

# <u>Understanding Climate Impacts on</u> <u>Fish Stocks of the Northeast Shelf Large Marine Ecosystem:</u> <u>Key Research Needs and Future Directions</u>

9:00-4:30, 23 July, 2013 Omni Providence Hotel, One West Exchange St., Providence, RI 02903

## **WORKSHOP PURPOSE:**

Provide a forum for the climate, oceanography and fisheries science community to share knowledge and identify priority science needs and opportunities to advance understanding of the impacts of climate variability and change on fish stocks of the U.S. Northeast Shelf Large Marine Ecosystem.

# **AGENDA:**

8:30-9:00	Registration and coffee etc
9:00-9:30	WELCOME AND PURPOSE
	Dr. Bill Karp, Director, NOAA Northeast Fisheries Science Center
	Dr. Jason Link, Senior Ecologist, NOAA Fisheries Service
9:30-10:15	SETTING THE STAGE PRESENTATION 1:
	Climate - ocean interactions in the NE region – current understandings, key
	science challenges (30 min presentation, 15 min Q&A)
	(Dr. Michael Alexander, NOAA Earth System Research Laboratory)
10:15-11:00	SETTING THE STAGE PRESENTATION 2:
	Climate - fisheries interactions the NE region - current understandings, key
	science and management challenges (30 min presentation, 15 min Q&A)
	(Dr. Jon Hare, NOAA Northeast Fisheries Science Center)
11:00-11:10	CHARGE TO BREAKOUT GROUPS - Framing science priorities
11:10-11:30	Break



### 11:30-12:15 BREAKOUT GROUPS IDENTIFY TOP SCIENCE PRIORITIES

INSTRUCTIONS – Each group should identify top priority science needs and opportunities to improve our understanding of the impacts of climate variability and change on fish stocks of the U.S. Northeast Shelf Large Marine Ecosystem.

- 1. WHAT ARE THE PRIORITY SCIENCE NEEDS TO IMPROVE UNDERSTANDING OF CLIMATE IMPACTS **ON THE REGIONAL OCEAN CONDITIONS**?
- 2. WHAT ARE THE PRIORITY SCIENCE NEEDS TO IMPROVE UNDERSTANDING OF CLIMATE IMPACTS **ON THE BIOLOGICAL COMPONENTS OF THE ECOSYSTEM**?
- 3. WHAT ARE THE PRIORITY SCIENCE NEEDS TO IMPROVE UNDERSTANDING OF CLIMATE IMPACTS **ON FISH STOCKS AND FISHERIES**?
- 4. WHAT KEY STEPS, EXISTING EFFORTS, COLLABORATIONS OR OTHER OPPORTUNITIES MIGHT HELP ADDRESS THESE NEEDS?

12:15-1:15	LUNCH
1:15-2:45	BREAKOUT GROUPS - CONTINUED
2:45-3:00	BREAK
3:00-4:15	Report out from Breakout groups on science priorities and key steps/opportunities to address these needs.
4:15-4:30	General discussion on how to advance science and collaboration in this area.
4:30	Adjourn

### Organizers:

Northeast Fisheries Science Center, NOAA Fisheries Service
Geophysical Fluid Dynamic Laboratory, NOAA Oceanic and Atmospheric Research
Joint Office for Science Support (JOSS)