



**Climate and  
Fisheries Initiative**

# **Climate and Fisheries Initiative Overview for NRCC**

May 26, 2021

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# Strategy

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Establish a ***nationally integrated ocean modeling and decision support system*** with four core components:

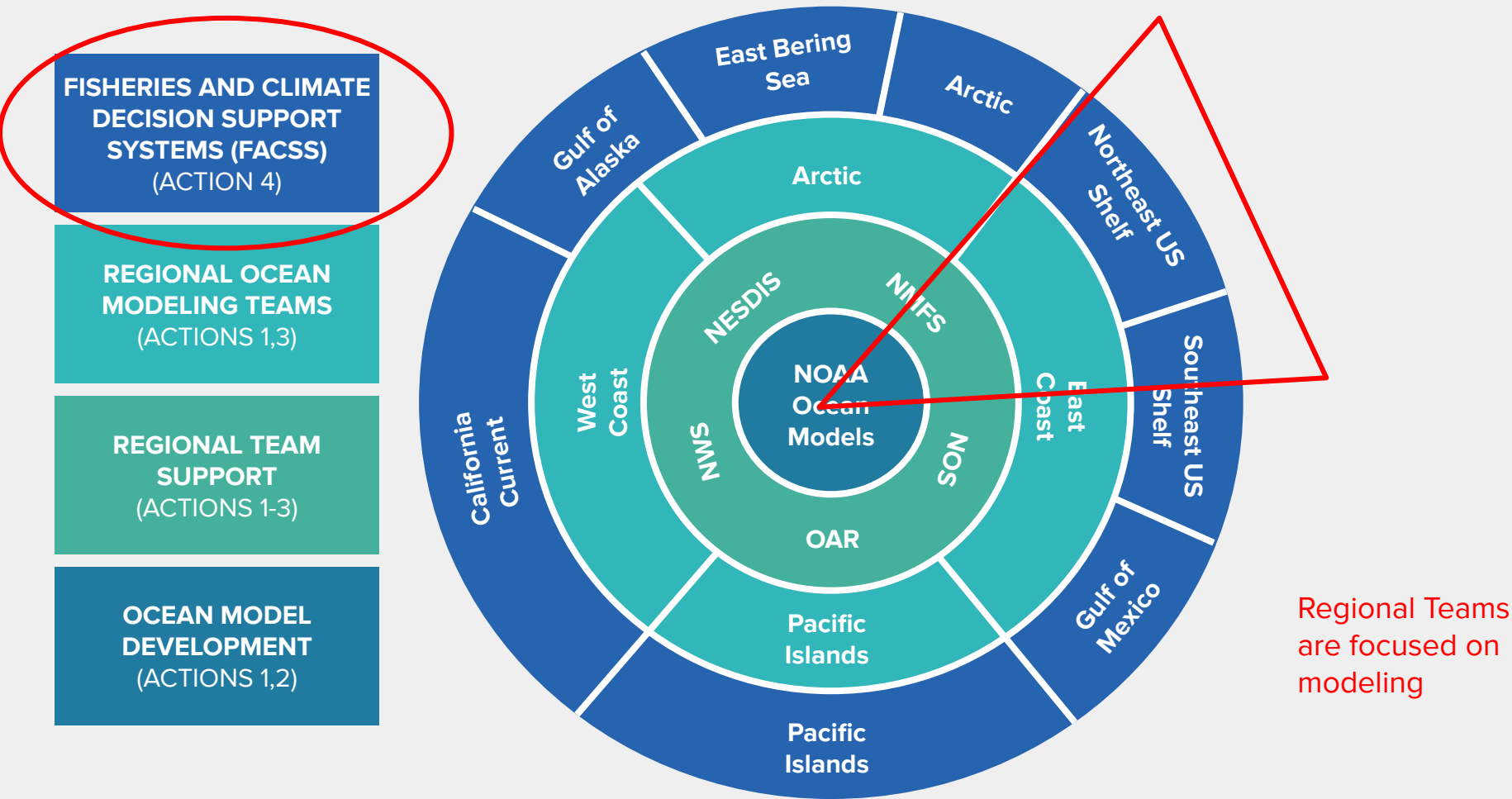
Enhances the  
utility of existing  
climate  
information

Advances  
NOAA's ocean  
modeling system

Establishes a  
national  
community of  
practice and  
regional ocean  
modeling teams

Fuels innovations  
and applications  
for  
climate-informed  
LMR management

# *A Nationally Integrated Ocean Modeling and Decision Support System*



# Relevant NEFSC Ongoing Efforts

(climate informed  
LMR management)

- Northeast Climate Integrative Modeling Project w/ GMRI
- Climate and Groundfish Projects
- Several MAPP and COCA projects (funded by NOAA Climate Program Office)
- Woods Hole Assessment Model (State-Space Model)
- Fisheries Integrative Modeling System (HQ Effort)
- Development of Northeast Regional Action Plan version 2
- Opportunity to further coordinate the above activities

## NRCC and CFI?

- Does NRCC want to engage collectively in climate related efforts (with or without CFI)?
- Or should this be more a series of bilateral efforts?
- Of both?

- Identify applications - Ideas
  - Research Track Working Groups
  - East Coast Scenario Planning
  - State of the Ecosystem Reports
  - Sea Turtles / Right Whale
- Integrate w/ ongoing EAFM and EBFM activities at MAFMC, NEFMC, ASMFC, and GARFO
- Feedback associated with Climate Executive Order

**Questions?**

# Climate & Northeast Groundfish Funding

- FY18 & FY19 Projects
  - <https://www.fisheries.noaa.gov/new-england-mid-atlantic/science-data/new-englands-groundfish-changing-climate>

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- FY20 Projects (examples)
    - Incorporating multivariate physical and biological data as covariates in state-space age-structured stock assessments (NEFSC, Miller)
    - Spatio-temporal analyses of New England fish species with VAST (NEFSC, Brooks)
    - Northeast Climate Integrated Modeling [NCLIM] (GMRI, Kerr)
    - Analysis of New England Groundfish Catch Rates (SMAST, Cadrin)
  - FY21 Projects (examples)
    - Cod Task Force Projects (pending)
    - Continuation of NCLIM (GMRI, Kerr)
    - Cod Stock Structure Management Strategy Evaluation (GMRI, Kerr)
    - Linking climate and life history parameters to reduce stock assessment retrospective patterns using ROMS and NOAA GFDL's next generation ocean model (NEFSC, Saba)
    - Evaluating annual variation and environmental regulation of fecundity in winter and yellowtail flounder with implications for stock reference points (NEFSC, Wuenschel)