Climate and Fisheries Initiative

CFI Webpage

NPFMC NPFMC
October 2021
2019 Assessment: NMFS Climate Information Requirements

Modified from Tommasi et al., Progress in Oceanography, 2017
NOAA’s Climate and Fisheries Initiative

• **Challenge:** Climate change is impacting the nation’s valuable marine and Great Lakes ecosystems, fisheries, and the communities that depend on them. These impacts are creating urgent questions that demand climate-informed answers.

• **Response:** NOAA’s Climate Fisheries Initiative is a cross-NOAA effort which, when combined with existing programs, will enable the sustained operational ocean prediction and decision support system needed to reduce negative impacts and increase resilience of ecosystems and coastal communities.
NOAA Climate and Fisheries Initiative (CFI)

- Cross-NOAA effort (NMFS, OAR, NOS, NWS, NESDIS)
- Build a operational ocean modeling and decision support system
  - Provide state-of-the-art ocean forecasts and projections
  - Provide climate-informed ecosystem projections, risk assessments and management strategies
  - Reduce impacts and increase resilience of LMRs and communities.
What will CFI do?

CFI will:

• **Build an operational ocean modeling and decision support system to**

• **Provide NMFS and other decision-makers with state-of-the-art ocean forecasts, risk assessments and management options that**

• **Enable climate-informed LMR management.**

Integrated, nation-wide operational system that delivers:

- Ocean forecasts and projections
- Ecosystem projections
- Stock projections
- Risk Assessments
- Adaptation Options
- Strategy Evaluations
- Management capacity
- Builds on NOAA ocean forecast (NOS) and Prediction Systems (OAR/GFDL)
- Regional Ocean Modeling Teams customize products for NMFS uses
- Holistic ocean/BGC predictions, expandable to earth system as needed
- NOAA HPC powers predictions spanning the range of ocean futures
- Robust dissemination through CFI Information Hub & national data stds
Initial funding 2021

• Continue ROMS-MOM6 transition and testing

• Pilot Projects Continue in New England, Eastern Bering Sea, Gulf of Alaska and West Coast

• Continued development of Arctic Grid

Build Phase 2022

○ Data Portal Teams

○ Model Teams

○ FACSS Teams

○ Skill Assessments

○ Model design specifications to meet regional needs

○ Cross – NOAA Communication

○ Testing and implementing tools and products
Questions?