

Essential Fish Habitat and Ecosystem Based Fishery Management in the South Atlantic Region

EFH and EFH-HAPC Designations and Habitat Policy Development

The [EFH Users Guide](#) developed during the Fishery Ecosystem Plan (FEP) II development process provides a comprehensive list of the designations of EFH and EFH-HAPCs for all species managed by the South Atlantic Fishery Management Council (South Atlantic Council). Web Services and spatial representations of EFH and other habitat related layers are accessible through the Council's [SAFMC Atlas](#), a platform for visualizing and downloading GIS data relevant to the Council's mission. The online systems provide access to the services below. *This platform has not yet been integrated into the South Atlantic Council's new website (launched in 2022).*

[South Atlantic Fisheries Webservice](#): Provides access to species distribution and spatial presentation of regional fishery independent data from the Southeast Area Monitoring and Assessment Program (South Atlantic) SEAMAP-SA, the Marine Resources Monitoring, Assessment, and Prediction program (MARMAP), and NOAA Southeast Fishery-Independent Survey (SEFIS).

[South Atlantic EFH Webservice](#): Provides access to spatial representation of EFH and EFH-HAPCs for South Atlantic Council-managed species and Highly Migratory Species.

[South Atlantic Managed Areas Service](#): Provides access to spatial presentations of South Atlantic Council and other managed areas in the region.

[South Atlantic Artificial Reefs Web Application](#): Provides a regional view of artificial reefs locations, contents and imagery associated with programs in the southeastern U.S. overseen by individual states (Florida, Georgia, South Carolina, North Carolina).

South Atlantic [ACCSP Web Map](#) and [Application](#): The web map displays Atlantic Coastal Cooperative Statistics Program (ACCSP) Statistical Areas representing catch and values of Council-managed species across time with the application displaying charts of landings and values for ACCSP Statistical Areas.

Detailed information and links to partners are highlighted at the link below:

https://ocean.floridamarine.org/safmc_dashboard/partners.html.

The Council's new website includes a [Habitat page](#) including links to the South Atlantic Council's policy statements addressing non-fishing activities:

- [EFH Policy Statement on South Atlantic Climate Variability and Fisheries \(December 2016\)](#)
- [EFH Policy Statement on South Atlantic Food Webs and Connectivity \(December 2016\)](#)
- [Protection and Restoration of EFH from Marine Aquaculture \(June 2014\)](#)
- [Protection and Enhancement of Marine Submerged Aquatic Vegetation \(June 2014\)](#)
- [Protection and Restoration of EFH from Beach Dredging and Filling, Beach Re-nourishment and Large Scale Coastal Engineering \(March 2015\)](#)
- [Protection and Restoration of EFH from Energy Exploration, Development, Transportation and Hydropower Re-Licensing \(December 2015\)](#)

- [Protection and Restoration of EFH from Alterations to Riverine, Estuarine and Nearshore Flows \(June 2014\)](#)
- [Policies for the Protection of South Atlantic Marine & Estuarine Ecosystems from Non-Native and Invasive Species \(June 2014\)](#)
- [Policy Considerations for Development of Artificial Reefs in the South Atlantic Region and Protection of Essential Fish Habitat \(September 2017\)](#)

Habitat Conservation and Fishery Ecosystem Plans (FEP)

The South Atlantic Council views habitat conservation as the foundation EBFM. The South Atlantic Council has implemented gear restrictions through all its FMPs to protect habitat and directly manages habitat through two FMPs: the [FMP for Coral, Coral Reefs and Live/Hard Bottom Habitat of the South Atlantic Region](#) (Coral FMP) and the [FMP for the Sargassum Fishery of the South Atlantic Region](#).

Through [Comprehensive Ecosystem-Based Amendment 1](#), [Comprehensive Ecosystem-Based Amendment 2](#), and [Coral Amendment 8](#), the South Atlantic Council established and expanded deep-water coral HAPCs (CHAPCs) and co-designated them as EFH-HAPCs to protect deep-water coral ecosystems from fishing and non-fishing activities. A [Managed Areas](#) page on the Council's new website provides information, interactive mapping, and access to regulations .

The South Atlantic Council completed FEP I in 2009. FEP I was developed to provide a clear description and understanding of the physical, biological, and human/institutional context of ecosystems within which fisheries are managed, identify information needed and how that information should be used in the context of FMPs. FEP I comprises 7 volumes that are *currently not linked on the South Atlantic Council's new website*.

FEP II was developed in cooperation with NMFS, as a mechanism to incorporate ecosystem principles, goals, and policies into the fishery management process, including consideration of potential indirect effects of fisheries on food web linkages when developing harvest strategies.

FEP II was developed employing writing and review teams established from the South Atlantic Council's Habitat Protection and Ecosystem Based Management Advisory Panel, and experts from state, federal, NGOs, academia and other regional organizations and associations. Unlike the original FEP, FEP II was envisioned as a "living" online information system presenting core sections and sections with links to documents or other online systems with detailed updated information on species, habitat, fisheries and research. *As stated above, the FEP II components have not yet been incorporated into the South Atlantic Council's new website.*

South Atlantic Ecopath with Ecosim Model

The South Atlantic Council initiated work with the University of British Columbia and the Sea Around Us project in 2000 to develop a straw-man food web model (Ecopath with Ecosim, EwE) to characterize the ecological relationships of South Atlantic species. This effort helped the South Atlantic Council identify available information and data gaps while providing insight into ecosystem function.

The current South Atlantic EwE model provides a more complete characterization of the system and supports potential future evaluations of managed species' interactions and the ability to

explore “what if” scenarios. A working group was convened in 2021 to provide guidance on application of the EwE model to investigate potential impacts of increased red snapper recruitment on other species in the snapper grouper complex.