



UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE  
NORTHEAST REGION  
55 Great Republic Drive  
Gloucester, MA 01930-2276

JUN 6 2011

Mr. Will Waskes  
Project Coordinator  
Bureau of Ocean Energy Management Regulation and Enforcement  
Office of Offshore Alternative Energy Programs  
381 Elden Street, Mail Stop 4090  
Herndon, Virginia 20170

**RE: Commercial Leasing for Wind Power on the Outer Continental Shelf (OCS) Offshore  
New Jersey – Call for Information and Nominations (Call)**

Dear Mr. Waskes:

The National Marine Fisheries Service (NMFS) has reviewed the Bureau of Ocean Energy Management, Regulation, and Enforcement's (BOEMRE) *Commercial Leasing for Wind Power on the Outer Continental Shelf (OCS) Offshore New Jersey - Call for Information and Nominations (Call)* published in the Federal Register on April 20, 2011. The Call itself is not a leasing announcement, but the area described in the notice may be subject to future leasing. The area under consideration for commercial leasing is located off the coast of New Jersey beginning approximately seven nautical miles (nm) from the shore, extending roughly 22 nm seaward to the approximate 100 ft depth contour, and extending 45 nm parallel to the Federal/State boundary between Avalon and Barnegat Light. This area is approximately 418 square nm and contains 43 whole OCS blocks and 34 partial OCS blocks. This area was delineated in consultation with BOEMRE/New Jersey Renewable Energy Task Force and has been identified as a Wind Energy Area (WEA) as referenced and described in the Secretary of Interior's *Smart from the Start* OCS renewable energy initiative.

The purpose of this Call is to solicit interest in acquiring commercial wind leases in some or all of the area, and to determine whether a competitive interest exists in any particular sub-areas as required by 43 U.S.C. 1337 (p) (3). With the Call, BOEMRE is also soliciting comments and information from interested and affective parties about site conditions, resources and multiple uses within the area identified in the notice that would be relevant to BOEMRE's review of the nominations submitted and subsequent decision to offer all or part of the area for commercial wind leasing.

NMFS has been a member of the New Jersey Renewable Energy Task Force since its inception and has provided initial information regarding NMFS issues and concerns. As such, NMFS offers the following general comments regarding the established process, as well as additional comments regarding NMFS trust resources, commercial fishing activity, and management concerns within the Call area. Due to the fact that specific projects, and associated project components, have yet to be proposed within the potential lease area, our comments focus on. It



is NMFS's intention to provide this information to assist BOEMRE in avoiding and minimizing conflicts with fishery interests and resources in the future siting of offshore renewable energy facilities.

### ***General Comments***

In July 2010, President Obama signed Executive Order 13547 to establish the National Ocean Council, and to establish a comprehensive, integrated national policy for the stewardship of the nation's ocean, coasts and Great Lakes. In particular, it provides a process for the development of ecosystem-based coastal and marine spatial planning (CMSP), through the work of regional planning bodies. As described within the recommended framework, CMSP takes a regional approach to the development of CMS plans, including planning for multiple existing and emerging uses, such as offshore wind energy facilities. At the same time, BOEMRE's Smart from the Start initiative (including this Call) established a process for the leasing of sites for offshore wind energy facilities as well. However, BOEMRE's process is being conducted on a state-by-state basis and is focused on a single sector – offshore wind. While NMFS has raised this issue on multiple occasions, it is unclear how these two parallel processes will intersect in a comprehensive manner.

The establishment of regional planning bodies (RPBs) under the National Ocean Policy's CMSP framework establishes a formal coordination mechanism with the regional fishery management councils (RFMCs). This has been highlighted within the National Ocean Policy due to their "unique statutory responsibilities under the Magnuson-Stevens Fishery Conservation and Management Act, and their quasi-regulatory role." As such, the Council Coordinating Committee has formally requested a role on the RPBs, once established. Likewise, the RFMCs have expressed interest in engaging on the Federal-State task forces, due to their important role in identifying commercial and recreations fishing interests. As a parallel track is being considered for the broader CMSP process, involvement of the RFMCs in the BOEMRE offshore wind siting process can further encourage linkages of the CMSP and BOEMRE processes.

### ***Fishery Habitat Resources within the RFI area***

The potential lease area has been designated as essential fish habitat (EFH) for more than 30 federally managed species of fish and shellfish covered by 10 fishery management plans (FMPs), under the auspices of the New England Fishery Management Council, Mid-Atlantic Fishery Management Council, South Atlantic Fishery Management Council or NMFS. Managed species for which EFH has been designated in the potential lease area include: Atlantic butterfish (*Peprilus triacanthus*), Atlantic cod, Atlantic mackerel (*Scomber scombrus*), Atlantic sea herring (*Clupea harengus*), bluefish (*Pomatomus saltatrix*), black sea bass (*Centropristis striata*), cobia (*Rachycentron canadum*), king mackerel (*Scomberomorus cavalla*), monkfish (*Lophius americanus*), red hake (*Urophycis chuss*), silver hake (*Merluccius bilinearis*), scup (*Stenotomus chrysops*), Spanish mackerel (*Scomberomorus maculatus*), spiny dogfish (*Squalus acanthias*), summer flounder (*Paralichthys dentatus*), windowpane flounder (*Scophthalmus aquosus*), winter flounder (*Pseudopleuronectes americanus*), witch flounder (*Glyptocephalus cynoglossus*), yellowtail flounder (*Limanda ferruginea*), winter skate (*Leucoraja ocellata*), little skate (*Leucoraja erinacea*), clearnose skate (*Raja eglanteria*), surf clam (*Spisula solidissima*) and ocean quahog (*Artica islandica*).

EFH for highly migratory species designated in the area includes: swordfish (*Xiphias gladius*), bluefin tuna (*Thunnus thynnus*), skipjack tuna (*Katsuwonus pelamis*), Atlantic angel shark (*Squatina dumerili*), Atlantic sharpnose shark (*Rhizoprionodon terraenovae*), blue shark (*Prionace glauca*), dusky shark (*Carcharhinus obscurus*), sandbar shark (*Carcharhinus plumbeus*), sand tiger shark (*Odontaspis taurus*), scalloped hammerhead shark (*Sphyrna lewini*), shortfin mako shark (*Isurus oxyrinchus*) and tiger shark (*Galeocerdo cuvieri*). It should be noted that dusky shark and sand tiger shark have been designated as species of concern by NOAA. Species of concern are those species about which NMFS has some concerns regarding status and threats, but for which insufficient information is available to indicate a need to list the species under the Endangered Species Act.

For each of these species, descriptions of specific habitat parameters can be found at:

<http://www.nero.noaa.gov/hcd/list.htm>

<http://www.nmfs.noaa.gov/sfa/hms/EFH/index.htm>

The New Jersey Department of Environmental Protection (NJDEP) issued The Ocean/Wind Power Baseline Ecological Studies in November 2010. This document is the result of 18 to 24 months of data collections, surveys and literature reviews to provide spatial and temporal data on species using New Jersey's offshore waters to assist in determining potential areas for wind power development. Information on the use, abundance, distribution, flight behavior of bird species; the abundance, utilization, and distribution of marine mammal sea turtles, fish and shellfish; and the distribution of other existing natural resources, including, but not limited to, shoals and sand bottoms. Predictive modeling, mapping, and environmental assessment methodologies were used to identify portions of the proposed lease area that are more or less suitable for energy power facilities based on potential ecological impacts. The final report and supporting information can be found on the NJDEP's Office of Science and Technology's website at <http://www.nj.gov/dep/dsr/ocean-wind/>. NMFS staff participated on the Technical Review Committee for this project. The information contained in the report should be used by BOEMRE as part of the evaluation of nominations and subsequent decision to offer all or part of the area for commercial wind leasing.

The State of New Jersey has designated portions of the potential lease area including the Brigantine Shoal, Lobster Shoal, Atlantic City Ridge, Sea Isle Lump, Sea Isle Ridge, Sea Isle Shoal and Inshore Stone Bed as a prime fishing habitat (Long and Figley 1981). Long and Figley (1981) also identify the area as supporting a sportfishery for mackerel, whiting (silver hake), black sea bass, false albacore (*Euthynnus alletteratus*), weakfish (*Cynoscion regalis*), bluefish, summer flounder, striped bass (*Morone saxatilis*), tautog (*Tautoga onitis*) and sharks. New Jersey also has several sites located in and around the Call area including the Atlantic City, Great Egg, Ocean City and Townsend Inlet reefs. Commercial fisheries also exist for weakfish, summer flounder, bluefish, mackerel, Atlantic menhaden (*Brevoortia tyrannus*) and surf clam (Long and Figley 1981). NMFS surveys (Berrien and Sibunka 1999) undertaken between 1977 and 1987 also show seasonally high densities of fish eggs in the project area for species including bay anchovy (*Anchoa mitchilli*), windowpane, summer flounder, butterflyfish, Atlantic mackerel, weakfish, bluefish, and black sea bass.

An understanding of the role and relationship these habitats and resources have in the ecological system is important in order to integrate wind energy development appropriately into the ocean use setting. The NMFS Northeast Fisheries Science Center (NEFSC) has identified certain ecologically important factors within the potential lease area, including chlorophyll concentrations, areas of primary productivity, as well as benthic organism species richness and biomass. This information may be utilized by BOEMRE in the site leasing analysis to identify areas that serve critical ecosystem functions. This information is displayed in figures 1-29.

### ***Essential Fish Habitat Consultation***

Due to the potential for substantial adverse effects on essential fish habitat (EFH) from offshore wind energy projects on the OCS, specific proposals within the Call area must include an expanded EFH assessment under the federal review process, and should be included within the draft NEPA document. This is a separate review mandated pursuant to the terms of the Magnuson Stevens Fishery Conservation and Management Act (16 U.S.C. 1855), although BOEMRE may use the draft NEPA document as the vehicle within which to present the EFH assessment. The required contents of an expanded EFH assessment include: a description of the action; an analysis of the potential adverse effects of the action on EFH and the managed species; the federal action agency's conclusions regarding the effects of the action on EFH; and proposed mitigation, if applicable. Other information that should be contained in the EFH assessment, if appropriate, includes: the results of on-site inspections to evaluate the habitat and site-specific effects; the views of recognized experts on the habitat or the species that may be affected; a review of pertinent literature and related information; and an analysis of alternatives to the action that could avoid or minimize the adverse effects on EFH. The expanded EFH assessment will be a key component of our consultation that will establish protections to trust fishery resources in the course of offshore energy development.

### ***Protected Resources within the Call area***

#### ***Endangered Species Act***

Federally endangered North Atlantic right (*Eubalaena glacialis*), fin (*Balaenoptera physalus*), and humpback whales (*Megaptera novaeangliae*) are found seasonally in the waters off of New Jersey included in the Call. North Atlantic right whales are likely to occur in the identified waters between November 1 and April 30. Humpback whales feed during the spring, summer, and fall over a range that encompasses the eastern coast of the United States and individuals may be found off the coast of Delaware year round. Fin whales may also be present off the coast of New Jersey year round. Sei (*Balaenoptera borealis*) and sperm (*Physeter macrocephalus*) whales may also be present in the deeper offshore waters included in the Call.

Listed sea turtles are also found seasonally in the waters off of New Jersey identified in the Call, typically between April and November. The species that are likely to be present include threatened loggerhead (*Caretta caretta*) sea turtles as well as endangered Kemp's ridley (*Lepidochelys kempi*), leatherback (*Dermochelys coriacea*) and green (*Chelonia mydas*) sea turtles.

Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*) occur in the coastal waters identified in the Call. On October 6, 2010, NMFS published two proposed rules to list five distinct population segments (DPS) of Atlantic sturgeon under the ESA. NMFS is proposing to list four DPSs as endangered (New York Bight, Chesapeake Bay, Carolina and South Atlantic) and one DPS of Atlantic sturgeon as threatened (Gulf of Maine DPS). Atlantic sturgeon are highly migratory and in marine waters, such as those identified in the Call, sturgeon from any of the 5 DPSs could be present; however, in mid-Atlantic waters such as those in the Call area, Atlantic sturgeon occur most frequently in waters less than 20 meters in depth. Please note that once a species is proposed for listing, the conference provisions of the ESA may apply (see 50 CFR 402.10 and Section 7(a) (4)). As the listing status for this species may change, NMFS recommends that BOEMRE and any potential lessee obtain updated status information from NMFS prior to the submittal of any applications or consultation requests. At this time it is anticipated that a final listing rule will be published by October 6, 2011.

#### *Section 7 Consultation*

The construction and operation of a wind energy facility in the Call area, as well as certain pre-construction activities such as geophysical and geotechnical surveys, may affect fish populations, marine mammals, sea turtles and the habitats on which they depend. Under Section 7(a) (2) of the ESA, each Federal agency is required to insure that any action they authorize, fund or carry out is not likely to jeopardize the continued existence of any endangered or threatened species. Consultation would be necessary for any permits, authorizations, leases, easements or right of ways issued by BOEMRE. It is NMFS understanding that BOEMRE will be the lead Federal agency for any section 7 consultations regarding any wind energy facility proposed in the Call area and that section 7 consultations would be completed prior to the issuance of any lease or other necessary authorization. As required by the section 7 consultation process, any environmental documentation regarding a proposed wind facility in the Call area must fully examine all potential impacts to NMFS listed species and designated critical habitat including: acoustic impacts of construction and operation, any pre-construction geophysical and/or geotechnical surveys, effects on prey, effects to migratory behavior, potential entanglement, vessel traffic, benthic impacts, and impacts to water quality

#### *Marine Mammal Protection Act*

Several species of marine mammals are common residents or occasional visitors to the waters identified in the RFI. All marine mammals receive protection under the Marine Mammal Protection Act (MMPA) of 1972, as amended. The MMPA prohibits, with certain exceptions, the take of marine mammals in U.S. waters and by U.S. citizens on the high seas, and the importation of marine mammals and marine mammal products into the U.S. NMFS may issue permits under MMPA Section 104 (16 U.S.C. 1374) to persons that authorize the taking or importing of specific species of marine mammals. As previously indicated, several marine mammals are likely to occur in the project area and thus could be affected by a proposed offshore wind project, including pre-construction activities such as geophysical and geotechnical surveys. As noted above regarding listed species, any environmental documentation should fully examine all potential impacts to species protected under the MMPA including: effects on prey, effects to migratory behavior, potential entanglement, vessel traffic, benthic impacts, and impacts to water quality. It is recommended that any project proponent discuss permitting needs with NMFS' Office of Protected Resources Permits, Conservation, & Education Division (301-

713-2289). Information on “incidental take” authorizations can also be found online at: <https://apps.nmfs.noaa.gov/questionnaire/questionnaire.cfm>.

We encourage BOEMRE and any potential applicants to work with NMFS as project plans become more developed to identify and evaluate the potential for impacts to the species under NMFS’ jurisdiction. Informal discussions can greatly facilitate consultation. If any applicant intends to conduct biological surveys at the project site, we encourage coordination with NMFS Northeast Fisheries Science Center (NEFSC). Please contact Dr. Richard Merrick at NMFS NEFSC (508-495-2291) to discuss any planned biological surveys. Should you have any questions regarding the information presented on listed species or about the ESA Section 7 process, please contact Julie Crocker of NMFS Protected Resources Division at (978) 282-8480 or [julie.crocker@noaa.gov](mailto:julie.crocker@noaa.gov)

### ***Fishing Activity and Associated Fishery Resources within the RFI Area***

The RFI area contains a broad range of federally managed fishery resources, which are the economic base of an extensive and valuable commercial fishing industry; the call area is within active fishing grounds for surf clams, Atlantic sea scallop (*Placopecten magellanicus*), ocean quahog and summer flounder, as well as other species managed under the Northeast Multispecies Fishery Management Plan (FMP), Atlantic Sea Scallop FMP, the Bluefish FMP, the Surf Clam and Ocean Quahog FMP, Summer Flounder, Scup and Black Sea Bass FMP and others. Figures 16-28 highlight specific fishing activity for the RFI area, utilizing Vessel Trip Report (VTR) data; specifically, the VTR data display fishing effort and catch data for otter trawl, dredge, gillnet, pot and longline fishing activities from 2001-2010. According to data from the New Jersey Ocean Stock Assessment (OSA) survey program (NJDEP 2009), the coastal fishery landings within the call area for juvenile butterfish, scup, squid and Atlantic herring were numerically abundant, and squid was the most economically valuable.

Based on the extensive fisheries that are present within the RFI area, it is critical for BOEMRE to determine the anticipated impact of wind energy development to current and future fishing activities, including the potential for exclusion zones to be proposed for offshore wind lease areas. Experiences in Europe suggest that fishing vessel insurance companies may require restricted access to wind energy areas as conditions of policies. As large closures of fishing grounds (for reasons other than fishery management) may affect the sustainable harvest of fishery resources, BOEMRE should investigate further the potential for vessel exclusion from areas identified within the RFI, and the impacts to fisheries associated with such exclusions.

### ***Fishery Management Actions within the RFI Area***

In association with the fisheries resources and fishing activities that occur within the NJ Call Area, portions of the NJ Call Area are actively managed by NMFS for a variety of resource management goals. Detailed information regarding these management areas can be found at:

<http://www.nero.noaa.gov/nero/fishermen/charts.html>

<http://www.nero.noaa.gov/nero/regs/>

Generally, the proposed New Jersey Call Area overlaps with the Multispecies FMP Mid-Atlantic Exemption Area which relieves vessels of some multispecies restrictions (such as areas where certain species can or cannot be retained or where particular fishing gear restrictions are applied). It is also contained within Atlantic Herring Management Area 2, which is a major fishing area under the Atlantic Herring FMP. For areas managed under the Atlantic Sea Scallop FMP, it is in an area of high fishing effort, and near (to the west) of the Hudson Canyon Scallop Access Area (proposed to open in June/July 2011) and to the north of the Elephant Trunk Access Area (proposed to be eliminated as an access area in June/July 2011), Finally the majority of the New Jersey Call Area lies within Federal Lobster Management Area 5, and it is near the southwestern portion of offshore Federal Lobster Management Area 3.

For each of the fishery management areas described above, both the physical location and intent of these management areas should be considered in the leasing of areas for offshore wind energy projects. It is also important to note that fishery management regulated areas can change based on the specific resource management goals. Therefore, it is important that BOEMRE recognize the importance of maintaining fishing access should current closed areas reopen in the future.

### ***Conclusion***

Thank you for the opportunity for NMFS to provide our issues and concerns into the leasing process. We look forward to working with BOEMRE to clearly establish the process for input of NMFS data and information, and to refine the coordination process for fulfilling statutory requirements under the Magnuson-Stevens Fisheries Conservation and Management Act and the Endangered Species Act. We encourage BOEMRE and any potential lessees to work with NMFS as specific project plans become more developed to identify and evaluate the potential for impacts to NMFS trust resources. If any applicant intends to conduct biological or geophysical surveys at the project site, we encourage coordination with both the NMFS Northeast Regional Office and the NMFS Northeast Fisheries Science Center. Should you have any questions regarding the information presented on listed species or about the ESA Section 7 process, please contact Julie Crocker of NMFS Protected Resources Division at (978)282-8480 or [Julie.Crocker@Noaa.gov](mailto:Julie.Crocker@Noaa.gov). For all other information regarding these comments, please contact Karen Greene at 732-872-3023.

Sincerely,



*for* Patricia A. Kurkul  
Regional Administrator

cc: Maureen Bornholdt, BOEMRE  
Lingard Knudson, US EPA  
Eric Davis, US FWS  
Frank Cianfrani, US ACOE  
Paul Howard, NEFMC  
Tom Hoff, MAFMC  
Jenifer Lukens, NOAA CMSP Program  
Tom Bigford, NOAA CMSP Regional Lead  
Ashley Chappell, NOAA Policy Office  
Emily Lindow, NOAA AA

## **References**

Long, D. and W. Figley. 1981. New Jersey's Recreational and Commercial Ocean Fishing Grounds. New Jersey Department of Environmental Protection.. Division of Fish and Wildlife. Marine Fisheries Administration. Bureau of Marine Fisheries. Technical Series 82-1. Trenton, NJ

NJDEP. 2009. New Jersey ocean stock assessment program (2003-2008). New Jersey Department of Environmental Protection, Division of Fish and Wildlife, Trenton, New Jersey,

75°W

74°W

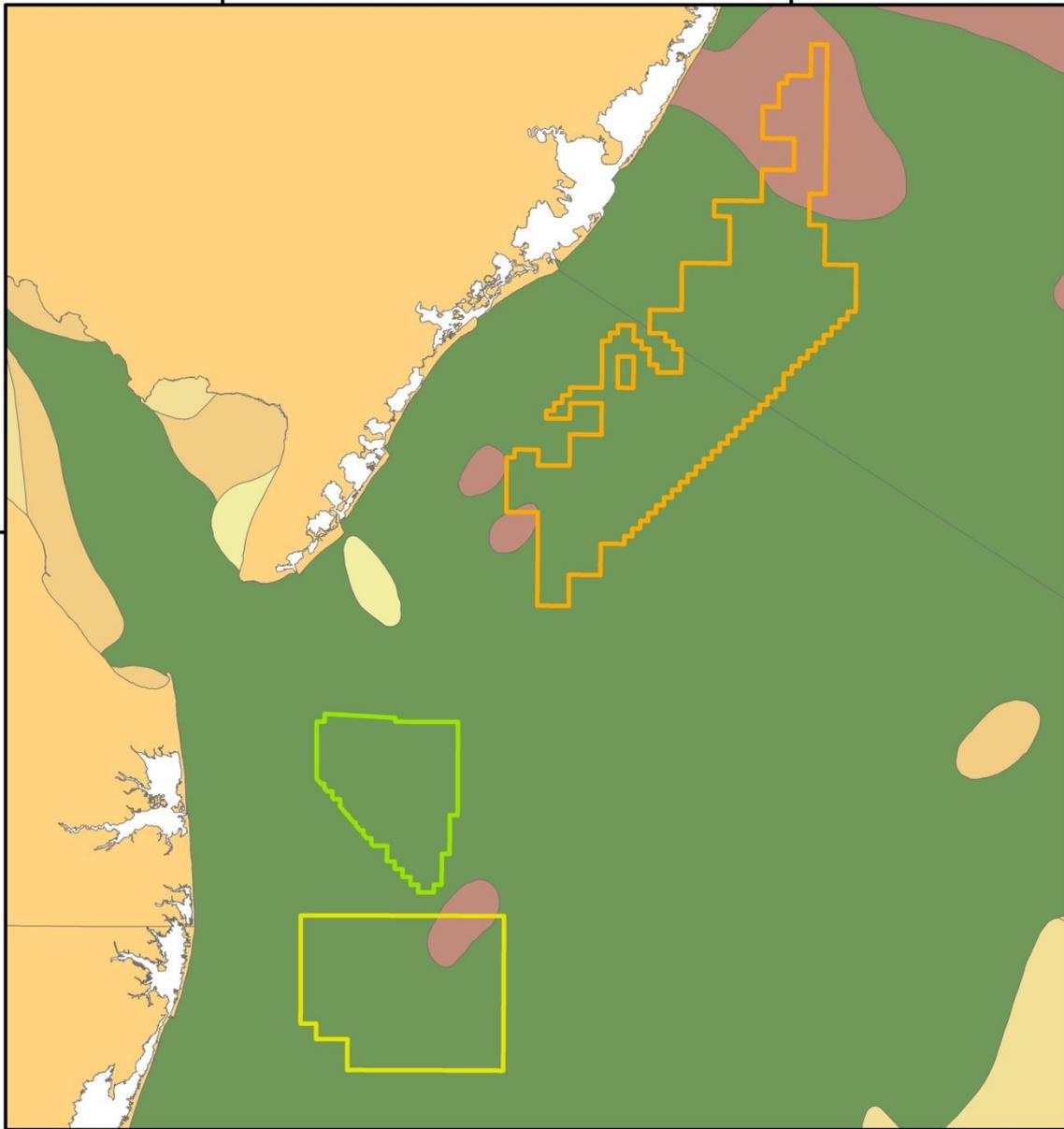
39°N

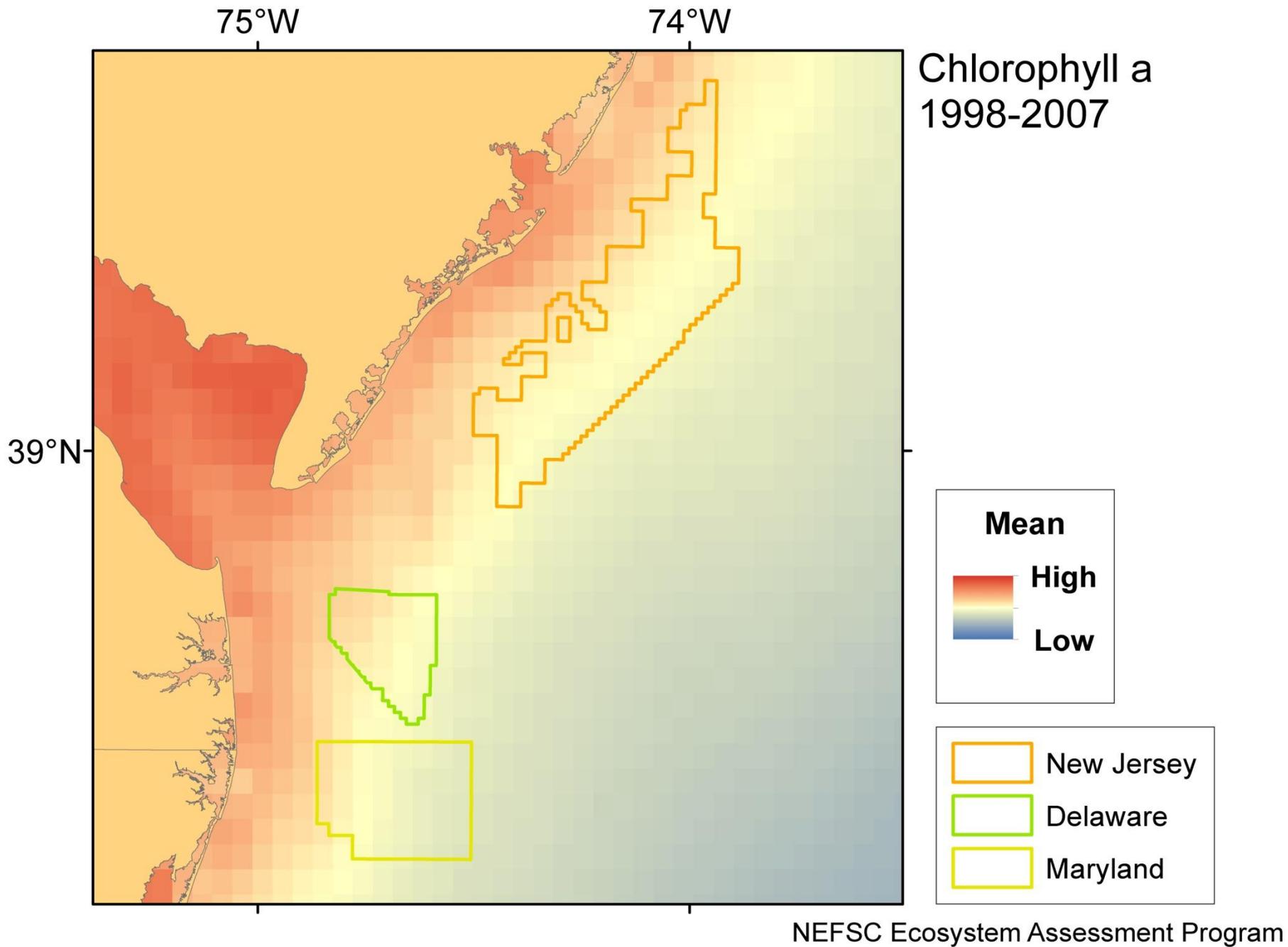
# USGS Continental Margin Mapping Program

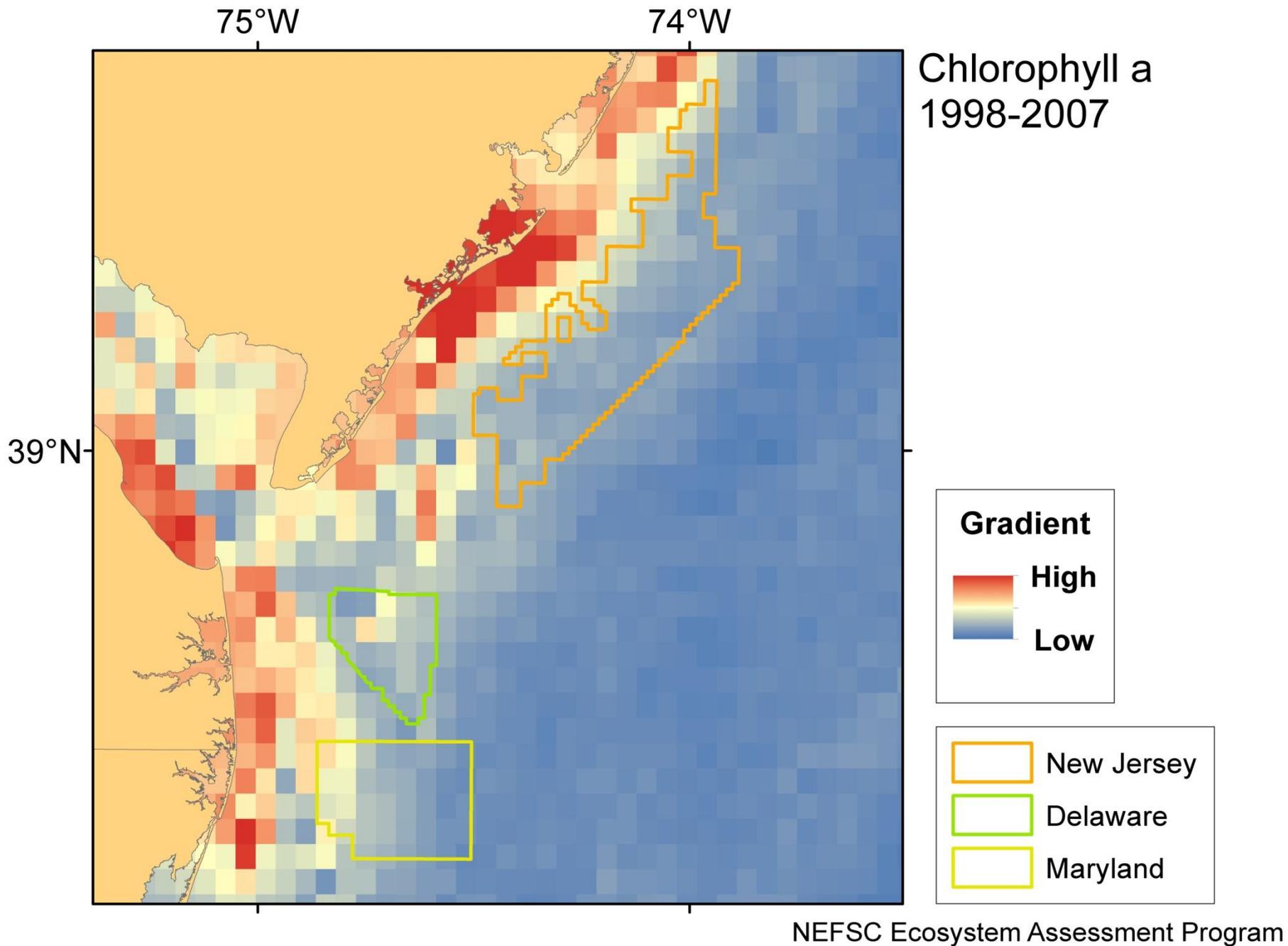
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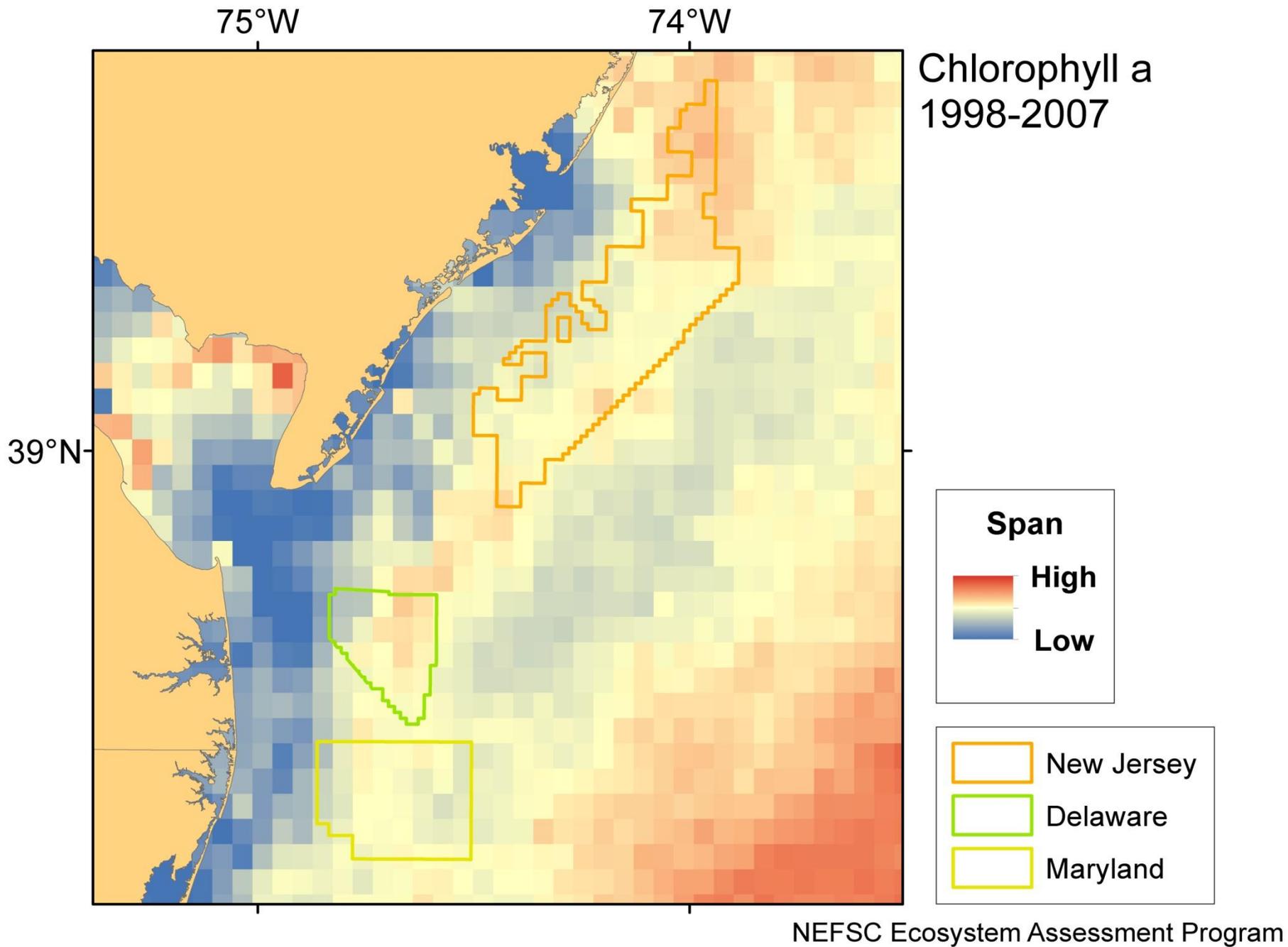
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- Sand-silt/clay
- Sand/Silt/Clay
- Sand-Clay/Silt
- Clay-Silt/Sand
- Clay
- Gravel-Sand
- Gravel
- Bredrock

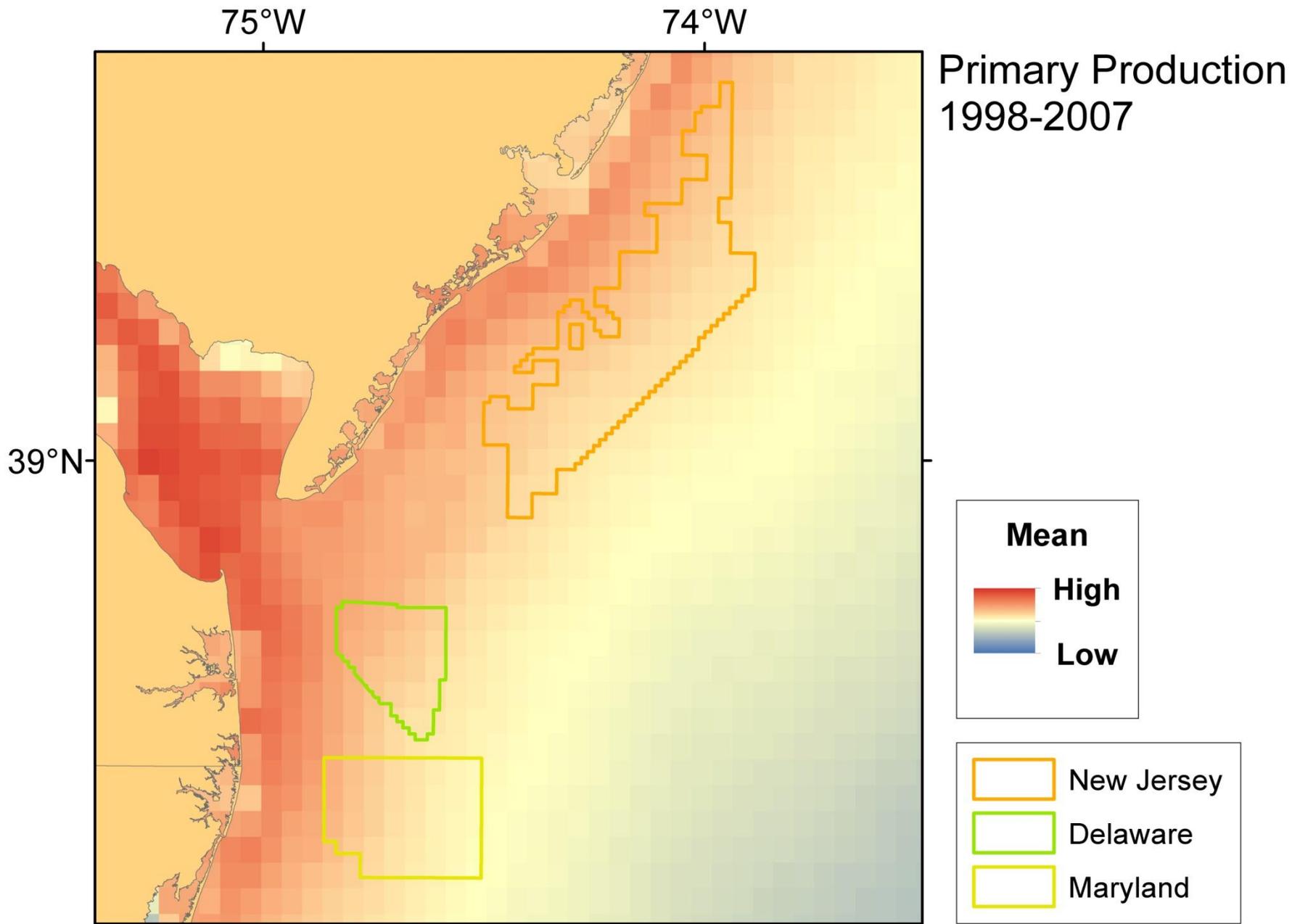
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- Delaware
- Maryland

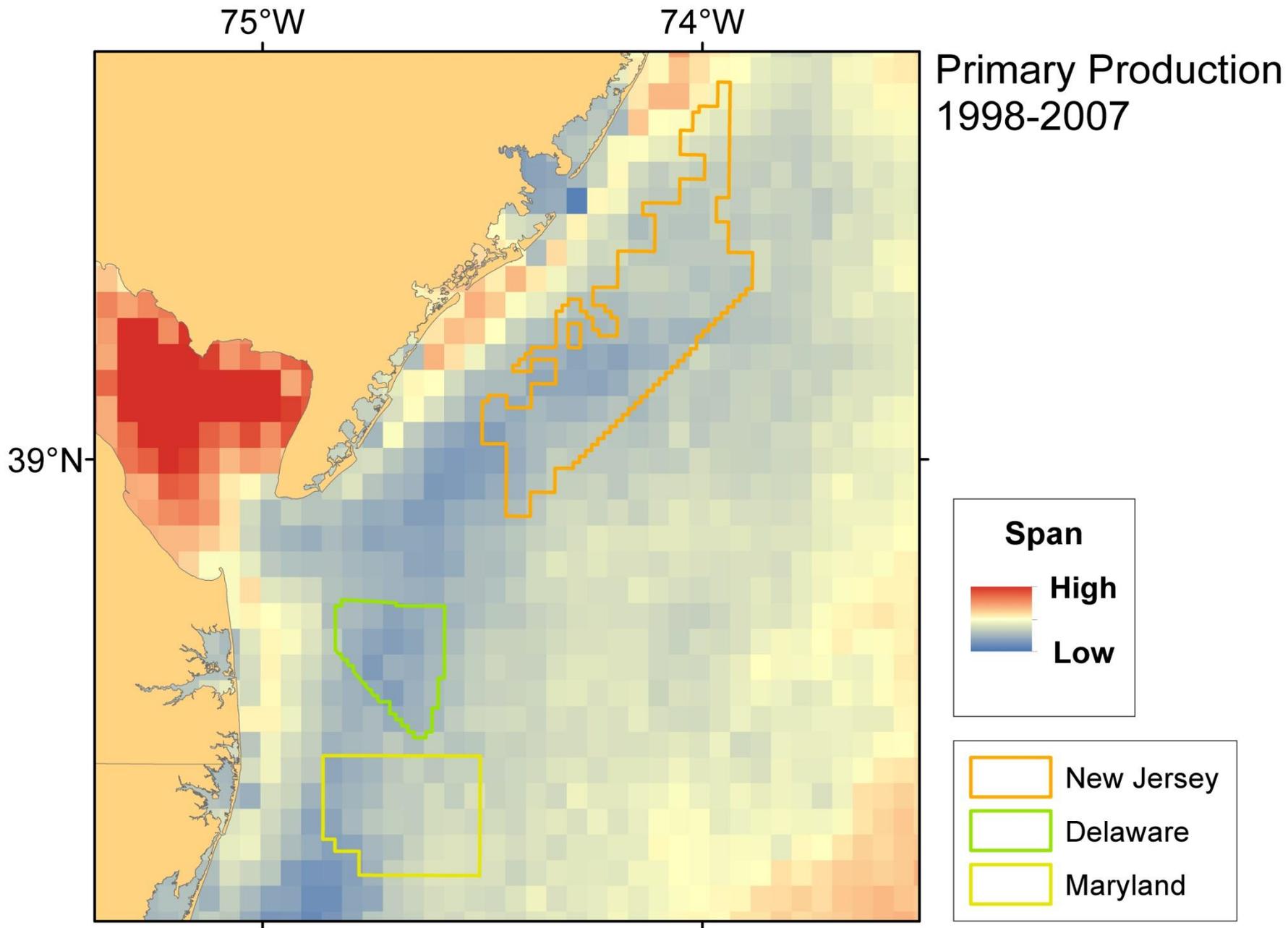


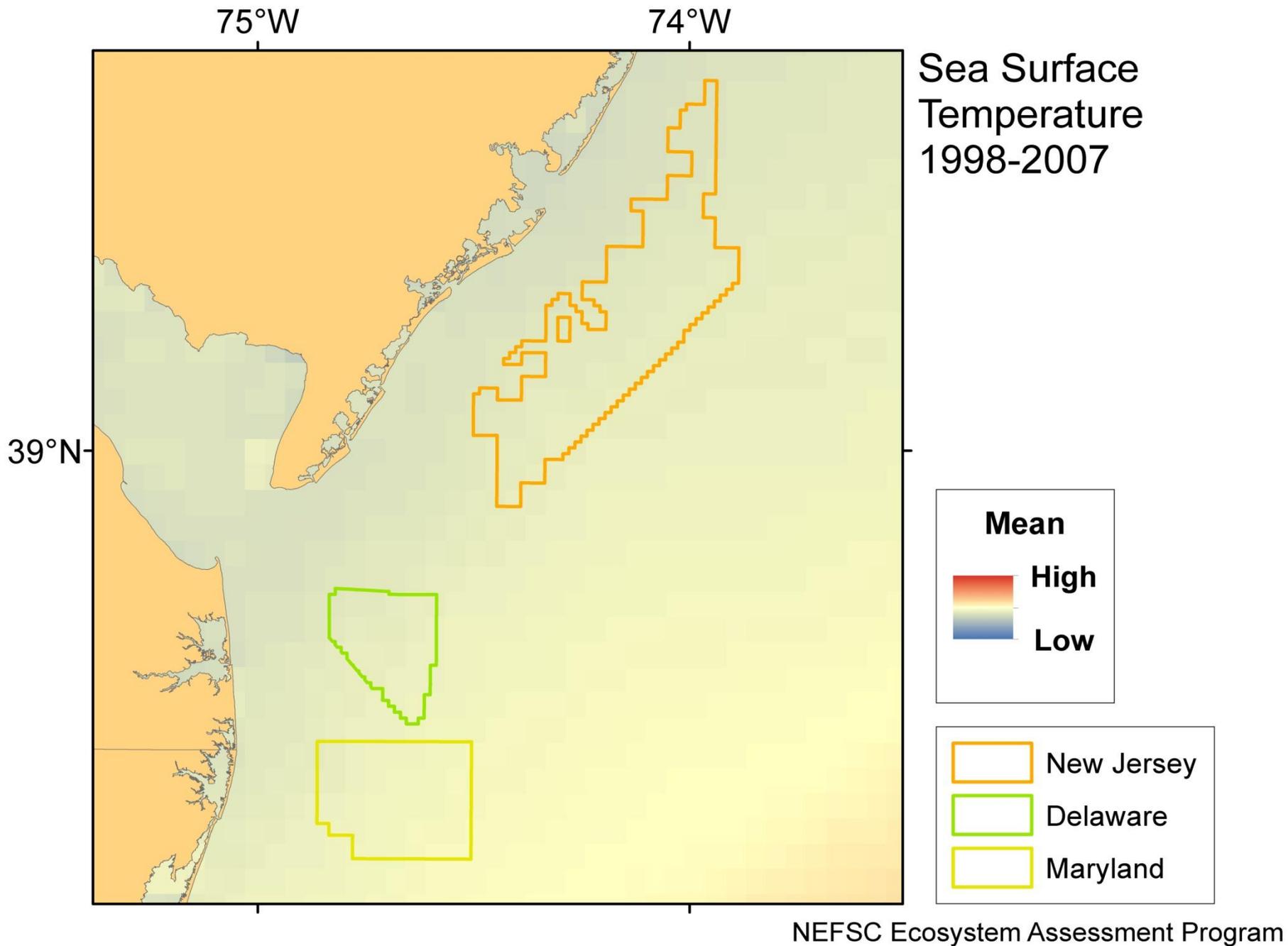


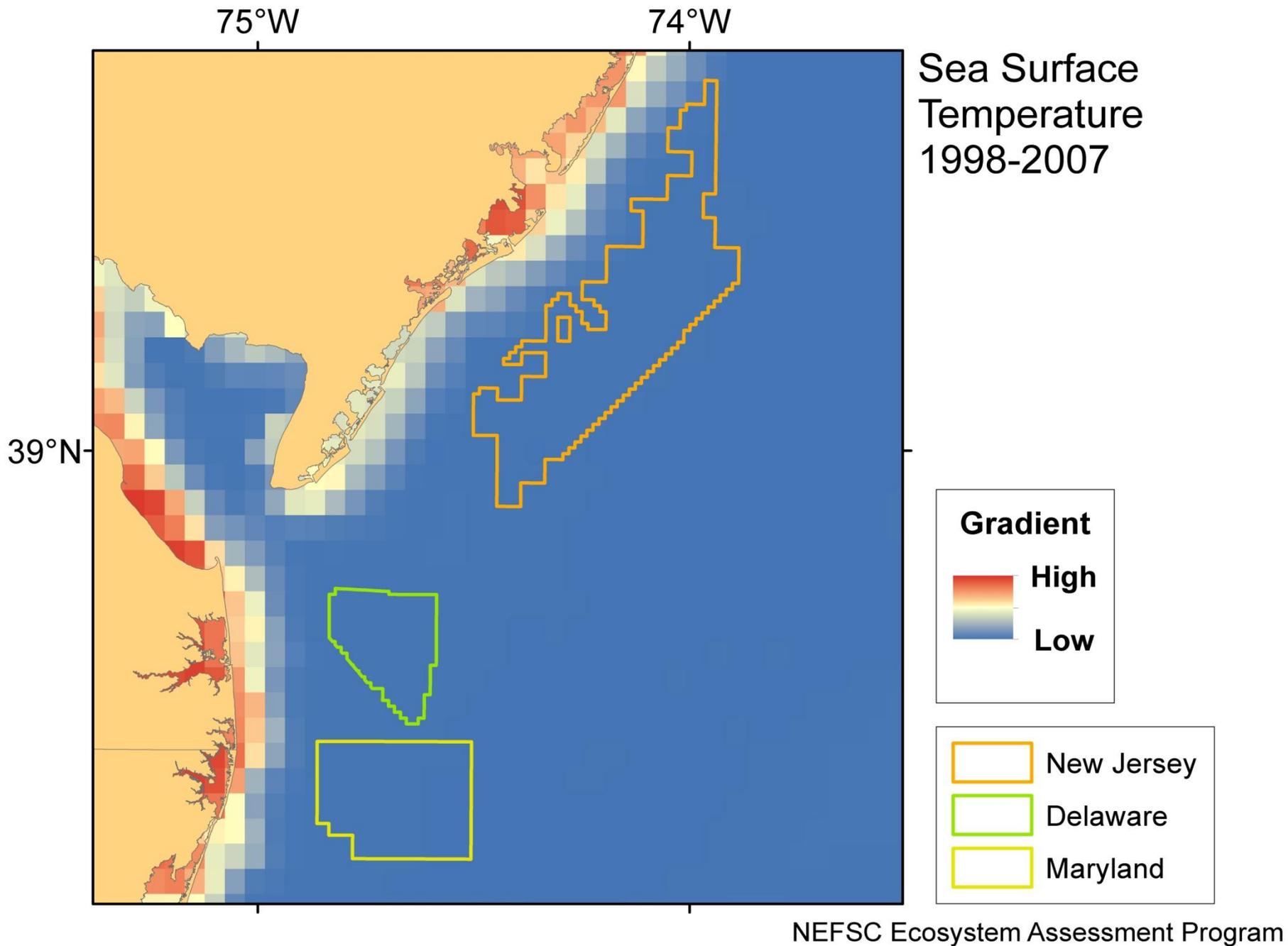


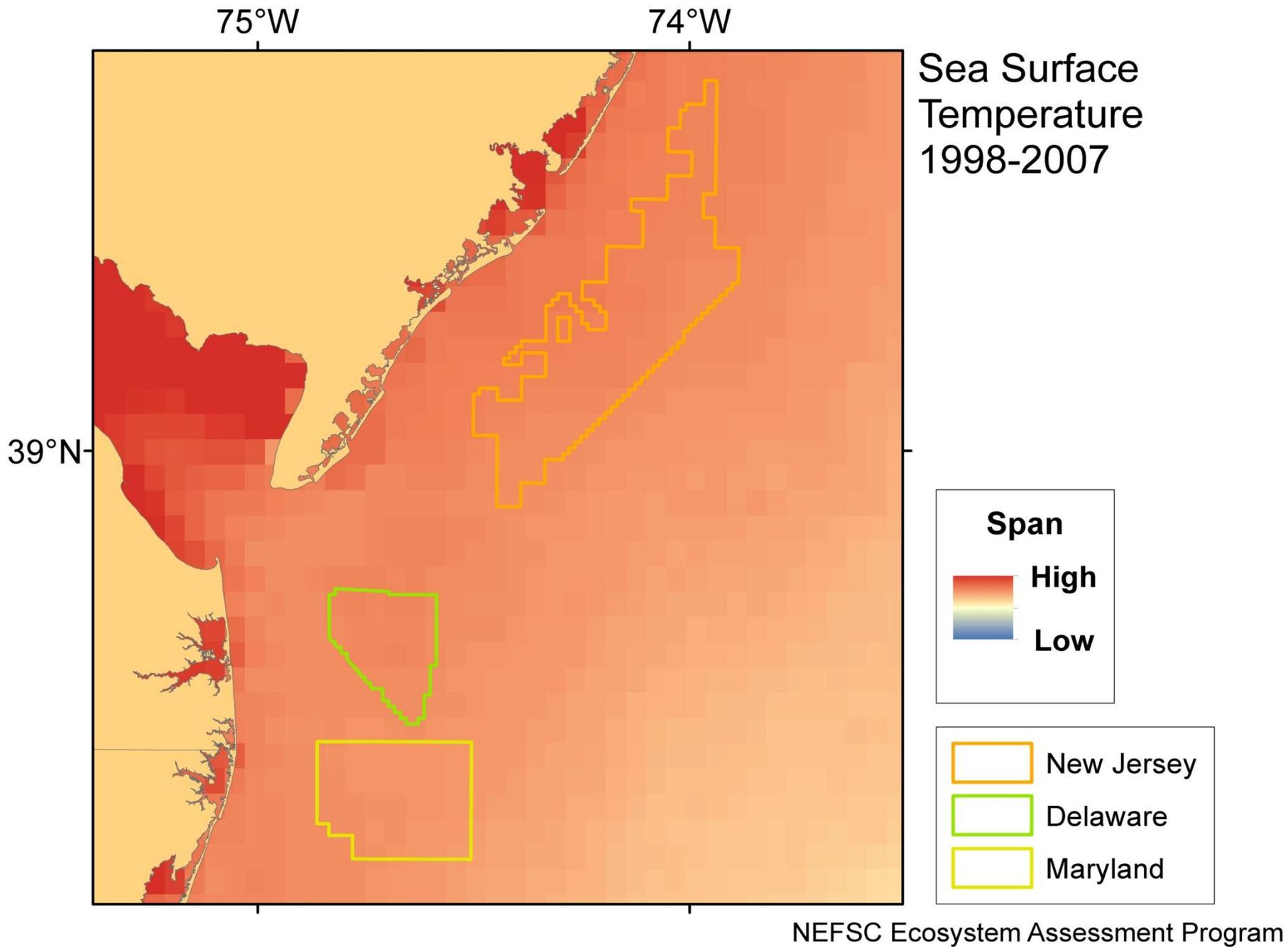


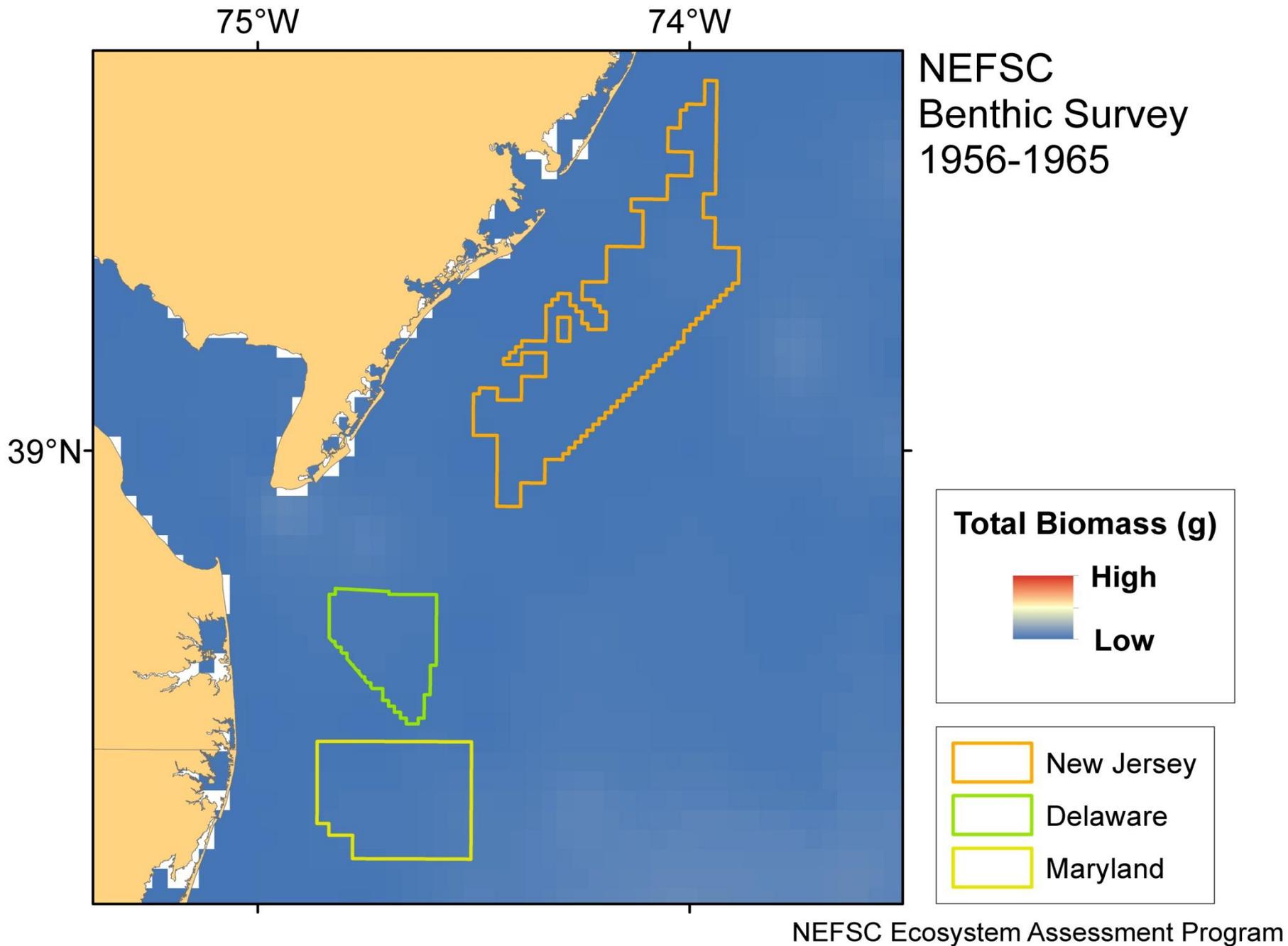










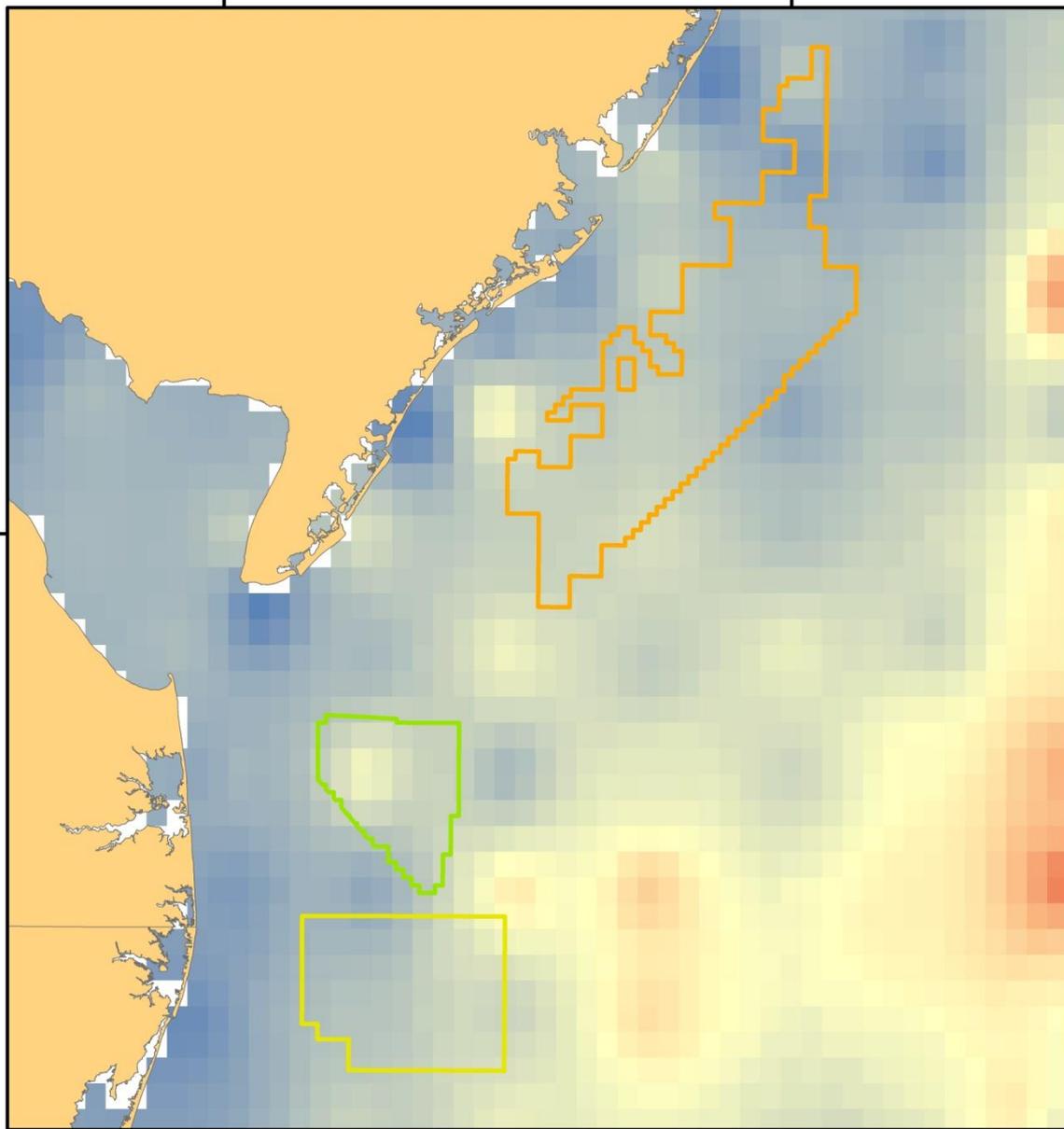


75°W

74°W

# NEFSC Benthic Survey 1956-1965

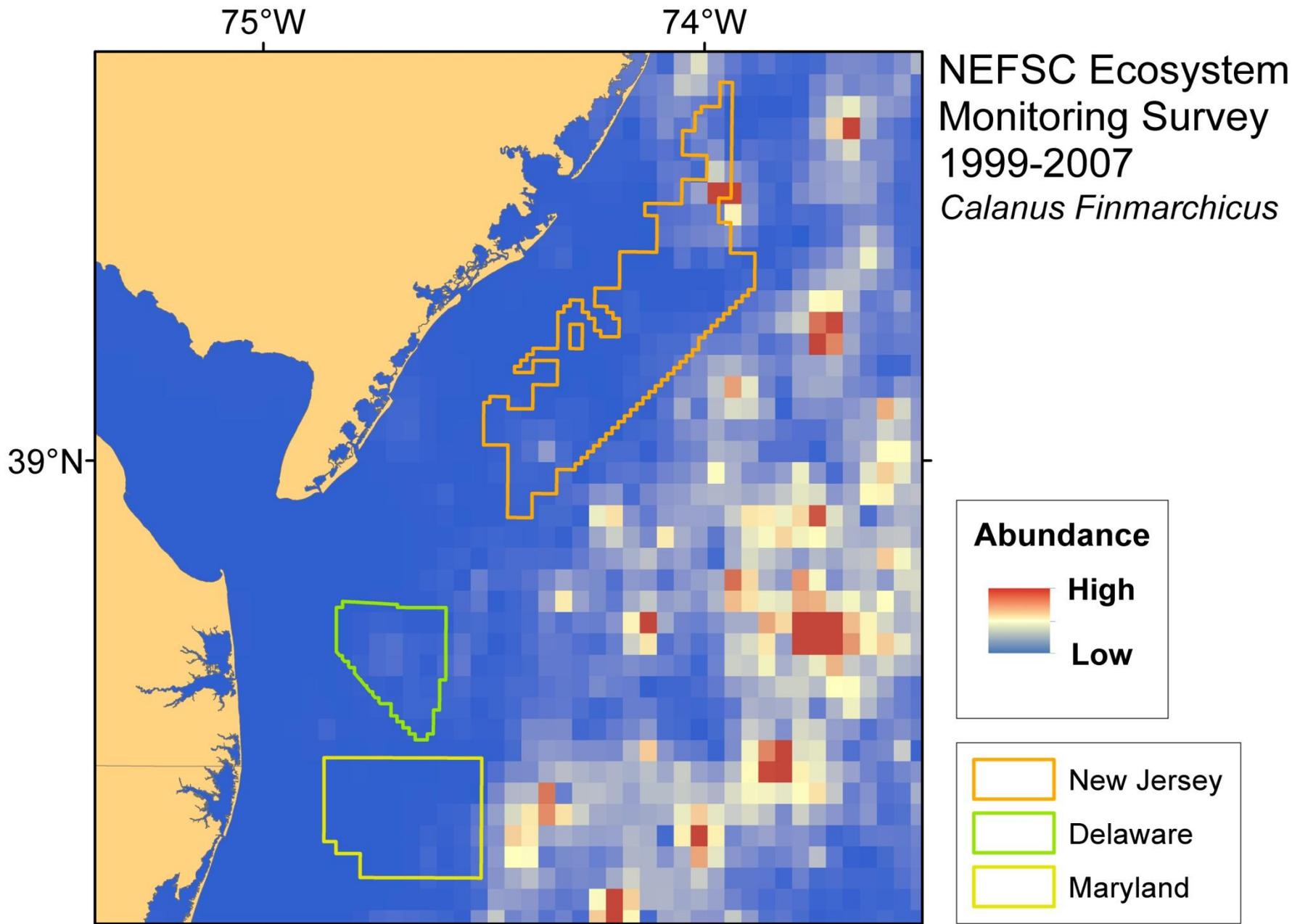
39°N



## Species Richness



-  New Jersey
-  Delaware
-  Maryland



75°W

74°W

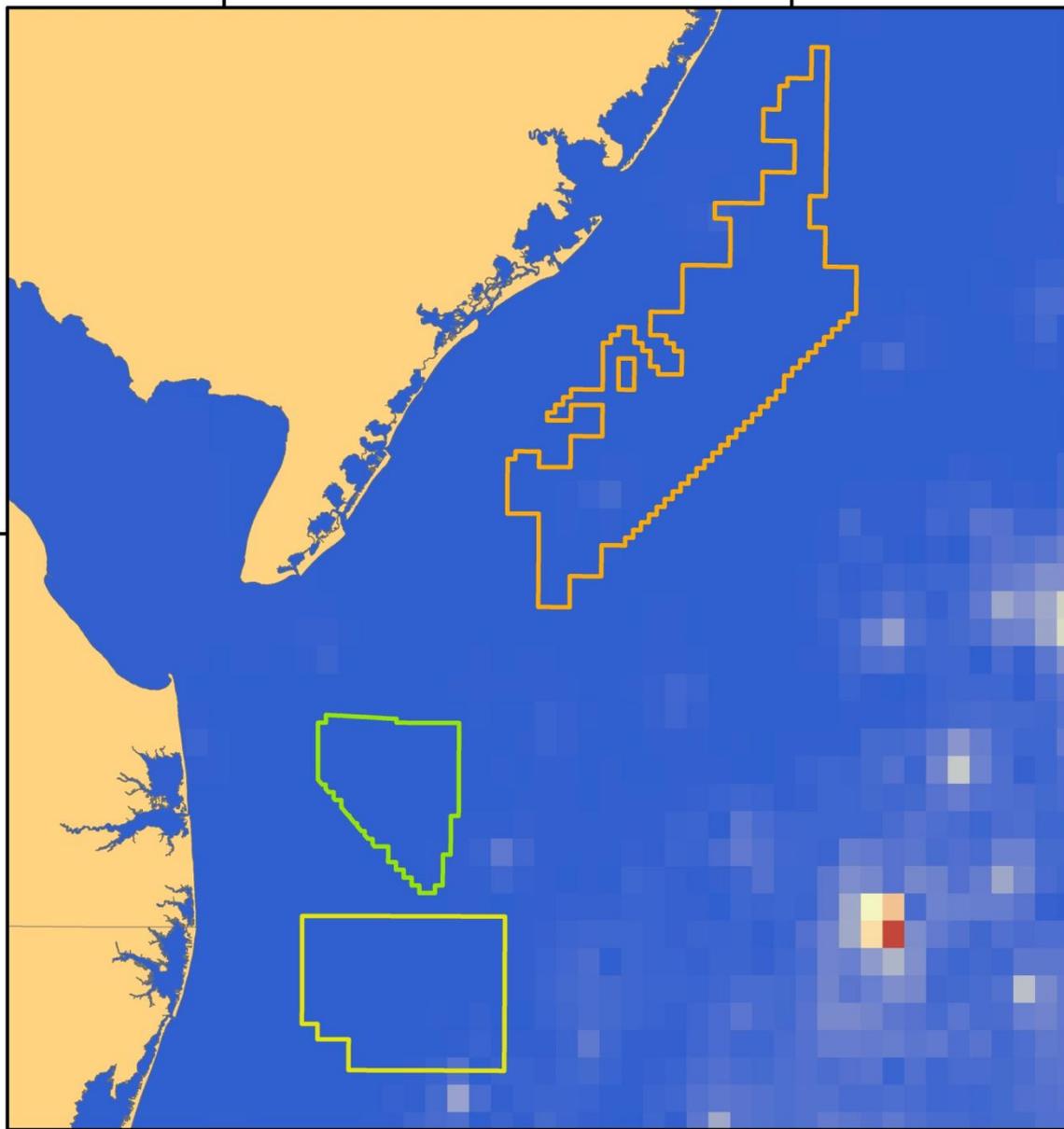
39°N

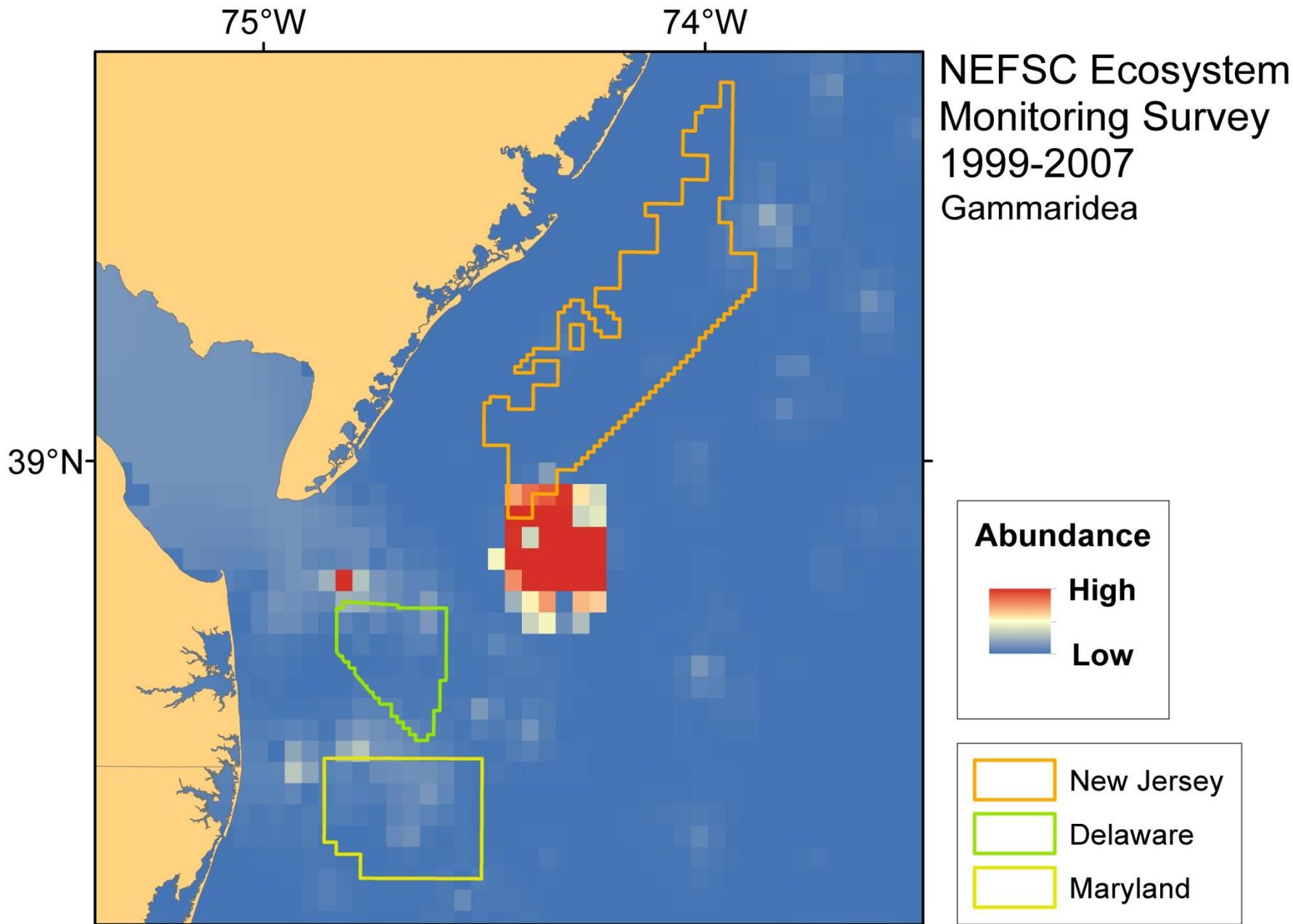
# NEFSC Ecosystem Monitoring Survey 1999-2007 Euphausiacea

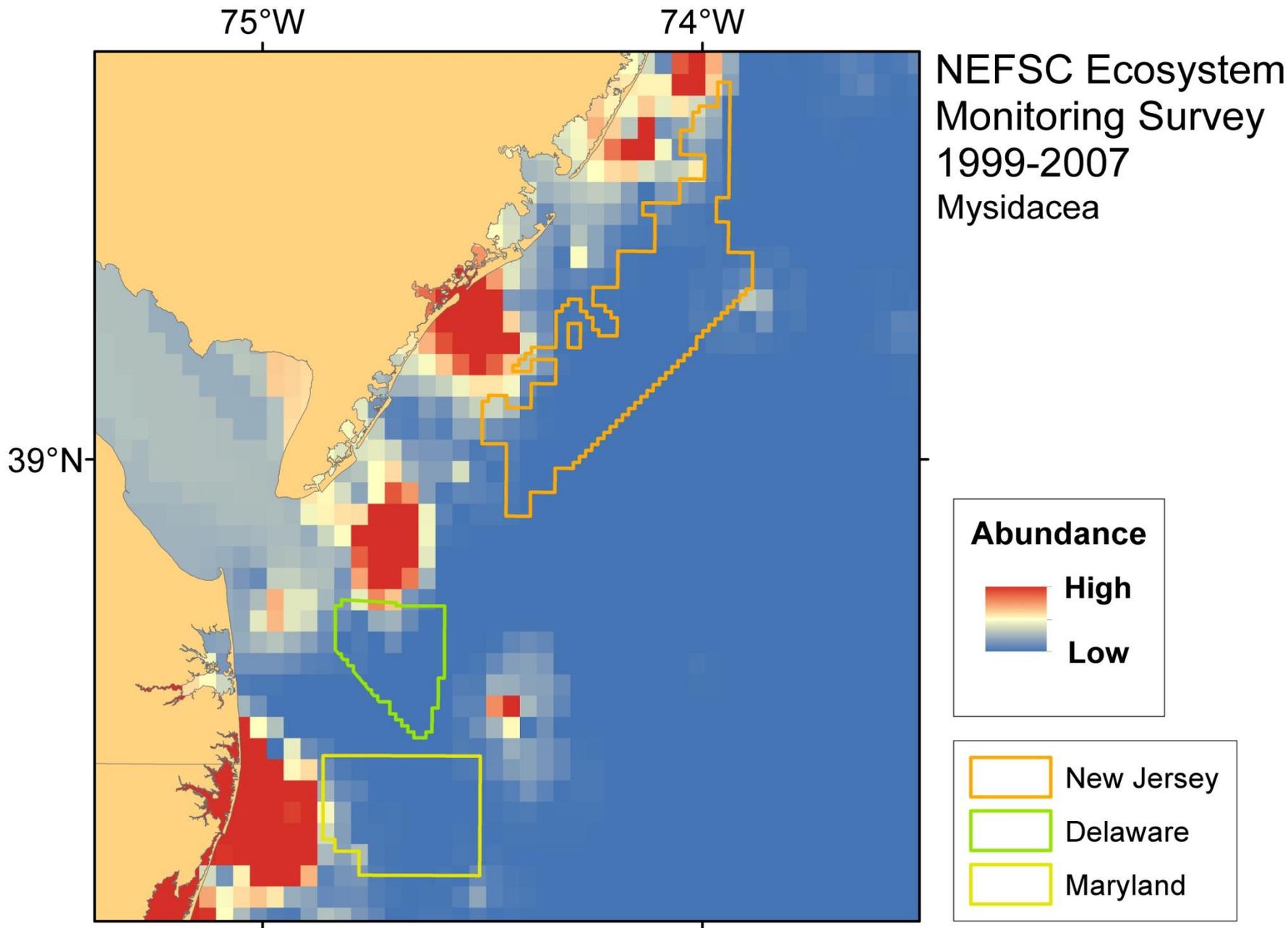
## Abundance



-  New Jersey
-  Delaware
-  Maryland





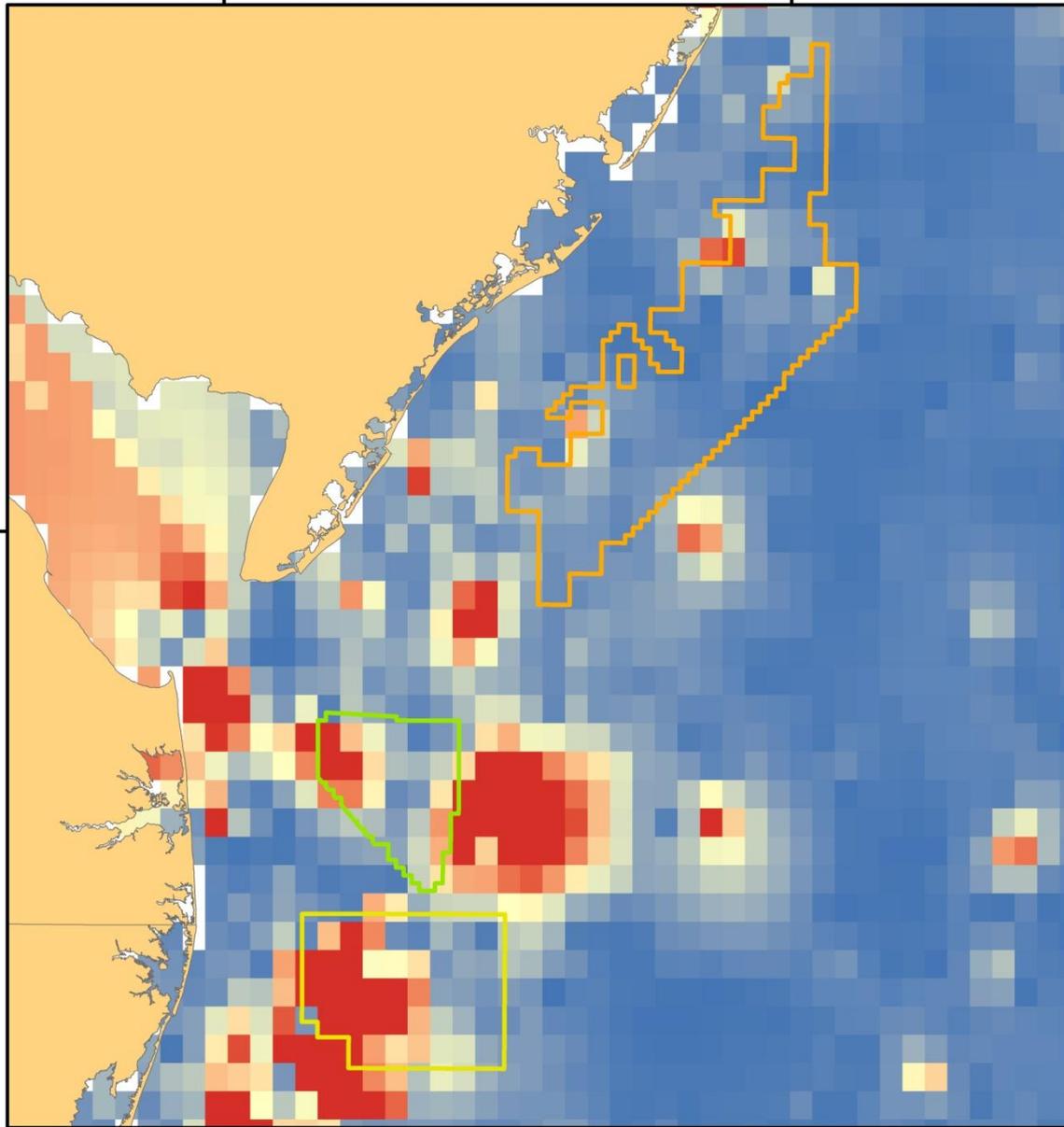


75°W

74°W

# NEFSC Autumn Bottom Trawl Survey 2001-2010

39°N



## Total Biomass (kg)



-  New Jersey
-  Delaware
-  Maryland

