

East Coast Forum
Duke University Marine Lab
May 7-8, 2015 • Beaufort, NC

Risk-Based Management and Management Strategy Evaluation

Forum objectives

The purpose of the 2015 East Coast Forum is to build capacity among council members, council staff, and science advisors to support the effective treatment and communication of uncertainty, and to explore the concept and implementation of risk-based management approaches. Specifically, participants will:

- Build awareness of regional and national efforts to advance the treatment of uncertainty in the federal fisheries management process;
- Discuss opportunities for improving communication about the sources and treatment of uncertainty across the science-policy interface;
- Examine risk-based management approaches for evaluating the sources and implications of uncertainty, and explicitly incorporating risk (the probability and severity of consequences) into decision-making;
- Explore the concept and application of management strategy evaluation (MSE) for simulating and evaluating the performance of management strategies under conditions of uncertainty, and consider the roles, responsibilities, and logistics of utilizing MSE within the council process; and
- Reflect on the benefits and limitations of characterizing uncertainty, and discuss how strategic approaches to addressing uncertainty can promote robust and effective long-term management outcomes.

Wednesday, May 6th

6:30 – 9:00 pm

Welcome reception (light dinner)

Front Street Grill at Stillwater, 300 Front St (private event space upstairs at The Landing). Walking directions provided. This is casual! Late arrivals are encouraged to join.

Agenda begins on following page.

Day 1: Responding to uncertainty through risk-based management

Thursday, May 7th

Meeting room: Repass Center, Duke University Marine Lab (DUML)

7:45 – 8:30 am

Breakfast and transportation to DUML

Shuttle service will be provided beginning at 7:45 am. Walking directions also provided. Coffee and light breakfast will be available in the Repass Center beginning at 8am.

8:30 – 9:00 am

Opening remarks and participant introductions

- Katie Latanich and Kim Gordon, Fisheries Leadership & Sustainability Forum (Fisheries Forum) Co-Directors
- John Virdin, Ocean and Coastal Policy Program Director, Nicholas Institute for Environmental Policy Solutions at Duke University

9:00 – 9:45 am

Addressing uncertainty in fisheries science and management: Expert panel findings and recommendations

Eric Schwaab, Chief Conservation Officer, National Aquarium

9:45 – 10:45 am

Communicating about uncertainty and risk

Fisheries Forum facilitators

Discussion questions:

- What are the roles and responsibilities of council members, council staff, and SSC members in communicating about uncertainty?
- What sources of uncertainty do you find most challenging to communicate and/or address in the management process?
- What is the relationship between uncertainty and risk? How can this relationship be defined and communicated effectively?

10:45 – 11:00 am

BREAK

11:00 – 12:00 pm

Group discussion: Defining risk-based management

Featured example: New England's Risk Policy Working Group

Lori Steele, Fishery Analyst, New England Fishery Management Council

Discussion questions

- What does risk-based management look like in practice? What practices and pathways can councils utilize to consider the probability and the consequences associated with management actions?
- What issues are framing your council's consideration of uncertainty and risk? (For example: risk policy development, climate change, ecosystem-based management, management of data-poor stocks, etc.)

12:00 – 1:00 pm

LUNCH (provided)

Afternoon session: Elements of a risk-based management framework

This session will include a series of discussions exploring elements of risk-based management approaches. Each segment will include a featured speaker and/or regional examples, followed by discussion. Participants are encouraged to share regional experiences and examples.

1:00 – 2:00 pm Part A: Tools for exploring and communicating uncertainty and risk

Featured examples:

- Use of decision tables by the Pacific Council – *Michele Culver, Regional Director, Washington Department of Fish and Wildlife*
- Use of decision tables by the International Pacific Halibut Commission (IPHC) - *Dr. Ian Stewart, Quantitative Scientist, IPHC*
- Developing a risk matrix for New England FMPs – *Lori Steele, New England Fishery Management Council*

Discussion questions:

- What strategies does your region use to portray the sources and implications of uncertainty, and explore risks and consequences?
- How can this information be organized and communicated effectively, e.g. through graphical approaches and tables?
- What are the roles of scientists and decision makers in communicating effectively about the sources and implications of uncertainty?

2:00 – 3:00 pm Part B: The National Standard 1 Guidelines: Exploring the decisions, tradeoffs and risks involved in getting to Optimum Yield

Dr. Wesley Patrick, Acting Branch Chief for Fisheries Policy, Office of Sustainable Fisheries, NOAA Fisheries

Discussion:

Share an example of a time your council was presented with new information that prompted an increase or decrease in catch. What factors might support a more rapid response to new stock assessment results? A more gradual response? Why?

3:00 – 3:15 pm BREAK

3:15 – 4:15 pm Strategic investments in science and data collection: constructing a risk-based science portfolio

Dr. Rick Methot, Senior Scientist for Stock Assessments, NOAA Fisheries

4:15 – 5:00 pm Wrap-up discussion

6:30 – 9:00 pm Reception and dinner

Blue Moon Bistro, 119 Queen St. Walking directions provided.

Day 2: Introduction to Management Strategy Evaluation (MSE)

Friday, May 8th

Meeting room: Repass Center, Duke University Marine Lab (DUML)

- 7:45 – 8:30 am** **Breakfast and transportation to DUML**
- 8:30 – 9:00 am** **Recap of Day 1/Introduction to MSE**
Fisheries Forum staff and invited speakers
- 9:00 – 10:00 am** **Management strategy evaluation fundamentals**
Dr. Jim Ianelli, Fisheries Biologist, Alaska Fisheries Science Center, NOAA Fisheries
- 10:00 – 10:15 am** **BREAK**
- 10:15 – 12:30 pm** **Regional examples: Management strategy evaluation in practice**
- Atlantic mackerel and summer flounder
Dr. John Wiedenmann, Assistant Research Professor, Department of Marine and Coastal Sciences, Rutgers University
 - King mackerel and ABC control rules
Dr. Mike Wilberg, Associate Professor, Chesapeake Biological Laboratory, University of Maryland Center for Env. Science
 - International Pacific Halibut Commission
Dr. Ian Stewart, IPHC
 - Southern bluefin tuna
Dr. Jim Ianelli, NOAA Fisheries
- 12:30 – 1:30 pm** **LUNCH** (provided)
- 1:30 – 3:00 pm** **Management strategy evaluation and the U.S. federal fisheries management framework**
Fisheries Forum facilitators and speakers

Discussion questions:

- What are the roles, responsibilities, and resources involved in developing and supporting an MSE process?
- What are similarities and differences between MSE as utilized in the council process, and in international and multilateral management settings?
- What does it mean to build MSE capacity? What are the opportunities, considerations, and challenges of wider utilization of MSE within the federal fisheries management framework?

- 3:00 – 3:15 pm** **BREAK**

3:15 – 4:30 pm **Looking ahead: Building capacity to support risk-based management**
Fisheries Forum facilitators

Discussion questions

- How do risk-based management approaches challenge your thinking about uncertainty? (For example, evaluating management strategies against a range of plausible scenarios, rather than a single “best estimate.”) How can this conceptual shift be understood and communicated effectively?
- What opportunities exist to apply risk-based management to current and emerging challenges?

4:30 – 5:00 pm **Wrap-up and closing remarks**

5:00 – 6:00 pm **Reception**

Back deck, DUML dining hall. A shuttle will be available between DUML and the Beaufort Inn.

6:00 – 7:30 pm **Dinner**

DUML dining hall. Return shuttle to Beaufort Inn provided following dinner.