



- What would be valuable to you?
- How shall be best engage with you and the NPFMC moving forward?



In "Managing Our Nations Fisheries 3 and subsequent congressional testimony NOAA Fisheries and regional Fishery Management Councils identified:

- a need to advance ecosystem-based decisionmaking, and
- overcome impediments to ecosystem-based fisheries management.



Bridge the
G a p
Between
B e s t Practices
And
A c t u a l Practice



Task Force

- Tim Essington, Chair, UW
- Phillip Levin, Co-Chair, NOAA Fisheries
- Kristin Marshall, Project Manager, UW
- Lee Anderson, U Delaware
- Alida Bundy, DFO Canada
- Courtney Caruthers, U AK
- Felicia Coleman , FSU
- Leah Gerber, ASU
- Jonanthan Grabowski, Northeastern Univ
- Ed Houde , U MD
- Olaf Jensen, Rutgers
- Christian Möllmann, U Hamburg, Germany
- Kenny Rose, LSU
- Jim Sanchirico, UC Davis
- Tony Smith CSIRO
- Laura Koehn, UW Graduate Student



Advisory Panel

- Phillip Levin, Chair, NOAA Fisheries
- Michele Culver, PFMC
- Mark Dickey-Collas, ICES
- Michelle Duval, SAFMC
- Mike Fogarty, NOAA Fisheries
- John Henderschedt, NPFMC
- Peter Kendall, NEFMC
- Jason Link, NOAA Fisheries
- Doug Lipton, NOAA Fisheries
- Rick Methot, NOAA Fisheries
- Julie Morris, New College of FL, GCFMC (ret.)



Our Charge

 How can regional fisheries bodies better incorporate ecosystem principles into management and develop Fishery Ecosystem Plans?

This forces us to address four key questions:

- What are the key principles of EBFM that should be included in a fisheries ecosystem plan,
- What is the current status of fisheries management that incorporates these principles?
- What are the gaps between ecosystem knowledge and fishery ecosystem planning?
- What are new approaches that can be used to fill these gaps?



Key principles of EBFM and gap analysis

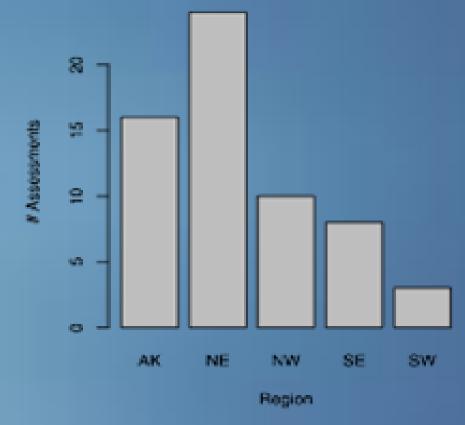
Key Principles of Ecosystem-based Fisheries Management

- A review of the social and natural science literature
- Analysis of the content provided by invited speakers at Task Force Meetings
- A review of existing FEPs, ecosystem information included in stock assessments, and essential fish habitat evaluations
- An evaluation of a series of U.S. and global case studies of fisheries where EBFM would benefit decision making

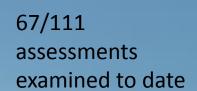


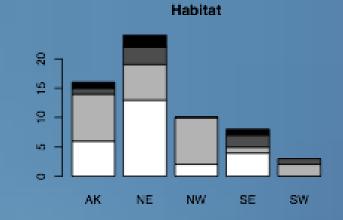
Ecosystem information in stock assessments

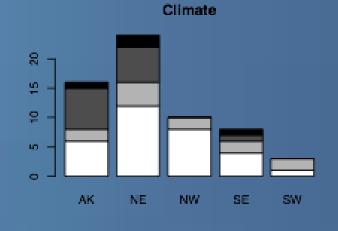
67/111 assessments examined to date

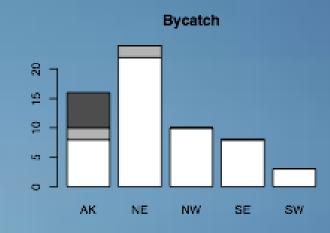


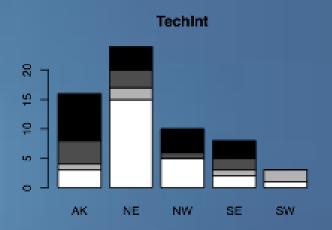


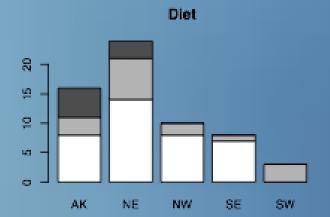


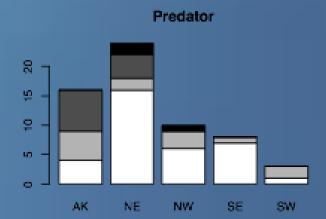














Gaps between ecosystem knowledge and fishery ecosystem planning

Focal Ecosystem Components

Mediating Components

Ecological Integrity Human Wellbeing Fisheries Health & safety Autonomy & self-sufficiency Food webs Socio-cultural relationships **Protected species Economic conditions** Habitat & Ecological Institutions & interactions Governance Climate & Ocean Broad Social, Political & **Human Activities Drivers Economic Forces**

Drivers and Pressures



Case Studies and Tool Development

ECOSYSTEM TASK FORCE

- Lobster Herring Fisheries in New England
- Menhaden in Mid Atlantic
- Butterfish-squid in Mid Atlantic
- Gag grouper and habitat Gulf of Mexico
- Crab-rockfish fishery interactions, California current
- Indigenous use of salmon, food security Alaska
- Groundfish Scotian Shelf Canada
- Baltic sea cod-herring-sprat



Case Studies and Tool Development

- Policy Instruments (examples)
 - Risk pools (sablefish)
 - CDQ's (halibut)
 - Species equivalence in multi-species ITQs (Iceland)
 - Quota Baskets (New Zealand)
 - TURFs
 - etc



SYNTHESIS: A BLUEPRINT FOR FISHERY ECOSYSTEM PLANNING

- Task Force and Advisory Panel meet in
 - May 2015, Portland ME
 - Fall 2015, Annapolis MD
- Council presentations
 - Begin in March 2015 (North Pacific, Pacific, New England, so far)
- Final products
 - Spring 2016