

Essential Fish Habitat Description

Redfish (*Sebastes* spp.)

In its *Report to Congress: Status of the Fisheries of the United States* (September 1997), NMFS determined redfish is neither currently overfished nor approaching an overfished condition. This determination is based on the fishing mortality rate. The identification and description of EFH for redfish includes two species, *Sebastes faciatius* and *S. mentella*. Essential Fish Habitat for redfish is described as those areas of the coastal and offshore waters (out to the offshore U.S. boundary of the exclusive economic zone) that are designated on Figures 9.1 - 9.3 and meet the following conditions:

Eggs: Redfish are ovoviviparous. Redfish eggs are fertilized internally and develop into larvae within the oviduct. Therefore, there is no essential fish habitat identification or description for this life history stage.

Larvae: Pelagic waters in the Gulf of Maine and southern Georges Bank as depicted in Figure 9.1. Generally, the following conditions exist where redfish larvae are found: sea surface temperatures below 15° C and water depths between 50 and 270 meters. Redfish larvae are most often observed from March through October, with a peak in August.

Juveniles: Bottom habitats with a substrate of silt, mud or hard bottom in the Gulf of Maine and on the southern edge of Georges Bank as depicted in Figure 9.2. Generally, the following conditions exist where redfish juveniles are found: water temperatures below 13° C, depths from 25 - 400 meters, and a salinity range from 31 - 34‰.

Adults: Bottom habitats with a substrate of silt, mud or hard bottom in the Gulf of Maine and on the southern edge of Georges Bank as depicted in Figure 9.3. Generally, the following conditions exist where redfish adults are found: water temperatures below 13° C, depths from 50 - 350 meters, and a salinity range from 31 - 34‰.

Spawning Adults: Bottom habitats with a substrate of silt, mud or hard bottom in the Gulf of Maine and on the southern edge of Georges Bank as depicted in Figure 9.3. Generally, the following conditions exist where redfish adults are found: water temperatures below 13° C, depths from 50 - 350 meters, and a salinity range from 31 - 34‰. Redfish females are most often observed spawning (larvae) during the months from April through August.

The Council acknowledges potential seasonal and spatial variability of the conditions generally associated with this species.

**Essential Fish Habitat
Redfish (*Sebastes* spp.) Larvae**

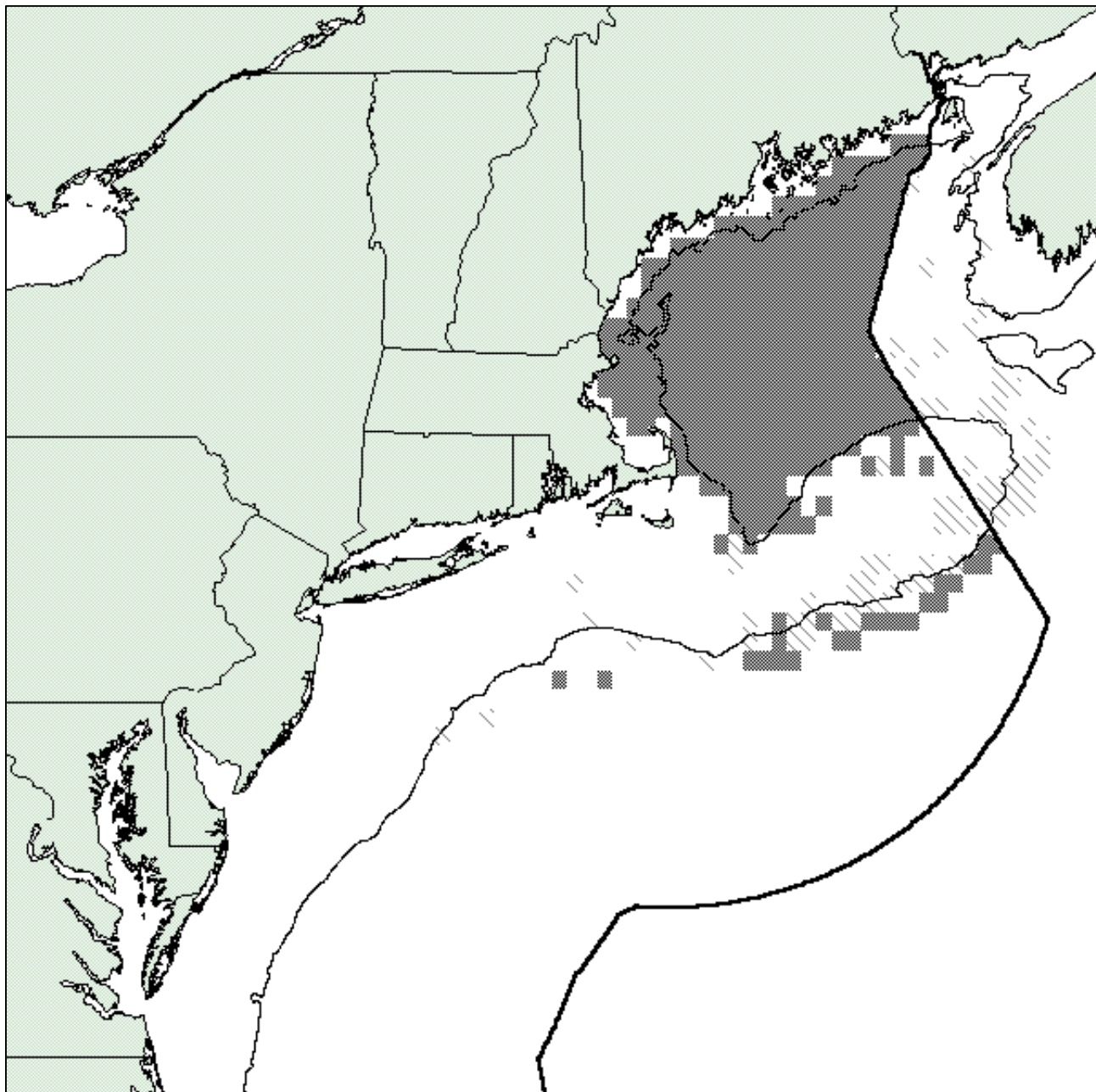


Figure 9.1: The EFH designation for redfish larvae is based upon alternative 4 for redfish adults. The larvae distribution was very patchy and does not point to areas of relatively high concentrations, so the adult distribution serves as a proxy to identify those areas where redfish larvae are most likely to be. This alternative was selected in order to include important areas in the historical range of redfish on the southeastern portion of Georges Bank, as well as to reflect that the entire Gulf of Maine is important redfish habitat. The light shading represents the entire observed range of redfish larvae.

**Essential Fish Habitat
Redfish (*Sebastes* spp.) Juveniles**

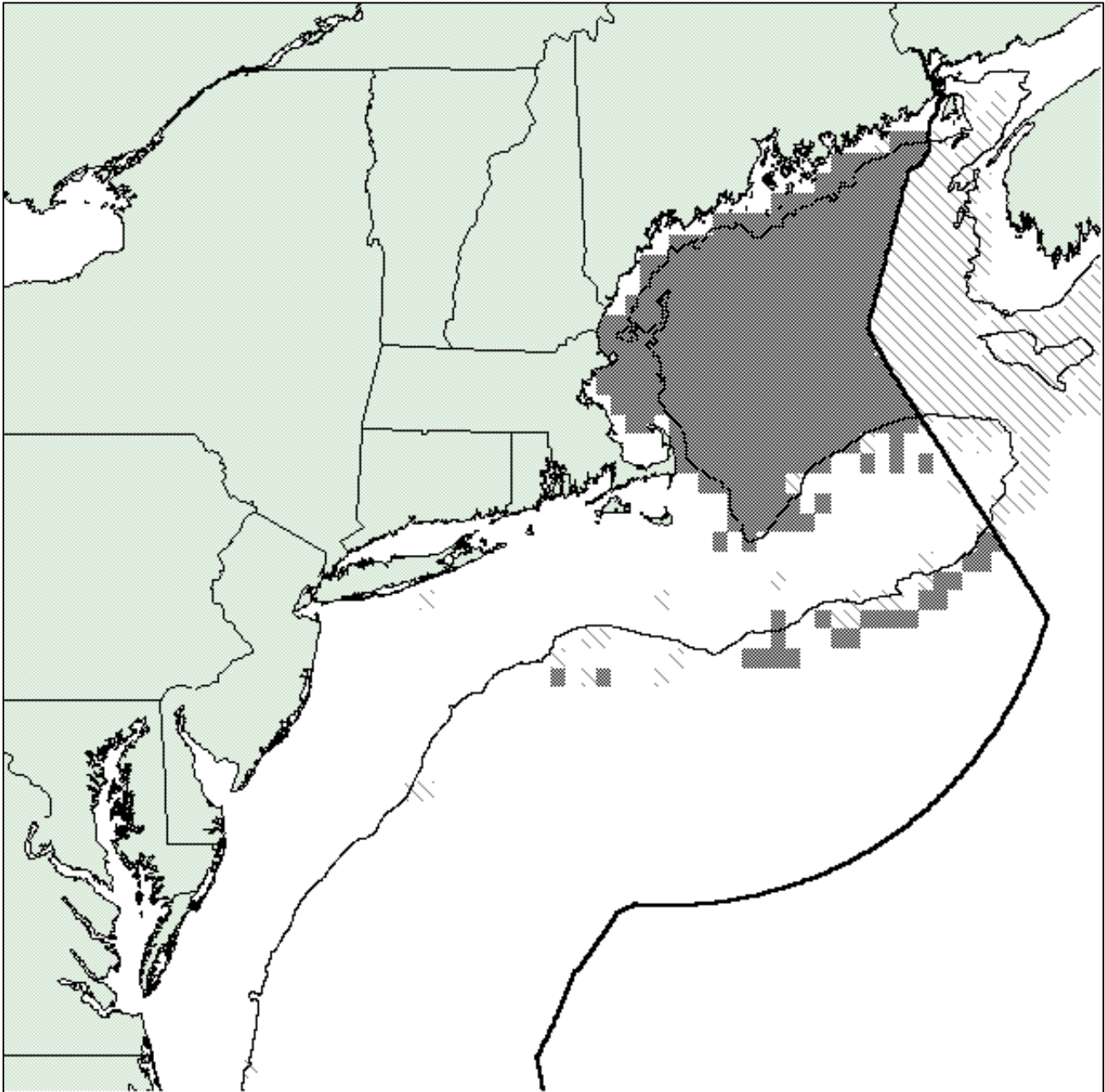


Figure 9.2: The EFH designation for juvenile redfish is based upon alternative 4 for redfish adults. This alternative was selected in order to include important areas in the historical range of redfish on the southeastern portion of Georges Bank, as well as to reflect that the entire Gulf of Maine is important redfish habitat. This species is very long lived and has tight habitat associations that are important to several life history stages, especially juveniles. The Council chose to be as conservative as possible in the EFH designation. The light shading represents the entire observed range of juvenile redfish.

**Essential Fish Habitat
Redfish (*Sebastes* spp.) Adults**

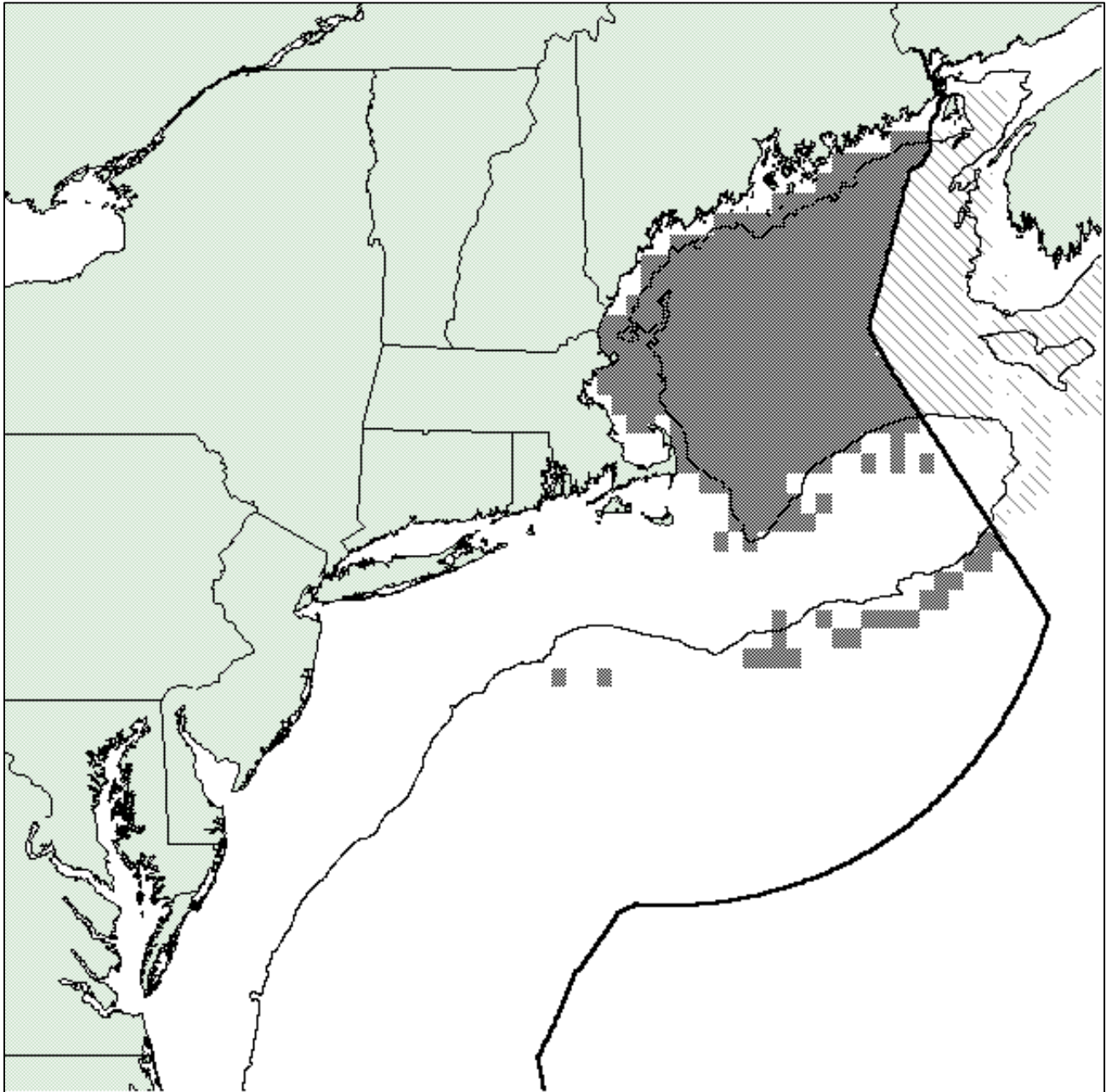


Figure 9.3: The EFH designation for adult redfish is based upon alternative 4 for redfish adults. This alternative was selected in order to include important areas in the historical range of redfish on the southeastern portion of Georges Bank, as well as to reflect that the entire Gulf of Maine is important redfish habitat. This species is very long lived and has tight habitat associations that are important to several life history stages. The Council chose to be as conservative as possible in the EFH designation. The light shading represents the entire observed range of adult redfish.