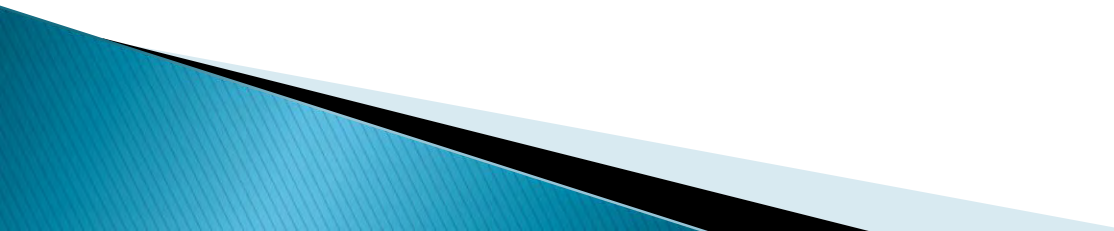


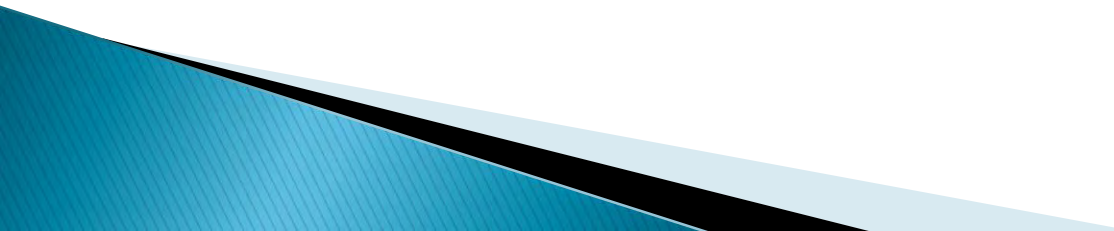
# US National Programs and FUTURE

John Stein, US Delegate  
April 2014  
Future OSM

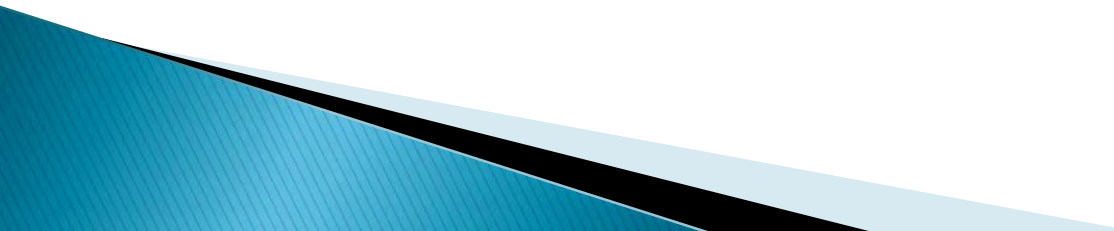
# Overview

- ▶ Research funding is constrained in most agencies
  - ▶ No GLOBEC-like program for FUTURE related questions
  - ▶ Requires innovation and leveraging existing funding options. Few new programs
  - ▶ ‘PICCEans’ in the US are being creative
- 


# NOAA

- ▶ Integrated Ecosystem Assessment Program
  - ▶ FATE (Fisheries And The Environment)
  - ▶ International Cooperation
  - ▶ Ocean Acidification Program
  - ▶ NMFS Science Center Fisheries Oceanography
- 

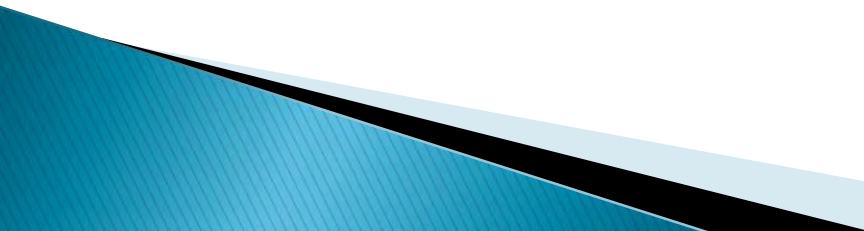
# NOAA Fisheries – IEA

- ▶ Integrated Ecosystem Assessment Program – Funding to West Coast reduced this year
  - ▶ NMFS Centers leveraging staff time to counter act to some degree
  - ▶ Focus is on indicators, risk assessment and ecosystem model development application (scenarios), and SOFE–like efforts
- 

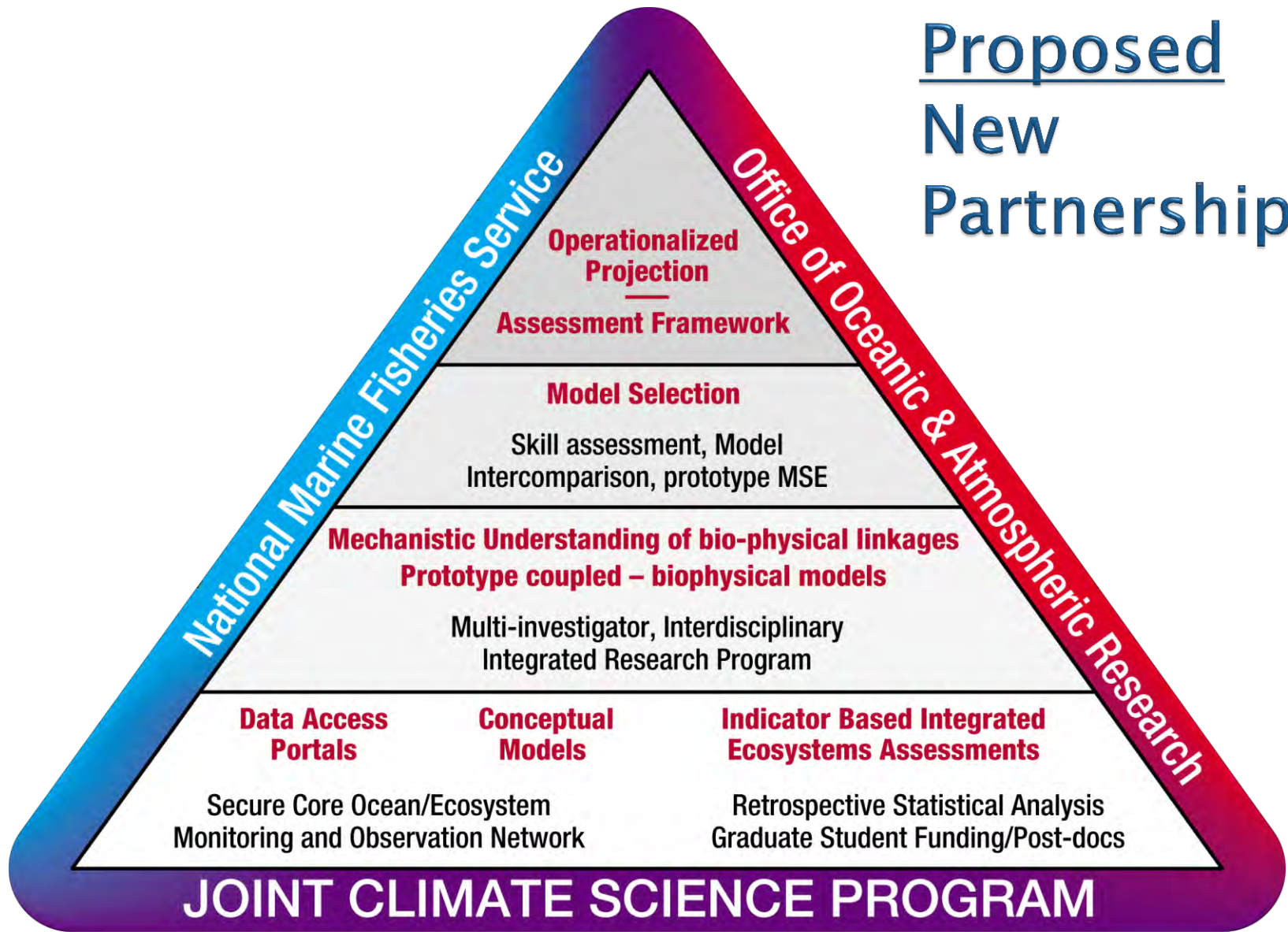
# NOAA Fisheries—FATE

- ▶ Annual program funds about 10 proposals a year plus 6 FTEs
  - ▶ 5 of 6 proposals funded in the Pacific address topics related to FUTURE
  - ▶
  - ▶ J-SCOPE (JISAO's Seasonal Coastal Ocean Prediction of the Ecosystem)
  - ▶ Indicators
- 

# NOAA Fisheries – Int'l

- ▶ Annual RFP for bilateral/multilateral projects
  - ▶ \$25 K limit
  - ▶ Supports workshops, technical exchange, etc.
  - ▶ FUTURE OSM Workshop 4 funded by this RFP
  - ▶ “Ecosystem Projection Model Inter-comparison and Assessment of Climate Change Impacts on Global Fish and Fisheries”
- 

# Proposed New Partnership

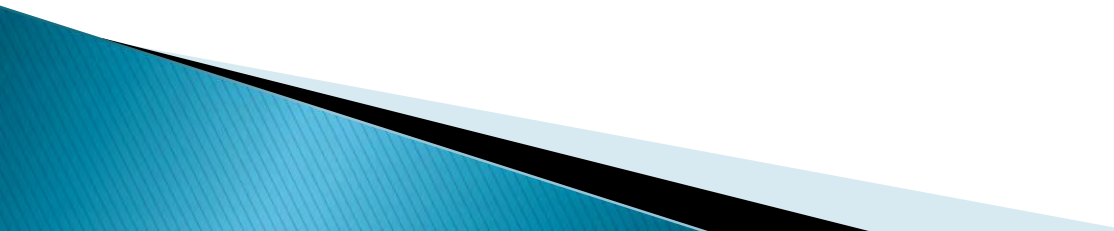


Deliverables listed in **RED**

Funding request listed in **BLACK**

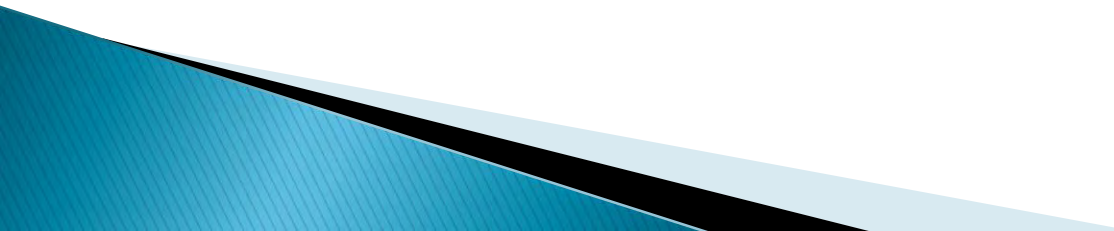


# NOAA OA Program


- ▶ Ocean Acidification Program
  - ▶ Cross Line Office Initiative
  - ▶ Monitoring, Modeling, Laboratory Studies
  - ▶ Funding joint efforts on the West Coast
  - ▶ Some prospect of increased support
  - ▶ Congressional interest is high, constituent support
- 



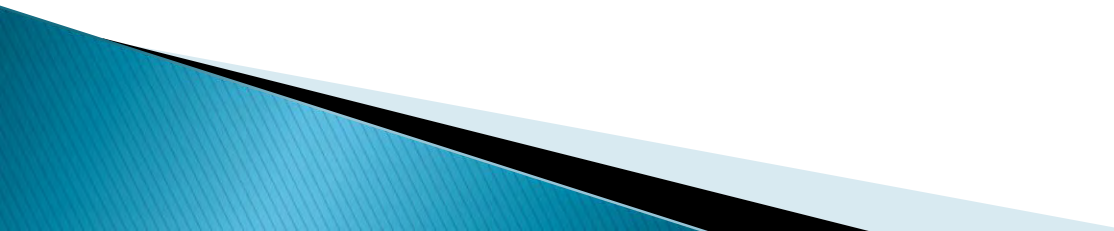
# NMFS Science Centers

- ▶ Alaska, Pacific Islands, Northwest and Southwest
  - ▶ Fish, Marine Mammal and Invertebrate surveys
  - ▶ Process Studies – striving to maintain core investigations
- 

# NSF/NASA/NOAA

- ▶ All agencies are supporting some form of ocean carbon or ocean acidification initiatives
  - ▶ Mentioned OA program of NOAA
  - ▶ Addressing climate adaptation/mitigation needs, more on adaptation
  - ▶ National Climate Assessment (US Global Change Research Program)
- 

# National Science Foundation

- ▶ OA Solicitation (closing)
  - ▶ Science, Engineering, Education for Sustainability (SEES)
  - ▶ Coastal SEES
  - ▶ Arctic SEES
- 

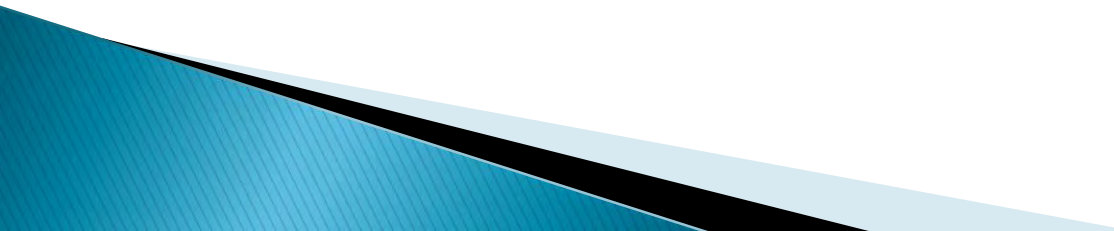
# SEES

To advance science, engineering and education  
to inform the societal actions needed for  
environmental and economic sustainability and  
sustainable well-being

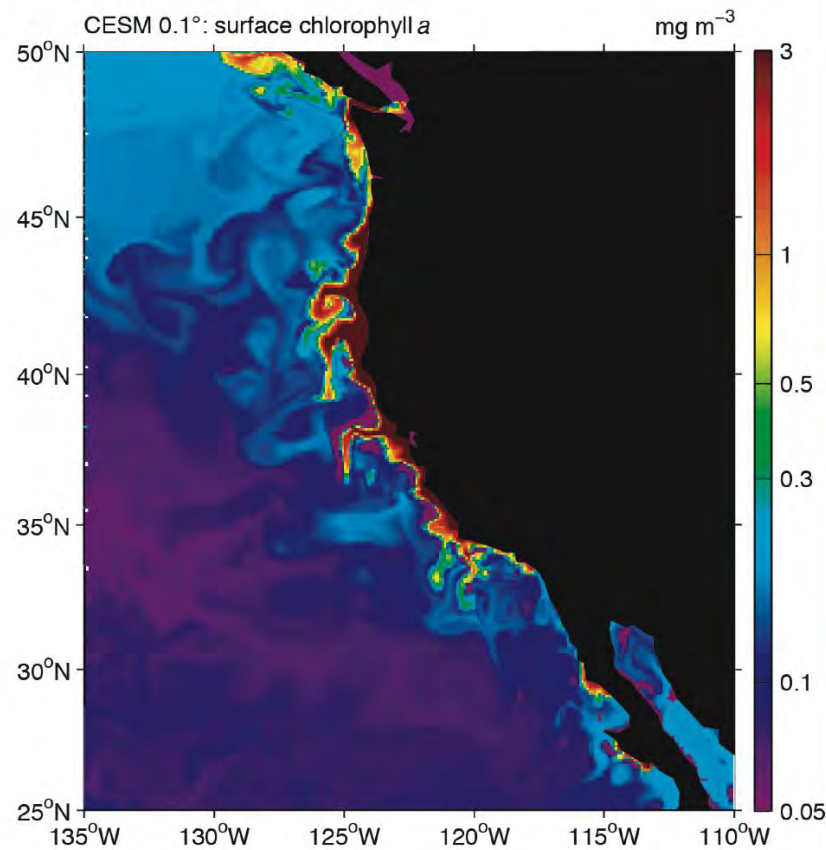
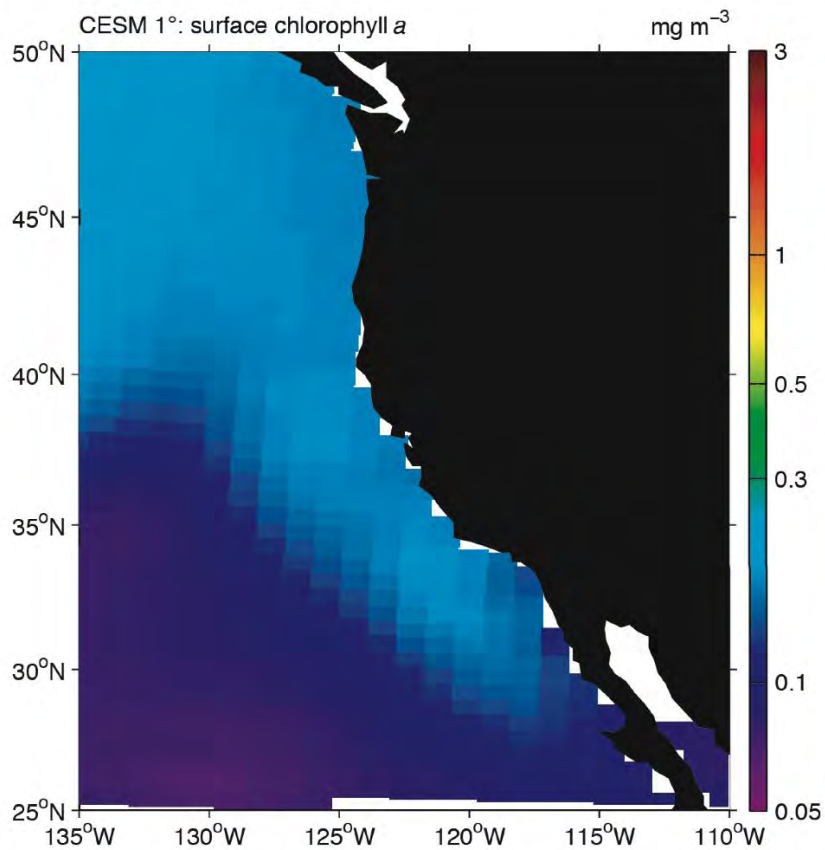
Connection to FUTURE



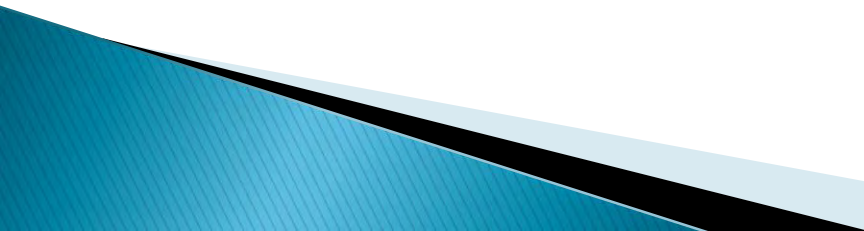
# NCAR and GFDL

- ▶ Higher Resolution Coupled Physics and Biogeochemistry Models
  - ▶ Recognition of the need to move in this direction
  - ▶ Also recognition of need for regional downscaling (partnership). Increase application to regional issues
- 

# Emerging directions: High-resolution global coupled models



# Conclusion -- Present and Future

- ▶ FY 14 (current year) – budget deal stopped the reductions in several NOAA programs
  - ▶ FY 15 – Unknown, but some optimism because budget deal is in place
  - ▶ FY 16 – Concern, budget deal expires, sequestration still in place. Crystal ball is very hazy
- 



# Conclusion

- ▶ Be creative
  - ▶ Be innovative
  - ▶ Dr. Kathy Sullivan confirmed as Head of NOAA – “critical environmental intelligence”
  - ▶ Glass half full
- 