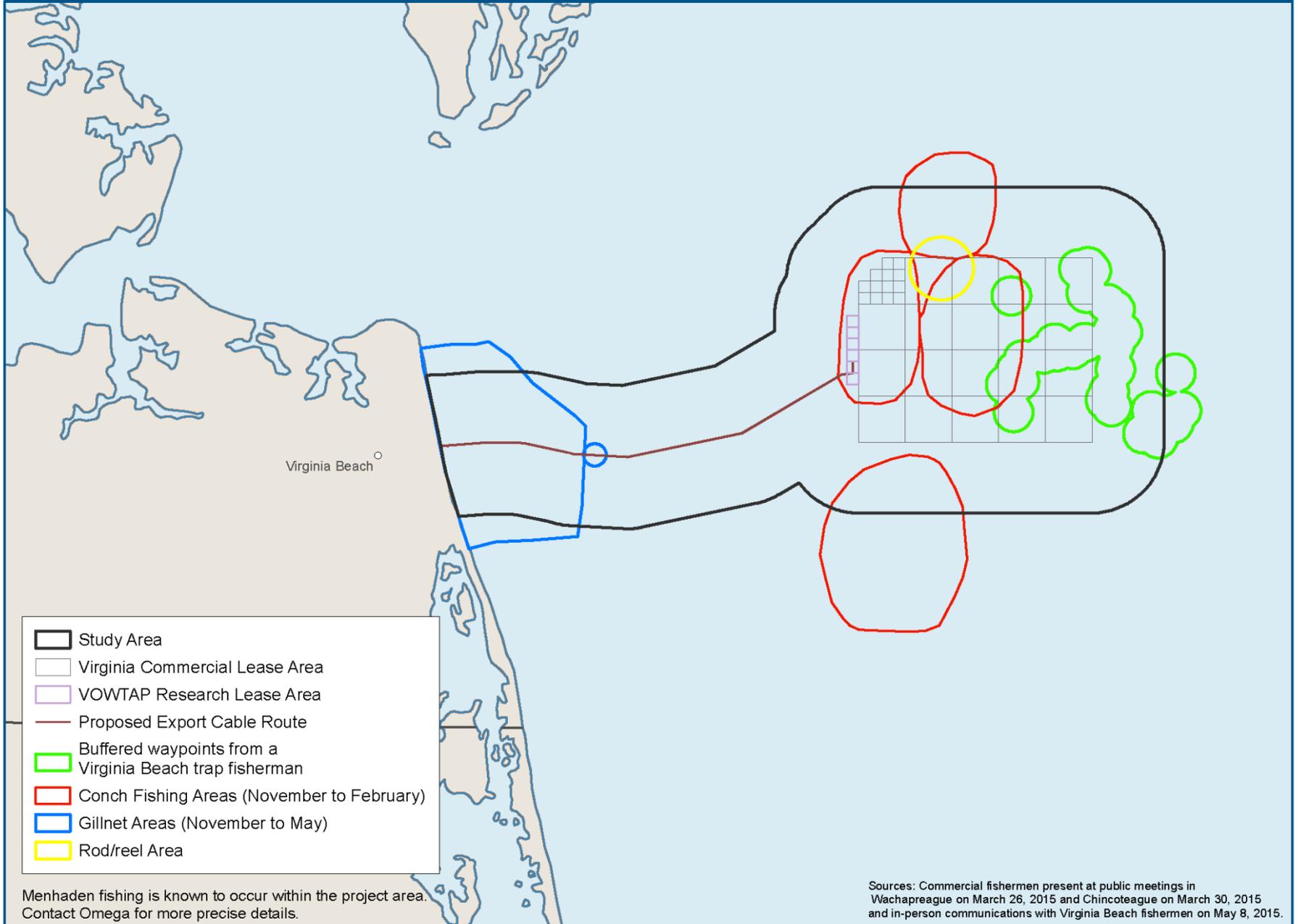


Virginia Commercial Lease Area	Camp Pendleton Military Reservation
VOWTAP Research Lease Area	USCG Traffic Separation Scheme
VOWTAP Proposed Turbine Locations	VMRC Artificial Reefs
Proposed Export Cable Route	ENC and AWDIS Wecks
Study Area	World Dive Site Atlas

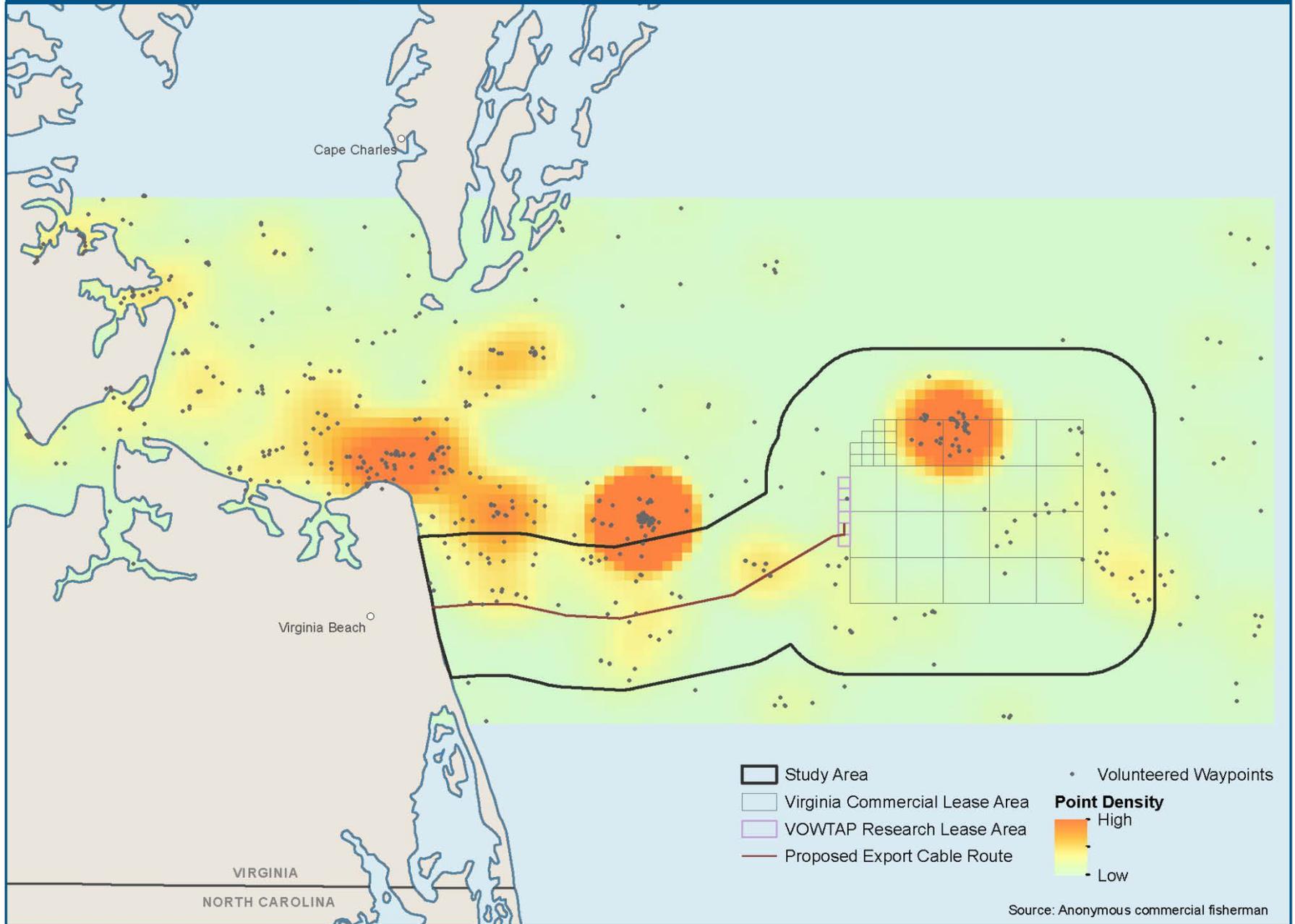
Commercial Lease Area Corners

1	-75°27'30.8648", 36°59'41.481"
2	-75°12'58.7936", 36°59'43.985"
3	-75°12'55.0404", 36°49'20.881"
4	-75°29'03.8148", 36°49'18.031"
5	-75°29'07.2636", 36°58'23.211"
6	-75°29'07.2636", 36°58'23.211"

Volunteered Information from Commercial Fishermen



Important Places for Commercial Fisherman #1













BMP 1: Communication Framework

BMP 1 identifies a starting point to assist the wind energy developer and other interested parties with information about the specific interests, needs, and dissemination of methods for communicating with those fishing off of the Virginia coast.

This BMP includes creating a timely two-way communication plan between the affected stakeholders (fishing communities) and the developers that can adapt over time.

A network of involved stakeholders is necessary, and the hiring of a **fisheries liaison** (who is the developer's point of contact) and a **fisheries representative** (who is the fishing community's point of contact) is recommended. These individuals would work together to ensure effective communication between the developers and user groups.

BMP 2: Siting, Micrositing, Design and Construction

Intended to minimize potential conflicts between the wind energy developer and fishermen during active project phases. It is predicated on ongoing candid interaction between the industry and fishermen and providing user groups continuously updated information.

Suggestions include early, often, and ongoing engagement with fishermen and that fishing should be allowed to continue with as few disruptions as possible.

Highly valued grounds and ecologically important areas should be disrupted as little as possible, especially during ecologically vulnerable times. The creation of a public website to post bulletins and provide opportunities for public comments is also recommended.

BMP 3: Navigation, Access and Safety

Includes recommendations regarding navigation through wind facilities, accessing and anchorage at or around structures, marking, radio contact, lighting, and safety equipment.

This includes both visual marking as well as automatic identification system transponders. It also includes the vetting of those procedures and notices by the user groups (fishermen).

To avoid conflicts with fishermen, wind energy developers will seek to maximize fishing access throughout all phases of offshore development: site assessment and site characterization; construction; operation; and, decommissioning.

BMP 4: Environmental Monitoring and Research

BMP 4 recommends procedures for documenting, monitoring, and researching environmental conditions and fish surveys related to the commercial and recreational fishing industry in and around Virginia's wind energy area during construction, operation, and following storm events.

An adaptive environmental monitoring plan should be implemented during all phases of development and include a pre-construction baseline survey and post-construction monitoring.

BMP 5: Mitigation

The goal of this BMP is to describe acceptable mitigation strategies, which will need to be further refined through dialogue with fishermen, fishery representatives, the fishery liaison, and the wind energy developer.

Types of mitigation could include:

- Shore-side improvements (e.g., derricks, gear or fuel storage facilities, freezers)
- Enhance fisheries science and management (e.g., surveys for black sea bass and channeled whelk)
- Fish habitat restoration and improvements
- Vessel and gear modifications
- Sport fishing and tourism promotion
- Use of fishermen and their vessels (e.g., surveys, guard and observer vessels)
- Financial compensation



Questions?

Todd Janeski

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for the VA Coastal Zone Management Program

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