

Essential Fish Habitat Generic Amendment 5 Progress Update



October 2025 SSC Meeting

Outline



1. Overview of EFH
2. Timeline
3. Summary of work completed on C1: EFH text descriptions and maps
4. SSC feedback
5. Discussion

What is Essential Fish Habitat (EFH)?



- The EFH 5-year Review is a mechanism to ensure NOAA Fisheries and Fishery Management Councils incorporate the most recent and best science available into fishery management for EFH.
- The objective of an EFH 5-year Review is to review the ten EFH components of FMPs and revise or amend the ten EFH components as warranted based on available information (50 CFR 600.815).

How is EFH used?



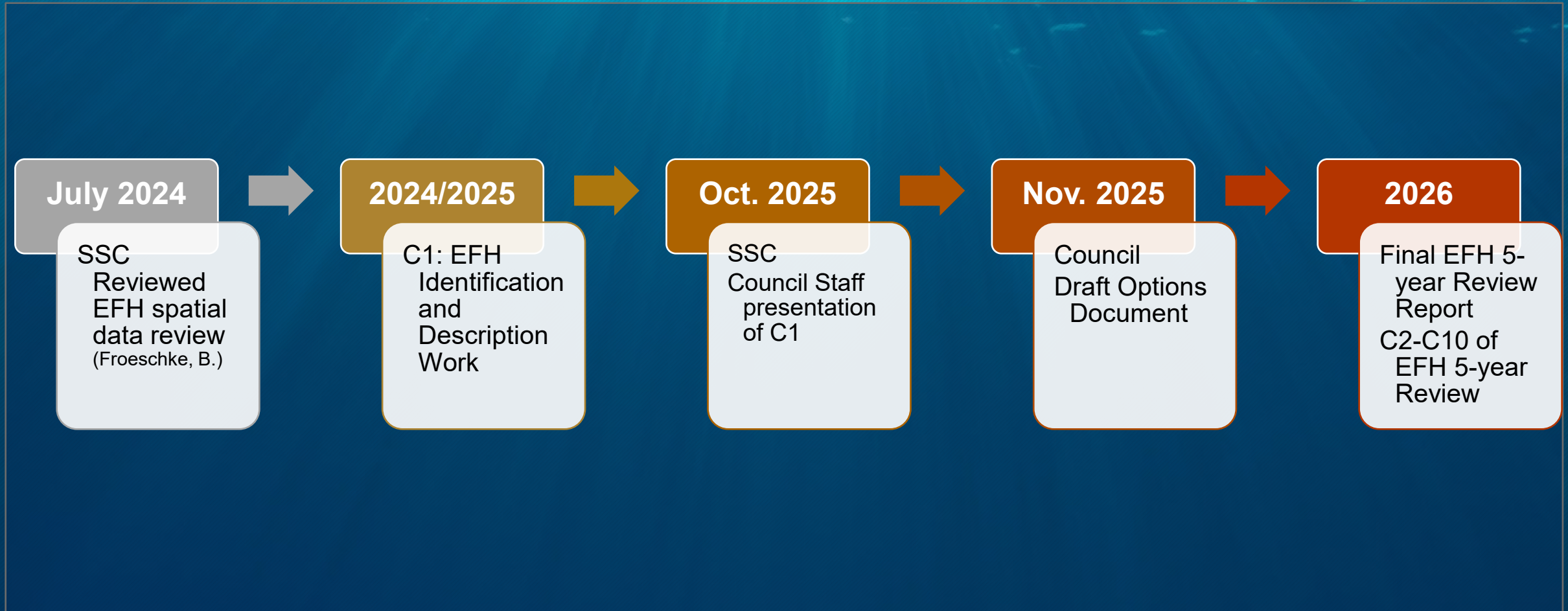
- EFH consultations
 - Federal agency partner projects
 - Regulatory permits and Civil Works of the U.S. Army Corps of Engineers
 - BOEM Wind, Oil and gas, and aquaculture development
- Most accurate and precise data allows for better characterization of habitat usage which may benefit stock health and condition
- Better stock health may provide better fishing opportunities and more access

Components of EFH



1. EFH descriptions and identification (text and maps)
2. *Fishing activities that may adversely affect EFH*
3. *Non-MSA fishing activities that may adversely affect EFH*
4. *Non-fishing activities that may adversely affect EFH*
5. *Cumulative impacts analysis*
6. *EFH conservation and enhancement recommendations*
7. *Prey species list and habitat locations*
8. *Habitat areas of particular concern (HAPC) identification*
9. *Research and Information needs*
10. *Review EFH every 5 years*

EFH review work to date



Purpose and Need



The purpose is to comply with EFH provisions of the Magnuson-Stevens Act (MSA) (50 CFR Part 600, Subpart J). The EFH Final Rule states that a review of the EFH components of the Council's FMPs should be reviewed every 5 years and the EFH provisions should be revised or amended, as warranted, based on the best available science contributing new information. This amendment incorporates all information required by 50 C.F.R. section 600.815(a).

The need is to consider new available spatial habitat information to revise the EFH text and map descriptions for the Shrimp, Reef fish, Coastal Migratory Pelagics, Spiny Lobster, and Red Drum Gulf FMPs. Updates to EFH descriptions and identifications will allow the best scientific information available to be utilized to provide enhanced conservation benefits to the stock, and establish a better understanding of species habitat by life stage. This document will concurrently meet the requirements under the EFH 5-year Review.

C1: EFH descriptions and identification (text and maps)



For all federal Gulf managed species, EFH is defined qualitatively using known habitat associations derived from the literature.

EX: *Reef Fish and CMP FMPs:* all estuaries; the US/Mexico border to the boundary between the areas covered by the Gulf and South Atlantic Councils from estuarine waters out to depths of 100 fathoms (600 feet, 182 m).

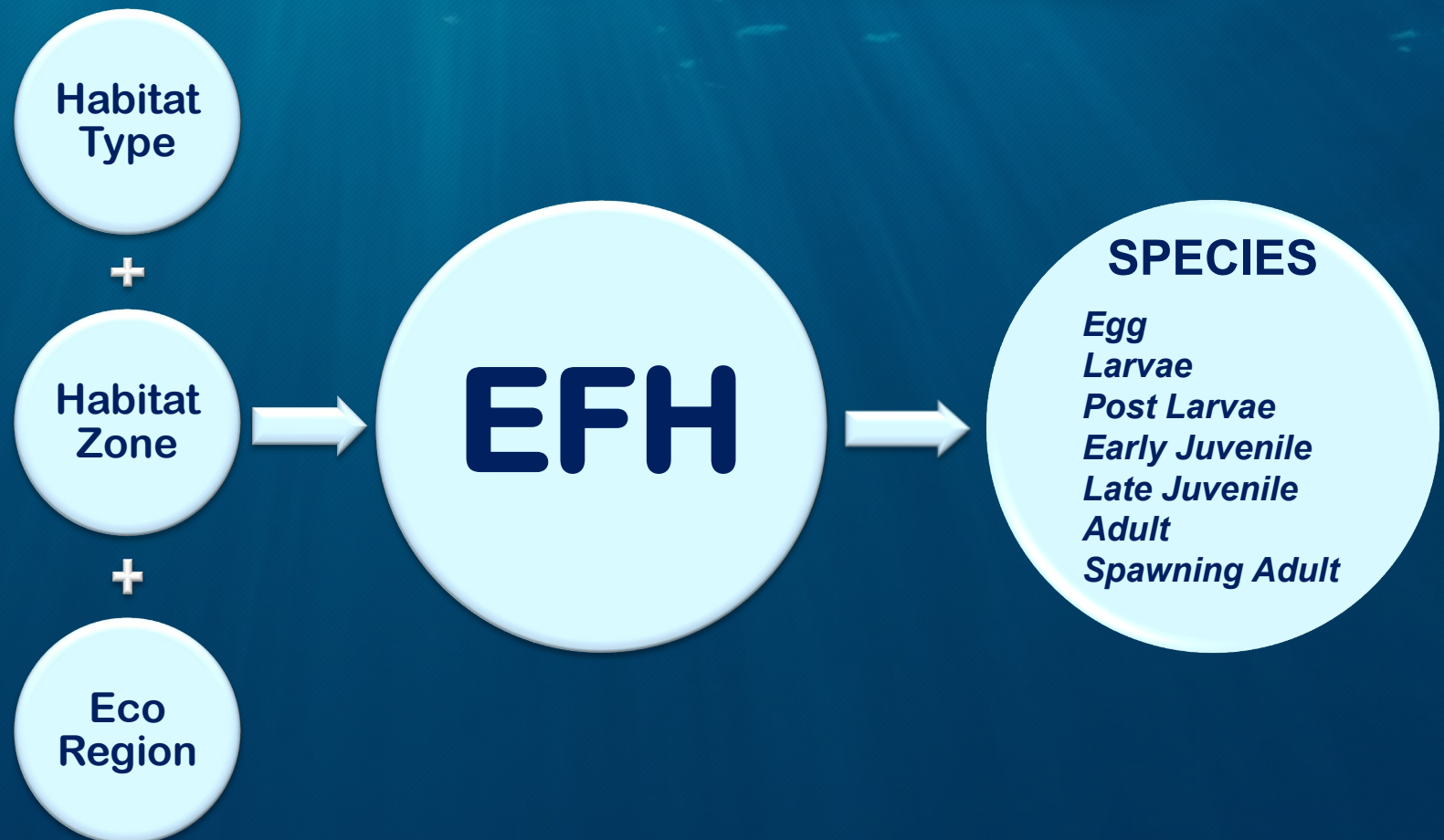
Currently, EFH is not defined in the FMPs by species or lifestage. The 2025 EFH Review aims to implement these text and map descriptions into the Gulf FMPs for finfish and shrimp species

C1: EFH descriptions and identification (text and maps)



Finfish and Shrimp FMPs

EFH is defined qualitatively using known habitat associations derived from the literature.



C1: EFH descriptions and identification (text and maps)



For all federal Gulf managed species, EFH is defined qualitatively using known habitat associations derived from the literature.

1. EFH descriptions and identification (text and maps)

- I. Habitat Type -
- II. Habitat Zone
- III. Eco-region

Habitat Type	
Submerged Aquatic Vegetation (SAV)	Hard bottoms
Mangroves	Oyster reefs
Drifting algae	Banks/shoals
Emergent marshes	Reefs
Sand/shell bottoms	Shelf edge/slope
Soft bottoms	Water Column Associated (WCA)

C1: EFH descriptions and identification (text and maps)



For all federal Gulf managed species, EFH is defined qualitatively using known habitat associations derived from the literature.

1. EFH descriptions and identification (text and maps)

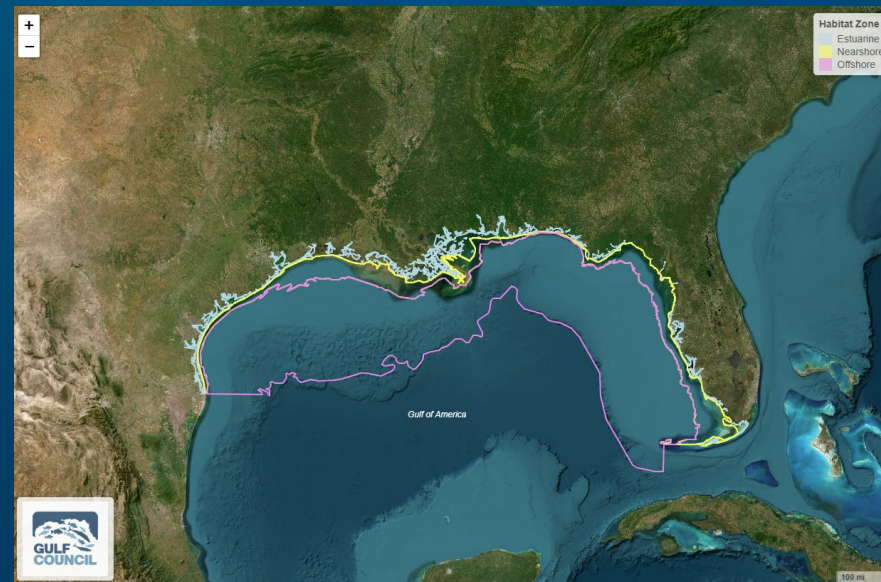
I. Habitat Type

II. Habitat Zone - Estuarine

III. Eco-region

Nearshore

Offshore



C1: EFH descriptions and identification (text and maps)



For all federal Gulf managed species, EFH is defined qualitatively using known habitat associations derived from the literature.

1. EFH descriptions and identification (text and maps)

I. Habitat Type

II. Habitat Zone

III. Eco-region -

- ER 1:** Florida Keys - Tarpon Springs
- ER 2:** Tarpon Springs - Pensacola Bay
- ER 3:** Pensacola Bay - Mississippi Delta
- ER 4:** Mississippi Delta - Freeport, Texas
- ER 5:** Freeport, Texas - Mexican border

C1: EFH descriptions and identification (text and maps)



For all federal Gulf managed species, EFH is defined qualitatively using known habitat associations derived from the literature.

1. EFH descriptions and identification (text and maps)

I. Habitat Type

II. Habitat Zone

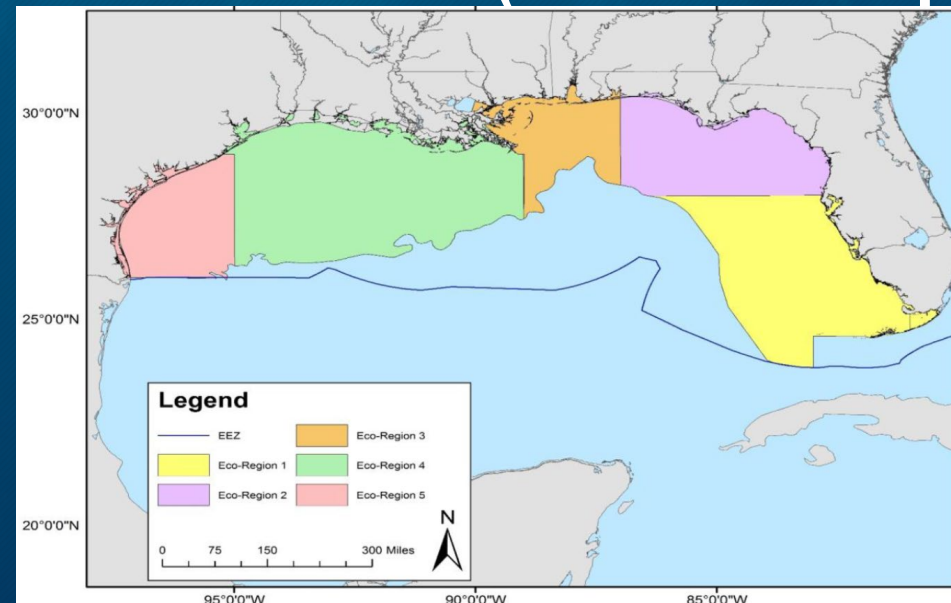
III. Eco-region - ER 1:

ER 2:

ER 3:

ER 4:

ER 5:



C1: EFH descriptions and identification (text and maps)



For all federal Gulf managed species, EFH is defined qualitatively using known habitat associations derived from the literature.

1. EFH descriptions and identification (text and maps)

- I. Habitat Type**
- II. Habitat Zone**
- III. Eco-region**

2. Habitat Attribute Tables

C1: EFH descriptions and identification (text and maps)



1. EFH descriptions and identification (text and maps)
 - I. Habitat Type
 - II. Habitat Zone
 - III. Eco-region
2. Habitat Attribute Tables
3. Spatial Data Contract (2023/2024) – Appendix B: [GoogleDrive Link](#)
4. Literature Review (through 2024)

C1: EFH descriptions and identification (text and maps)



- Habitat Attribute Tables were updated with literature through 2024
- 25/40 species included updated literature
 - 13/25 had updates to habitat type, habitat zone, or eco-region- influencing habitat text and map descriptions
 - Other updates include updates to life-history which address other components of the EFH 5-year Review
 - Life history: Mortality, growth, etc.
 - E.G. C7: Prey Species

C1: EFH descriptions and identification (text and maps)



Gag Grouper										
Life stage	Eco-region	Habitat Zone	Habitat Type	Season	Temp (°C)	Depth (m)	Prey	Predators	Mortality	Growth
Eggs	ER-1, ER-2	offshore	WCA	Dec-Apr		50-120				hatch in 45h at 21°C
Larvae	ER-1, ER-2	offshore	WCA	early spring		50-120				pelagic larval duration = 29-52 d TL=2.1 cm
Post Larvae	ER-1, ER-2	offshore	WCA			50-120				pelagic larval duration = 29-52 d
Early Juvenile	ER-1, ER-2, ER-3	estuarine, nearshore	SAV, mangroves	late spring-early fall	22-32	0-12	crustaceans (amphipods, copepods, grass shrimp)		minimal while in SAV	rapid during association with SAV
Late Juvenile	ER-1, ER-2, ER-3, ER-4	estuarine, nearshore, offshore	SAV, hard bottom, reefs, mangroves, seawhip	recruit to reefs offshore in fall	22-32	1-50	decapod crustaceans and fish	cannibalistic, larger fishes	recreational fishery, shrimp fishery bycatch	ages 1-3
Adult	ER-1, ER-2, ER-3, ER-4, ER-5	nearshore, offshore	hard bottom, reefs	year-round	14-24	13-100	fish, crustaceans, cephalopods	sharks	sudden low temps, fishing mortality; $M = 0.1342$; $M = 0.13 \pm 0.03$	$L_{inf} = 1277.95$ mm FL, $k = 0.1342$, $t_0 = -0.6687$, max. age = 31 yrs TL= 54 cm; $L_{max} = 145$ cm
Spawning Adult	ER-1, ER-2, ER-3, ER-4, ER-5	nearshore, offshore	shelf edge/slope, hard bottom	Dec-May peak: Feb-Mar Jan-Apr; Jan-April, peak Feb-March	21-30	50-120			spawning aggregations vulnerable to fishery	

2025 EFH 5-Year Review: EFH Descriptions



Gag Grouper

Egg: ER 1 and ER 2 in offshore (greater than 60 feet [18m] in depth) habitat, concentrated between 50-120m, during winter and spring, and are associated with the water column.

Larvae: ER 1 and ER 2 in offshore (greater than 60 feet [18m] in depth) habitat, concentrated between 50-120m, during spring, and are associated with the water column.

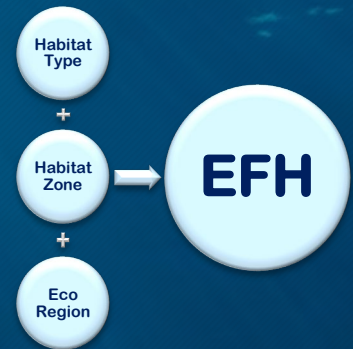
Post larvae: ER 1 and ER 2 in offshore (greater than 60 feet [18m] in depth) habitat, concentrated between 50-120m, and are associated with the water column.

Early juvenile: ER 1, ER 2 and ER 3, in estuarine (inside barrier islands and estuaries) and nearshore (60 feet [18m] or less in depth) habitats, concentrated between 0-12m, associated with submerged aquatic vegetation and mangroves.

Late juvenile: ER 1, ER 2, ER 3, and ER 4, in estuarine (inside barrier islands and estuaries), nearshore (60 feet [18m] or less in depth), and offshore (greater than 60 feet [18m] in depth) habitats, associated with submerged aquatic vegetation, hard bottom, reefs and mangroves.

Adult: Gulf-wide ER 1-5 in nearshore (60 feet [18m] or less in depth) and offshore (greater than 60 feet [18m] in depth) habitats, concentrated between 13-100m, associated with hard bottom and reefs.

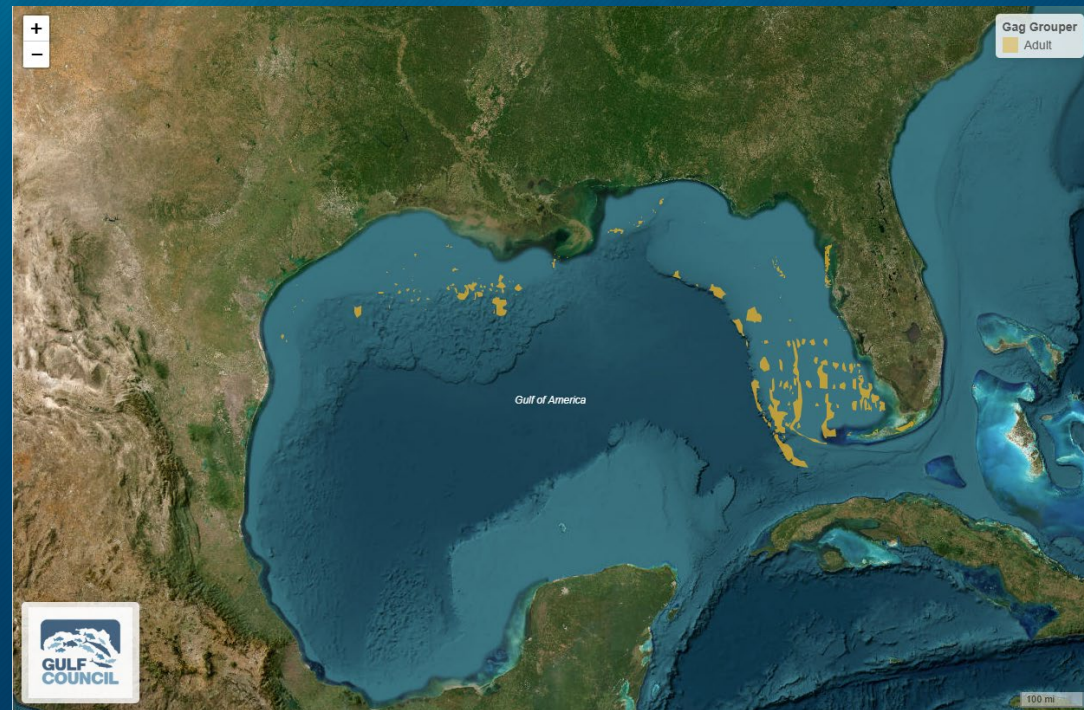
Spawning adult: Gulf-wide ER 1-5 in nearshore (60 feet [18m] or less in depth) and offshore (greater than 60 feet [18m] in depth) habitats, concentrated between 50-120m, associated with the shelf/slope edge and hard bottom.



2025 EFH 5-Year Review: EFH Descriptions

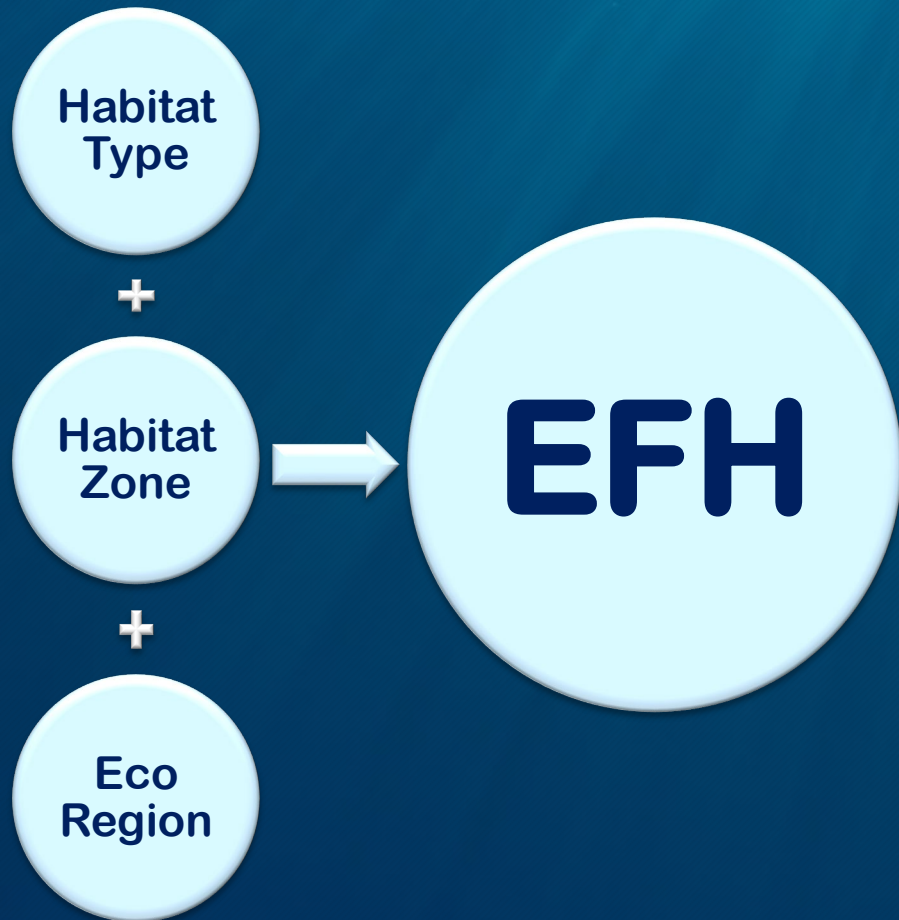


EX: Static Gag Grouper Adult Map



Rshiny Tool:

https://gulfcouncilportal.shinyapps.io/EFH_5_year_Review_2025/



Summary of Work Completed



1. Update EFH descriptions and identification (text and maps) (C1)

<u>Reef Fish</u>	<u>Shrimp</u>	<u>Coastal Migratory Pelagics</u>	<u>Red Drum</u>	<u>Spiny Lobster</u>
31	4	3	1	1

40 species x 7 Life Stages (eggs, larvae, post larvae, early juvenile, late juvenile, adults, spawning adults) = 280

Rshiny Tool: https://gulfcouncilportal.shinyapps.io/EFH_5_year_Review_2025/

1. Species-specific Distribution
2. Habitat Type
3. Literature- Review

SSC Feedback



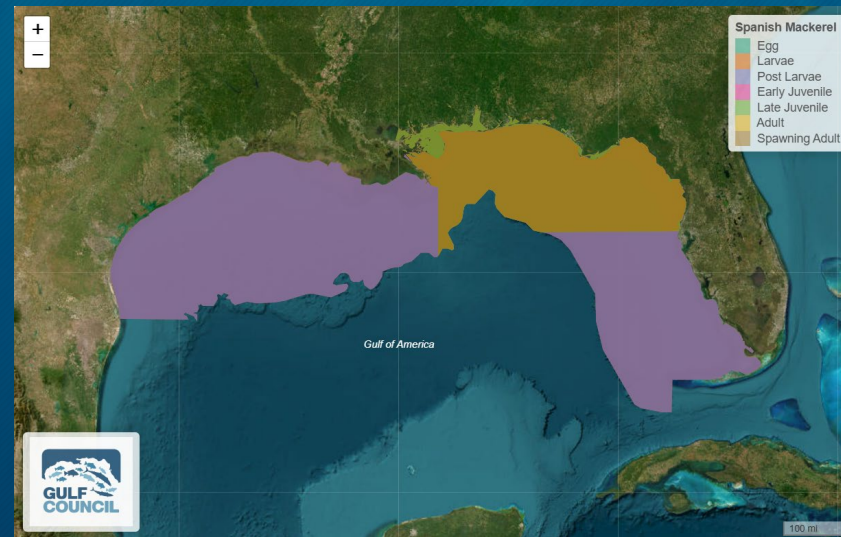
Species-specific Distribution



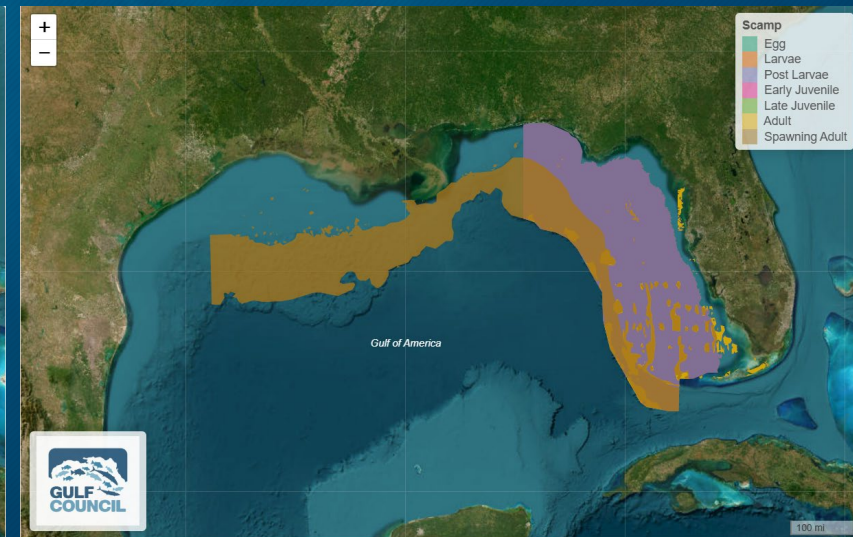
Wenchman



Spanish Mackerel



Scamp

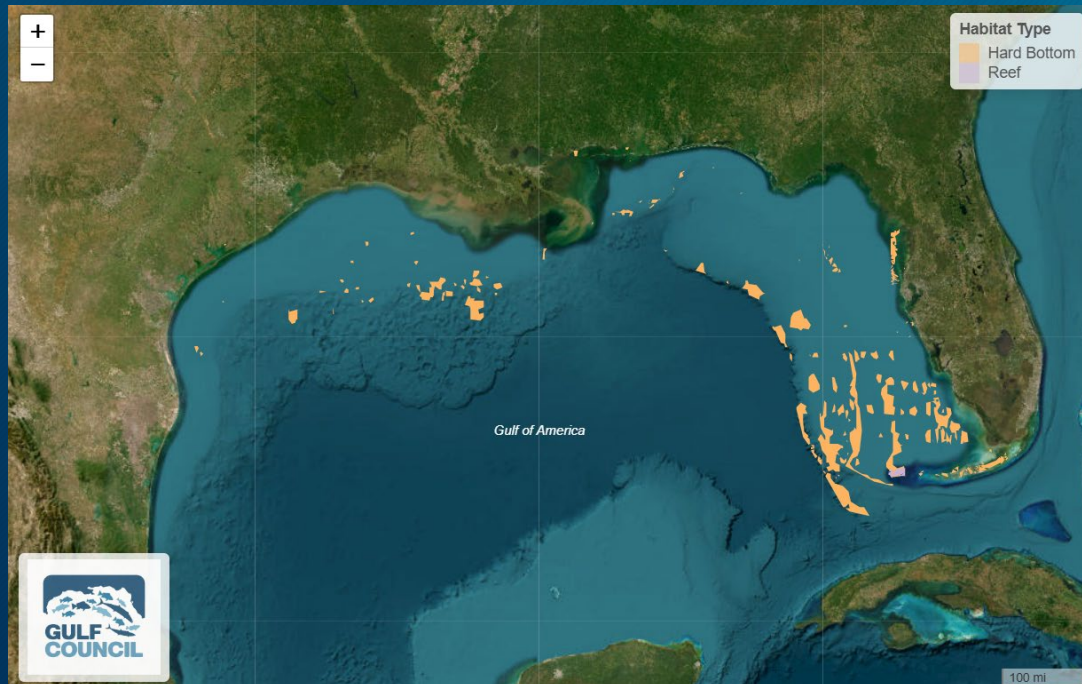


Q: Should the distribution of these species be expanded to other Eco-regions at different life stages?

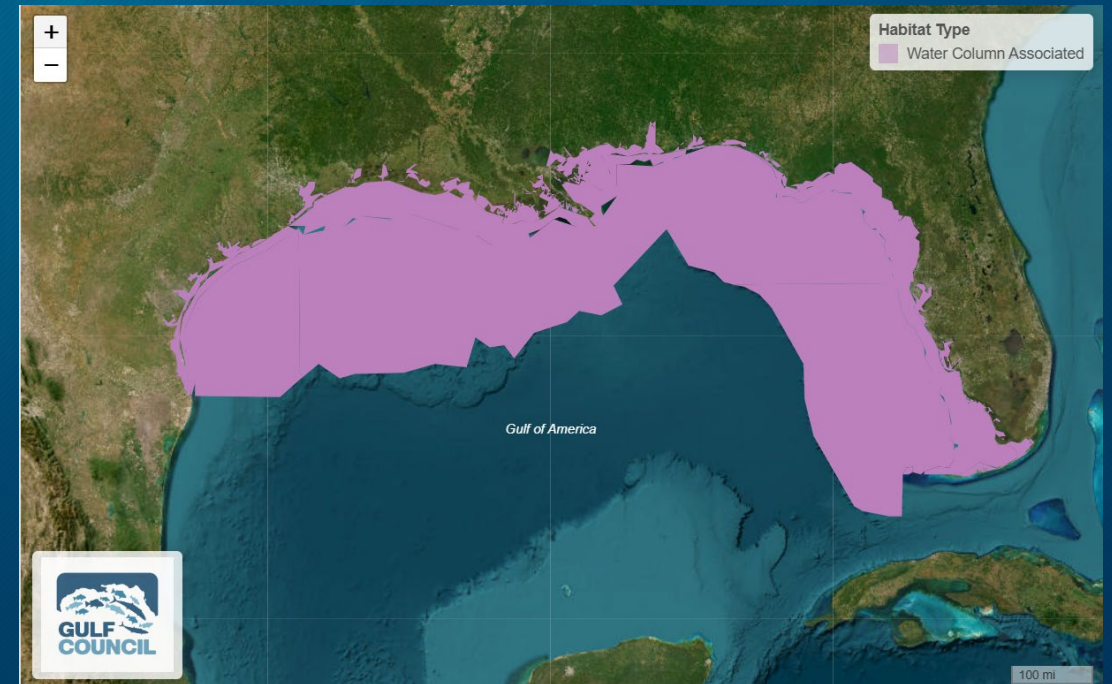
Habitat Type



Reef and Hardbottom



Water Column Associated



Q: Should we combine Reef and Hardbottom Habitat Type?

Q: How to show fine-scale habitat with WCA?

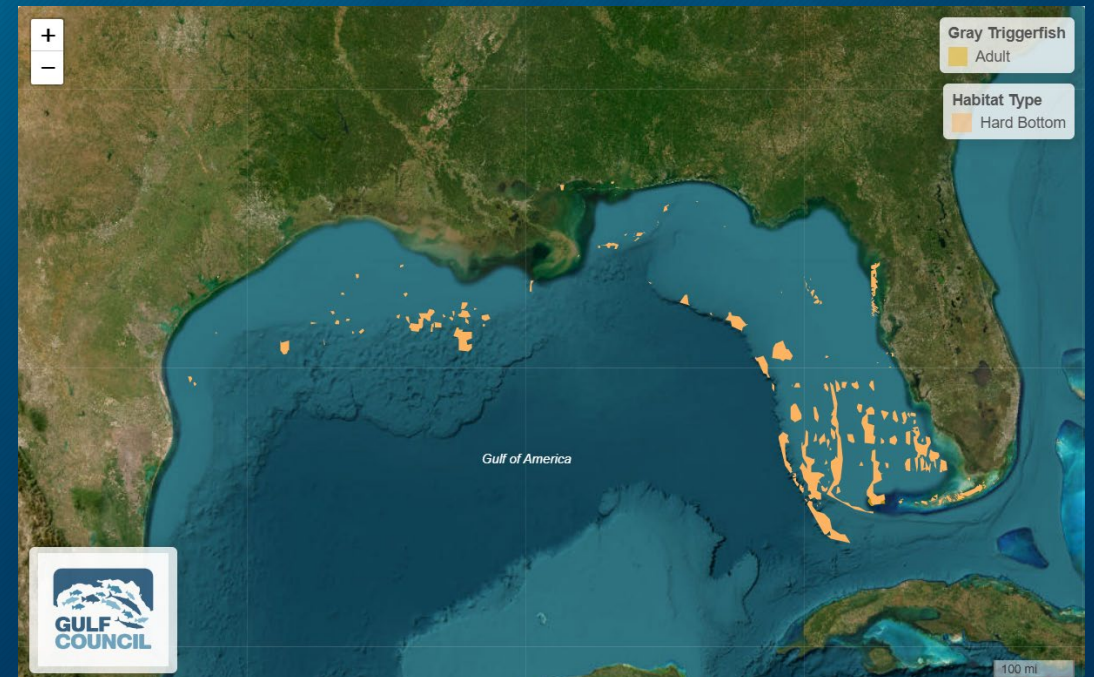
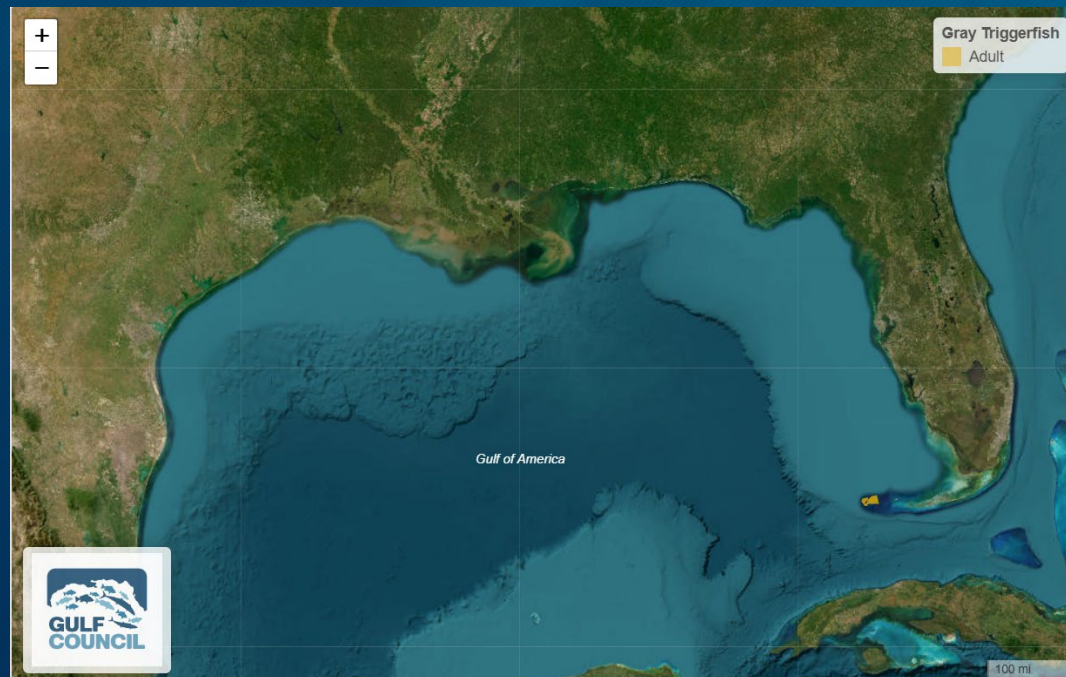
Rshiny Tool: https://gulfcouncilportal.shinyapps.io/EFH_5_year_Review_2025/

Habitat Type- Gray Triggerfish



Gray Triggerfish

Adult: Gulf-wide ER 1-5 in nearshore (60 feet [18m] or less in depth) and offshore (greater than 60 feet [18m] in depth) habitats, concentrated between 10-100m, and are associated with reefs.

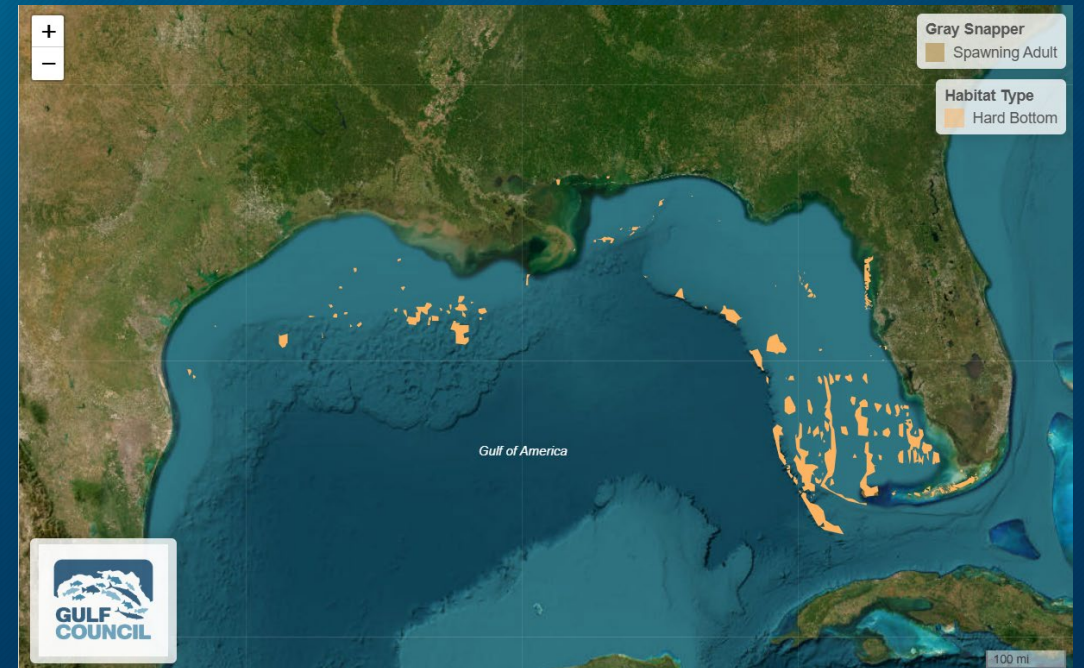
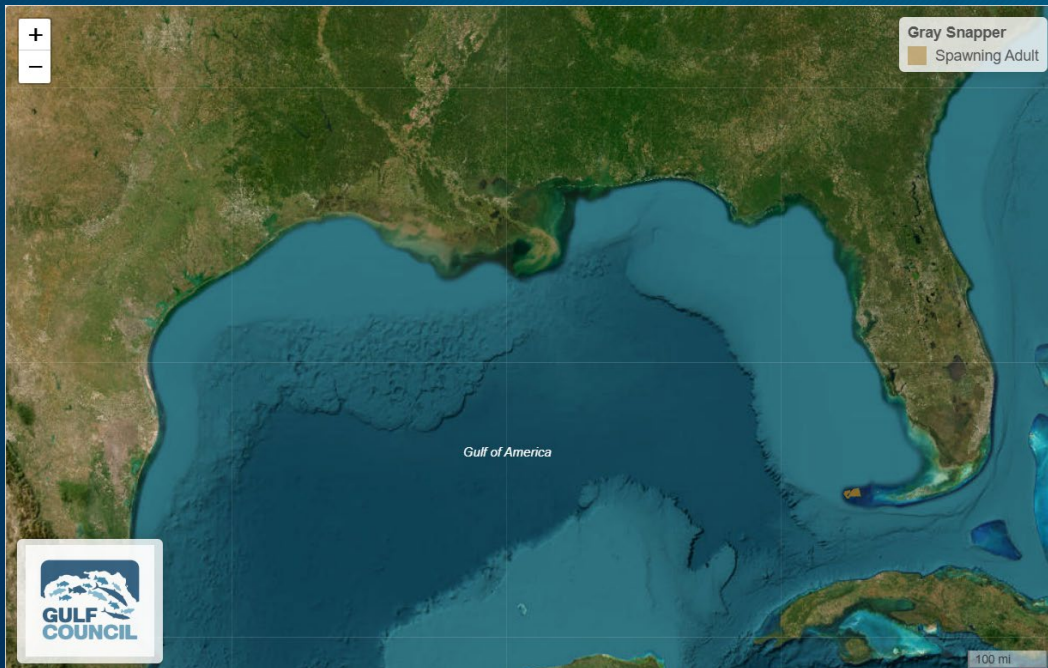


Habitat Type- Gray Snapper



Gray Snapper

Spawning adult: Gulf-wide ER 1-5 in nearshore (60 feet [18m] or less in depth) and offshore (greater than 60 feet [18m] in depth) habitats, concentrated between 1-180m, and are associated with reefs and banks/shoals.



Habitat Type- Greater Amberjack



Greater Amberjack

Adult: Gulf-wide ER 1-5 in nearshore (60 feet [18m] or less in depth) and offshore (greater than 60 feet [18m] in depth) habitats, concentrated at depths <187m, and are associated with the water column, hard bottom, reefs, and banks/shoals.

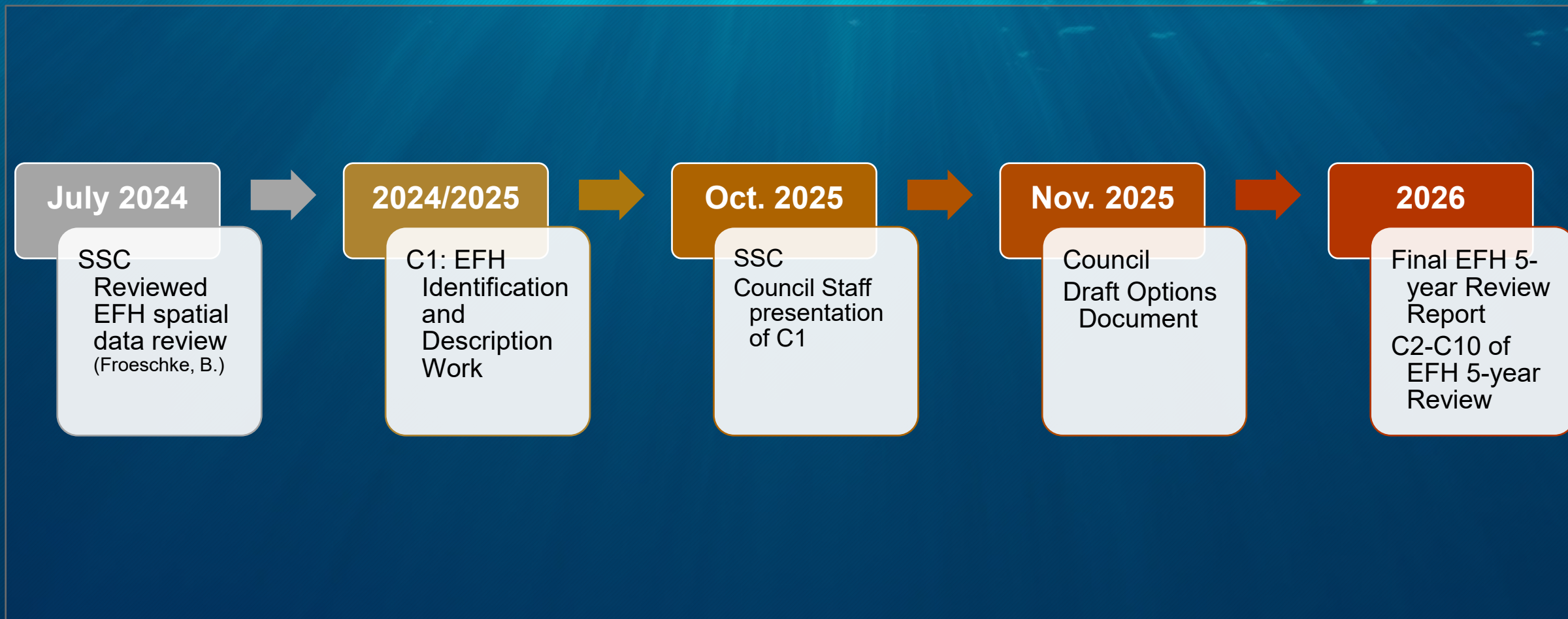


1. Species-specific Distribution
2. Habitat Type
3. Literature- Review

SSC Feedback



Forward-Facing Timeline



Questions?

