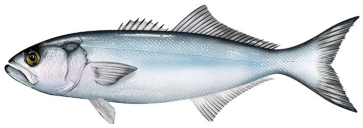
ATLANTIC BLUEFISH
POMATOMUS SALTATRIX



MID-ATLANTIC FISHERY MANAGEMENT COUNCIL (MAFMC) - ESSENTIAL FISH HABITAT (EFH) PROFILE

1. Management Unit

The management unit is bluefish (*Pomatomus saltatrix*) in U.S. waters of the western Atlantic Ocean.

2. Stock Status

The stock is overfished and overfishing is not occurring based on the most recent stock assessment (2021). For current stock status: https://www.fisheries.noaa.gov/national/status-stocks-reports

3. Current Text Designations

Source: MAFMC. 1998. Amendment 1 to the Bluefish Fishery Management Plan. Vol. I. Dover, DE. Available at: www.mafmc.org

Eggs: 1) North of Cape Hatteras, EFH is pelagic waters found over the Continental Shelf (from the coast out to the limits of the EEZ [Exclusive Economic Zone]) at mid-shelf depths, from Montauk Point, NY south to Cape Hatteras in the highest 90% of the area where bluefish eggs were collected in the MARMAP surveys. 2) South of Cape Hatteras, EFH is 100% of the pelagic waters over the Continental Shelf (from the coast out to the eastern wall of the Gulf Stream) through Key West, Florida at mid-shelf depths. Bluefish eggs are generally not collected in estuarine waters and thus there is no EFH designation inshore. Generally, bluefish eggs are collected between April through August in temperatures greater than 64 ºF (18 ºC) and normal shelf salinities (>31 ppt).

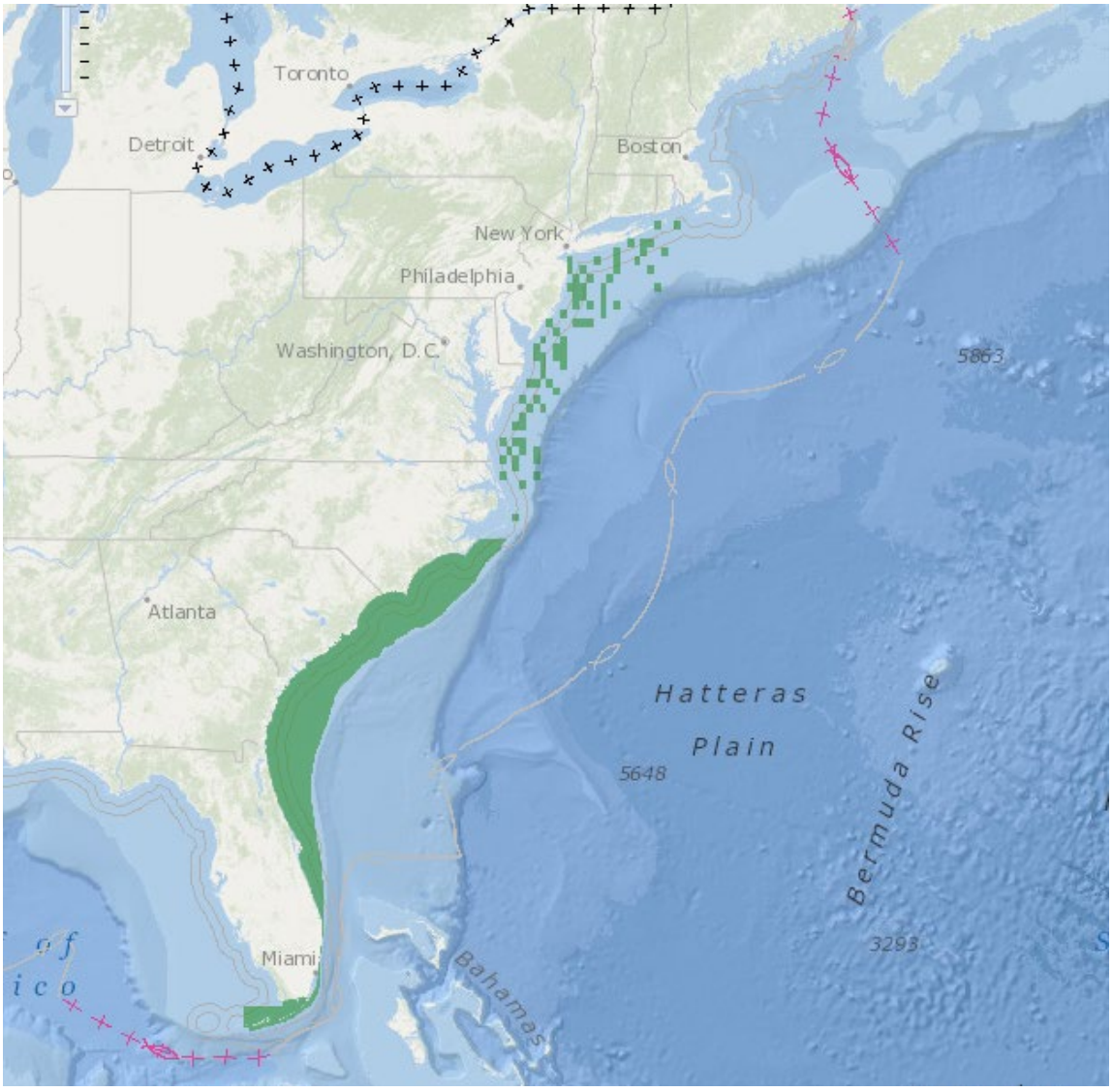
Larvae: 1) North of Cape Hatteras, EFH is pelagic waters found over the Continental Shelf (from the coast out to the limits of the EEZ) most commonly above 49 ft (15 m), from Montauk Point, New York south to Cape Hatteras, in the highest 90% of the area where bluefish larvae were collected during the MARMAP surveys. 2) South of Cape Hatteras, EFH is 100% of the pelagic waters greater than 45 feet over the Continental Shelf (from the coast out to the eastern wall of the Gulf Stream) through Key West, Florida. 3) EFH also includes the "slope sea" and Gulf Stream between latitudes 29º 00 N and 40º 00 N. Bluefish larvae are not generally collected inshore so there is not EFH designation inshore for larvae. Generally, bluefish larvae are collected April through September in temperatures greater than 64 ºF (18 ºC) in normal shelf salinities (>30 ppt).

Juveniles: 1) North of Cape Hatteras, EFH is pelagic waters found over the Continental Shelf (from the coast out to the limits of the EEZ) from Nantucket Island, Massachusetts south to Cape Hatteras, in the highest 90% of the area where juvenile bluefish are collected in the NEFSC [Northeast Fisheries Science Center] trawl survey. 2) South of Cape Hatteras, EFH is 100% of the pelagic waters over the Continental Shelf (from the coast out to the eastern wall of the Gulf Stream) through Key West, Florida. 3) EFH also includes the "slope sea" and Gulf Stream between latitudes 29º 00 N and 40º 00 N. 4) Inshore, EFH is all major estuaries between Penobscot Bay, Maine and St. Johns River, Florida. Generally juvenile bluefish occur in North Atlantic estuaries from June through October, Mid-Atlantic estuaries from May through October, and South Atlantic estuaries March through December, within the "mixing" and "seawater" zones (Nelson et al. 1991, Jury et al. 1994, Stone et al. 1994; [section 6]). Distribution of juveniles by temperature, salinity, and depth over the continental shelf is undescribed (Fahay 1998; [section 6]).

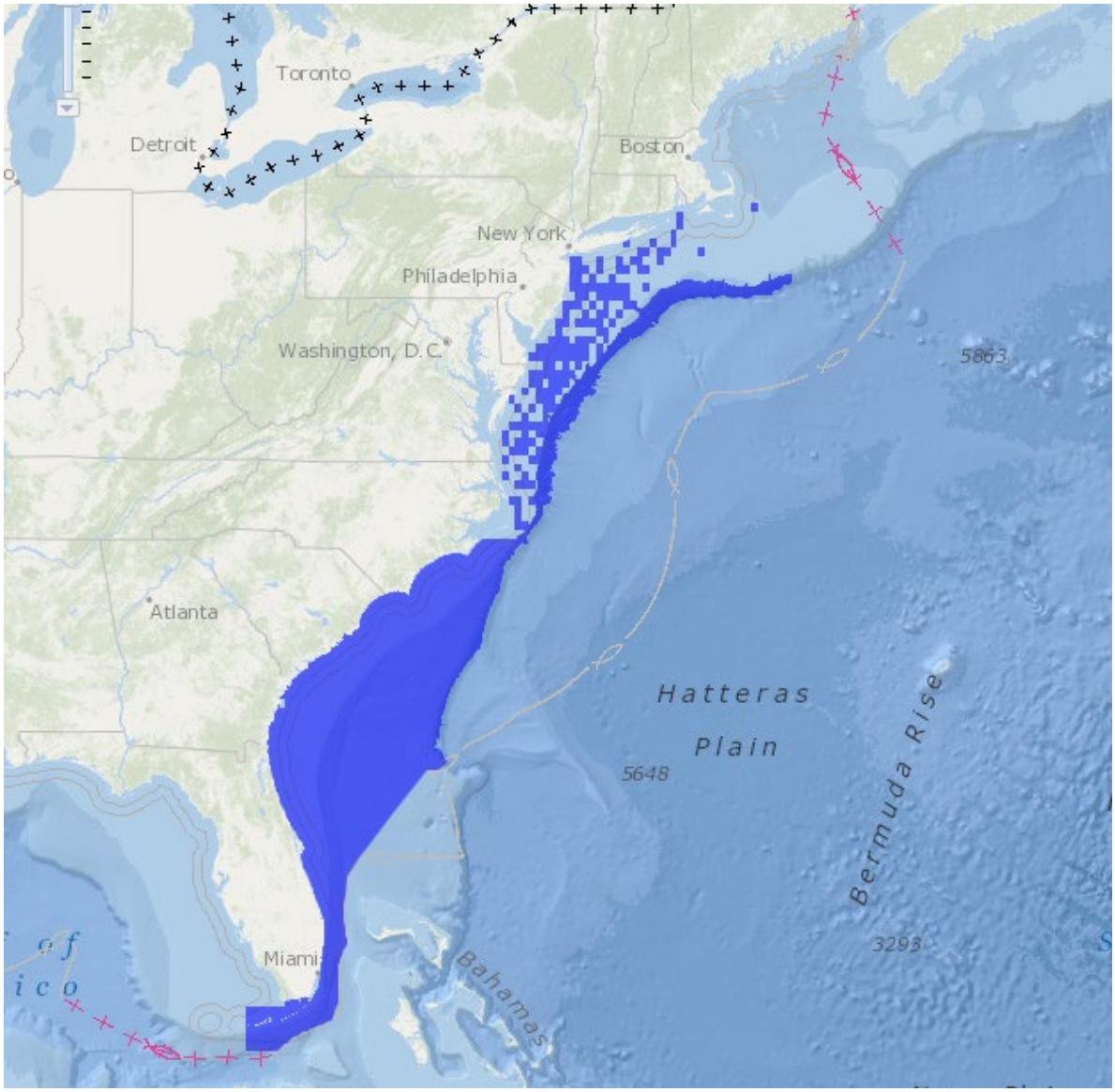
Adults: 1) North of Cape Hatteras, EFH is the pelagic waters found over the Continental Shelf (from the coast out to the limits of the EEZ), from Cape Cod Bay, Massachusetts south to Cape Hatteras, in the highest 90% of the area where adult bluefish were collected in the NEFSC trawl survey. 2) South of Cape Hatteras, EFH is 100% of the pelagic waters over the Continental Shelf (from the coast out to the eastern wall of the Gulf Stream) through Key West, Florida. 3) Inshore, EFH is all major estuaries between Penobscot Bay, Maine and St. Johns River, Florida. Adult bluefish are found in North Atlantic estuaries from June through October, Mid-Atlantic estuaries from April through October, and in South Atlantic estuaries from May through January in the "mixing" and "seawater" zones (Nelson et al. 1991, Jury et al. 1994, Stone et al. 1994; [section 6]). Bluefish adults are highly migratory and distribution varies seasonally and according to the size of the individuals comprising the schools. Bluefish generally found in normal shelf salinities (> 25 ppt).

4. Current Map Designations

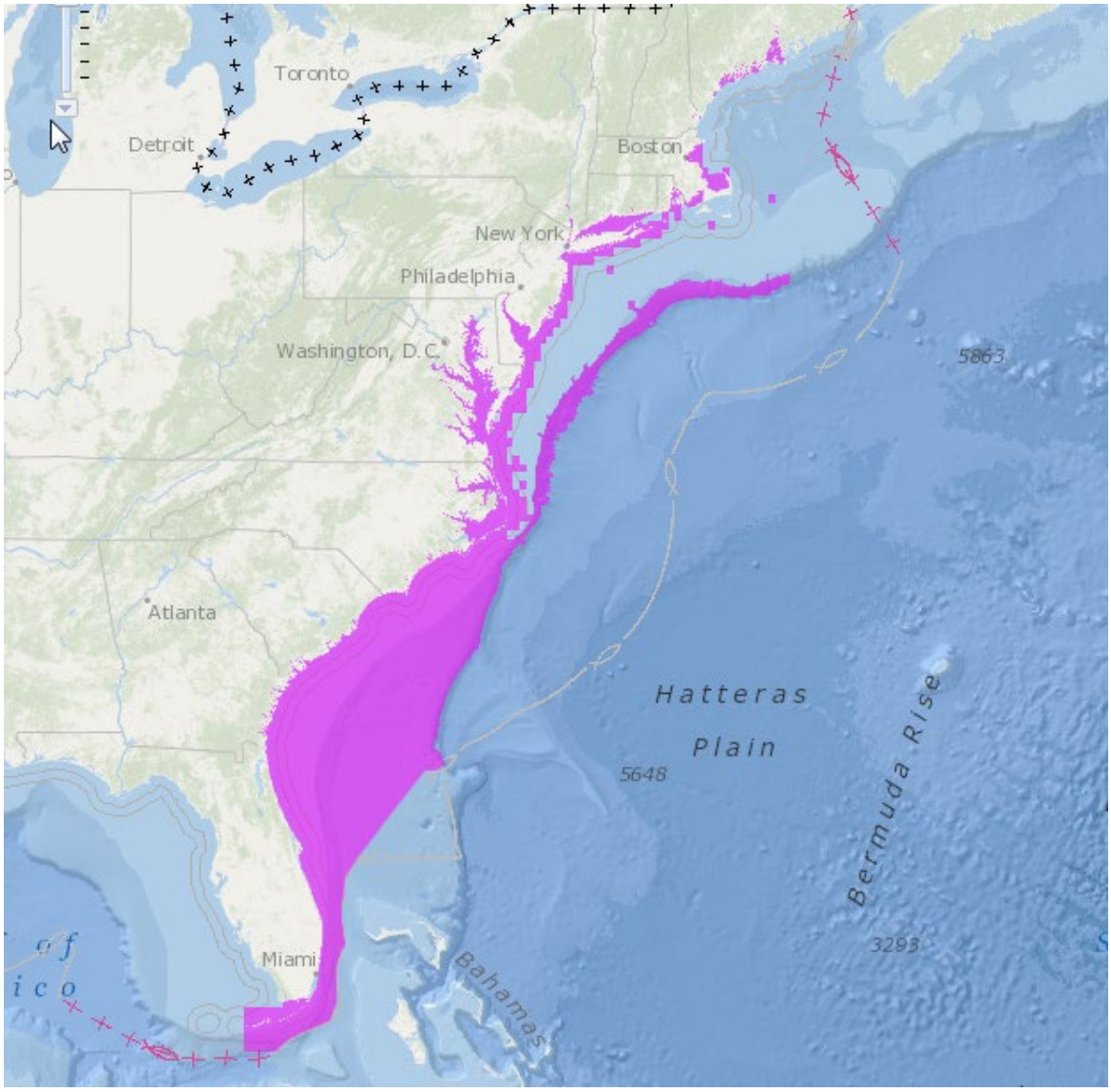
Eggs: Areas which encompass the top 90% of the areas where bluefish eggs were collected in the MARMAP surveys between 1978-1987, as well as broad areas designated south of Cape Hatteras.



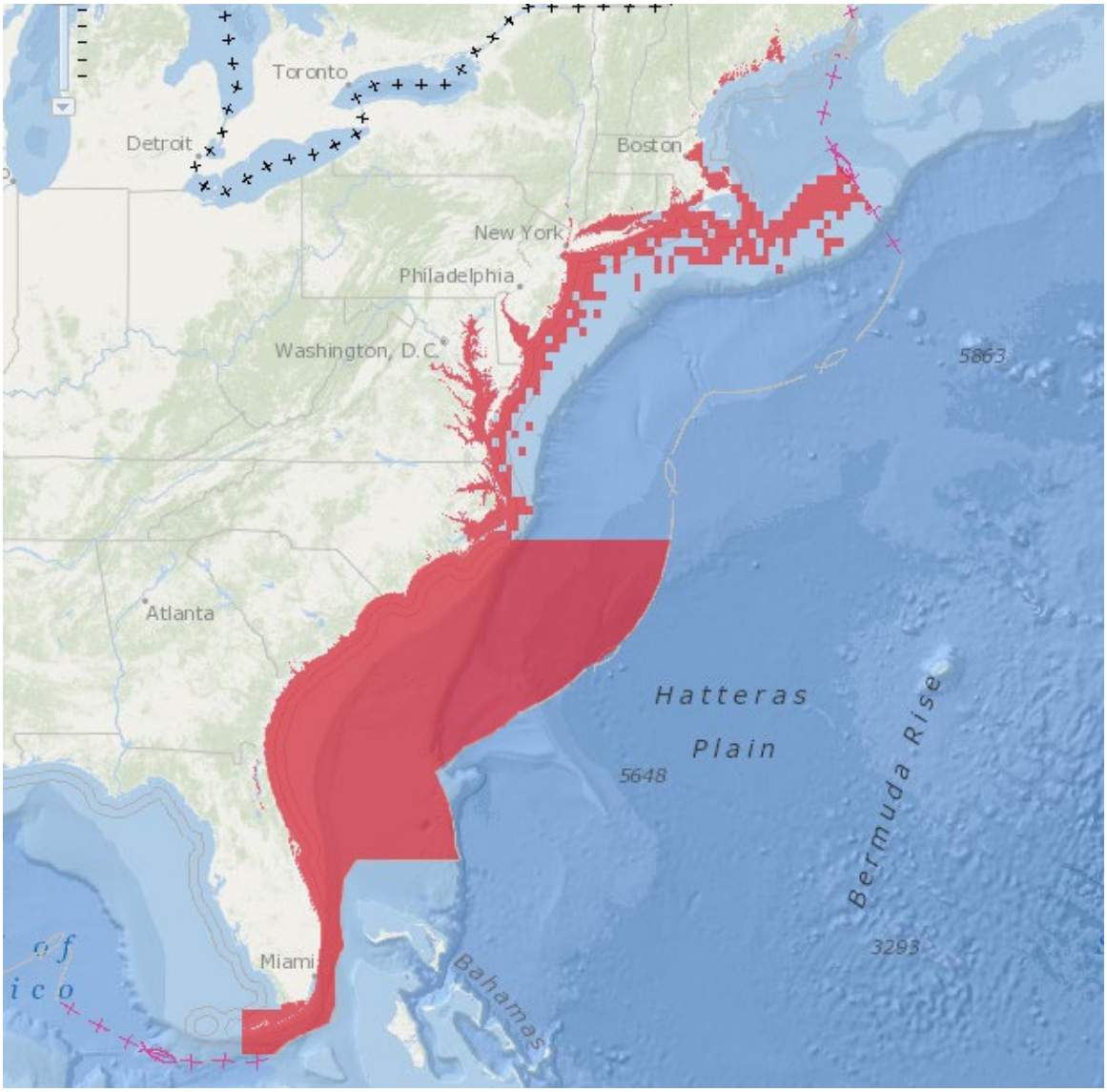
Larvae: Areas which encompass the top 90% of the areas where bluefish were collected in the MARMAP surveys in the Mid-Atlantic Bight between 1978 and 1987 and the South Atlantic Bight between 1973 and 1978, as well as broad areas designated south of Cape Hatteras.



Juveniles: Areas which encompass the top 90% of the areas where bluefish young-of-year (YOY) were collected by the NEFSC trawl survey between 1963 and 1996, as well as broad areas designated south of Cape Hatteras.



Adults: Areas that encompass the top 90% of the areas where bluefish adults were collected by the NEFSC trawl survey between 1963 and 1996, as well as broad areas designated south of Cape Hatteras.



5. Designation and Mapping Methods

The Council has generally identified EFH using level 1 and/or level 2 data (see EFH regulations; section 7) primarily from distribution and relative abundance data from the Northeast Fisheries Science Center (NEFSC) bottom trawl surveys (spring and fall, 1963+), ichthyoplankton surveys (monthly, 1977+), information from species EFH source documents (technical memos) developed by NEFSC staff, and - for some inshore areas - a resource inventory conducted by NOAA's Estuarine Living Marine Resources Program (ELMR; 1994). Additional broadly - defined (level 1) areas south of Cape Hatteras and on the continental slope were added to maps for larvae and juveniles. At the time, the SEAMAP data was not available in a consistent format and was less extensive than bottom trawl surveys north of Hatteras; therefore, extensive areas that were consistent with the same depth, temperature, and salinity preferences were included in the maps.

The EFH process was first developed for bluefish, and then applied to other individual FMPs. The designations were comprised of a detailed text description and a series of maps by ten-minute square areas (TMSQ).

The Mid-Atlantic EFH Technical Team, NEFSC scientists, and other experts developed alternatives for the Council to consider. Four alternatives were proposed and, for mapping purposes, the Council selected the alternative that used a distributional percentage (50%, 75%, 90%, or 100% of observations) of the catches by area based on which level of information was available and stock status. EFH maps were developed for each life stage and displayed the distribution and abundance data by TMSQ. The Bluefish FMP was the first plan amended (Amendment 1; 1999) to meet the EFH requirements. Because bluefish were overfished at the time, the Council was more inclusive and risk averse and identified EFH by life stage as the highest 90% of the TMSQ where bluefish were present.

6. EFH Source Documents

Information on bluefish habitat requirements can be found in:

Fahay MP, Berrien PL, Johnson DL, Morse WW. 1999. Essential Fish Habitat Source Document: Bluefish, *Pomatomus saltatrix*, Life History and Habitat Characteristics. NOAA Technical Memorandum, NMFS-NE-144. Available at: http://www.nefsc.noaa.gov/nefsc/habitat/efh/.

Shepherd, G.R. and D. B. Packer. 2006. Essential Fish Habitat Source Document: Bluefish, *Pomatomus saltatrix*, Life History and Habitat Characteristics 2nd edition. NOAA Technical Memorandum, NMFS-NE-198. Available at: http://www.nefsc.noaa.gov/nefsc/habitat/efh/.

7. Other Information

EFH Legal Authorities

EFH from Magnuson Stevens Act:
http://www.fisheriesforum.org/HigherLogic/System/DownloadDocumentFile.ashx?DocumentFileKey=014976d6-5bc1-f0c4-be6b-ade7c99fc932&forceDialog=0

EFH Contents of Fishery Management Plans under CFR §600.815:
https://www.gpo.gov/fdsys/pkg/CFR-2013-title50-vol12/pdf/CFR-2013-title50-vol12-sec600-815.pdf

Federal agency consultation with the Secretary under CFR §600.920:
https://www.gpo.gov/fdsys/pkg/CFR-2014-title50-vol12/pdf/CFR-2014-title50-vol12-sec600-920.pdf

NMFS 2006 EFH Guidance:
http://www.nmfs.noaa.gov/op/pds/documents/03/201/03-201-15.pdf

Management and Stock Assessments

MAFMC: http://www.mafmc.org, ASMFC: http://www.asmfc.org, NEFSC Stock Assessments:
http://www.nefsc.noaa.gov/saw/