

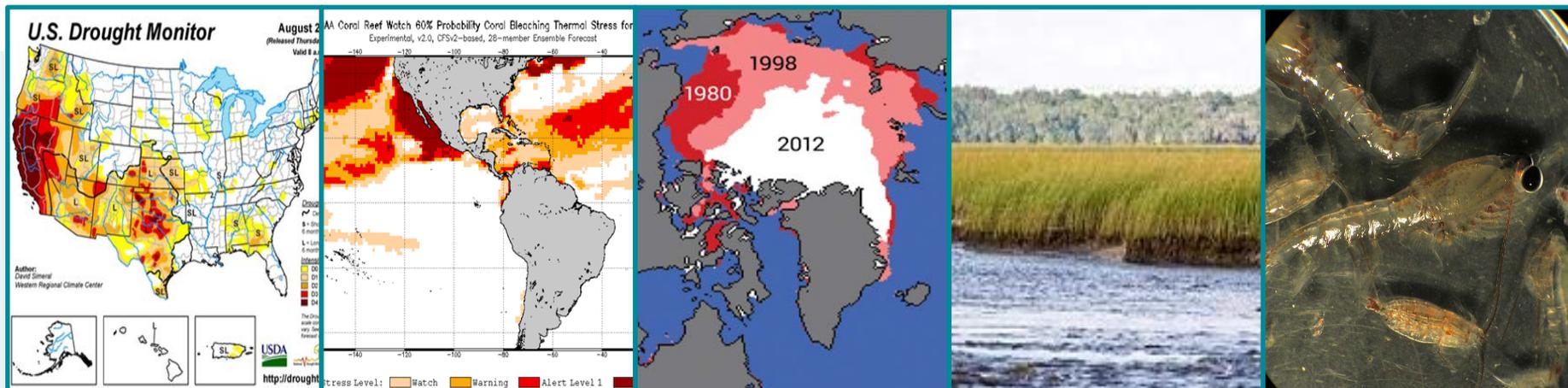
**NOAA
FISHERIES**

Taking Action:

NOAA Fisheries Climate Science Strategy

MAFAC Presentation
October 13, 2015

Growing Challenges for Resource Management



Droughts

Warming Oceans

Loss of Sea Ice

Rising Seas

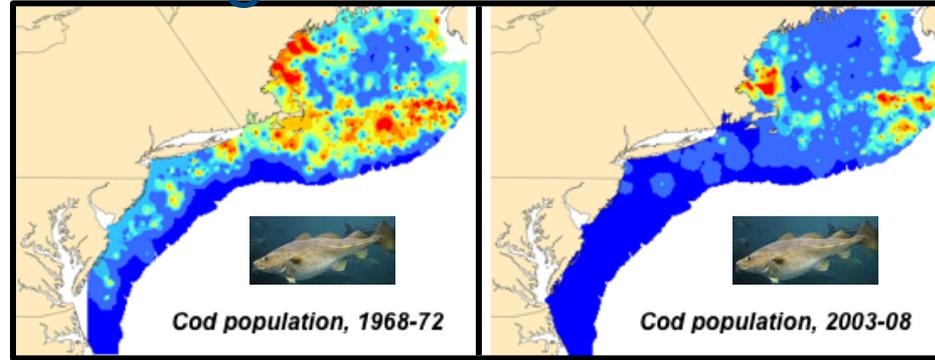
Ocean Acidification

The impacts are real...

Changing Productivity



Shifting Distributions



Changing Abundance



Changing Fisheries

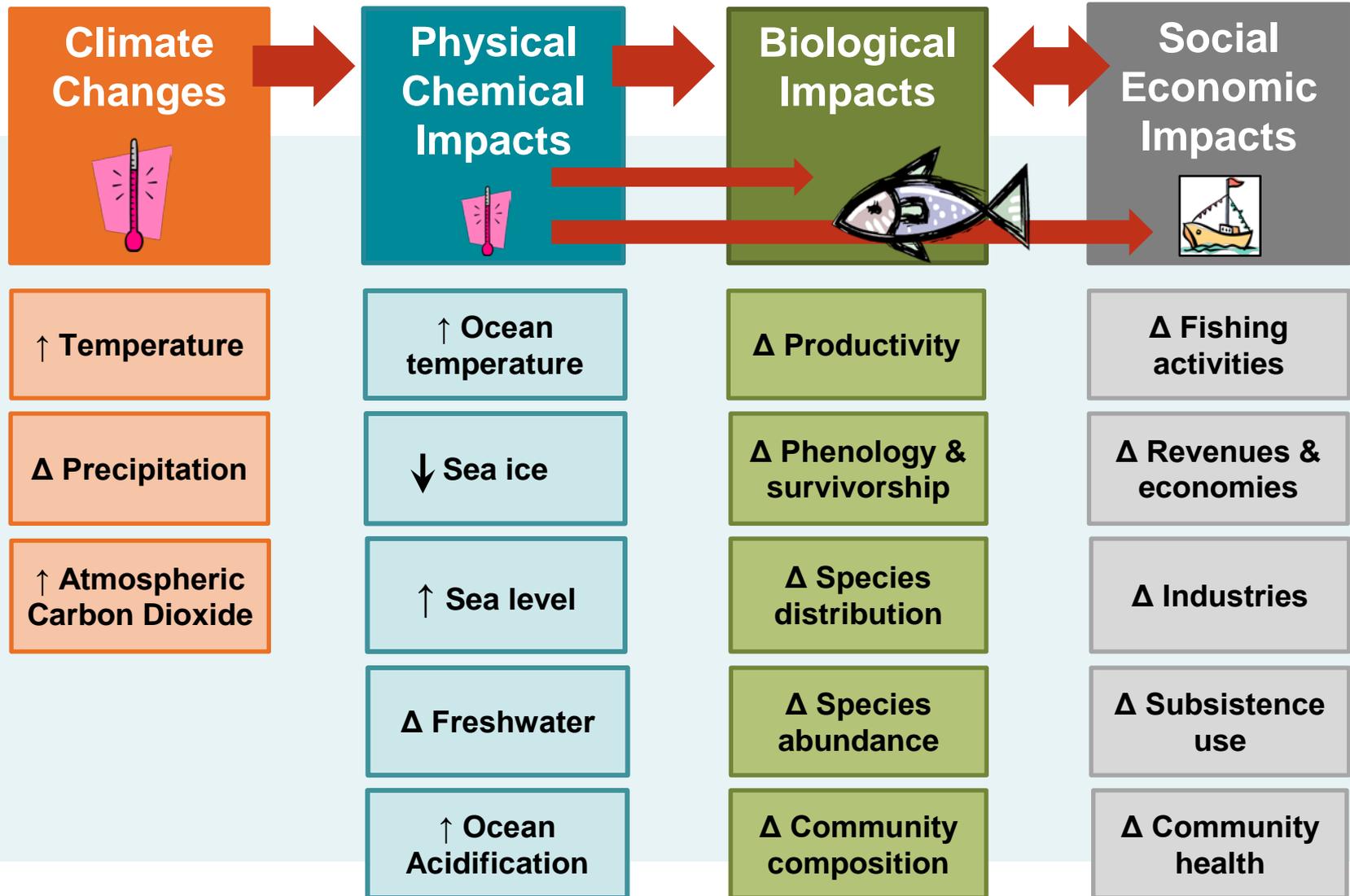


There is much at risk.

- \$ 200 billion
- 1.7 million jobs
- Recreation/tourism
- Food security
- Coastal protection
- Natural heritage

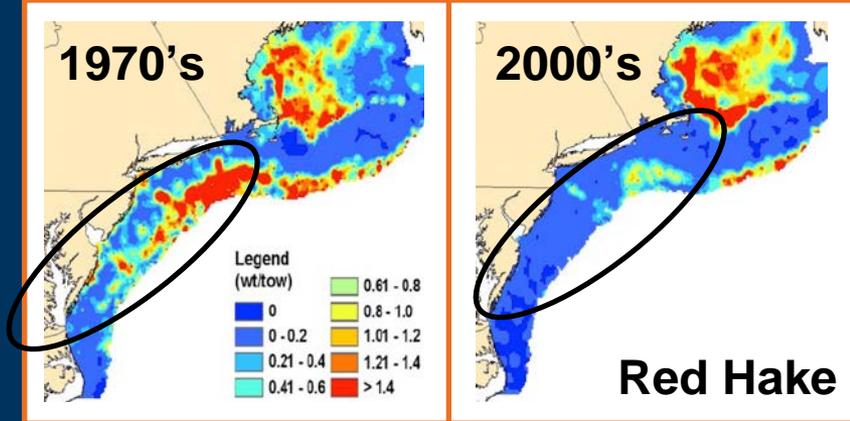


The Impacts Are Expected to Increase

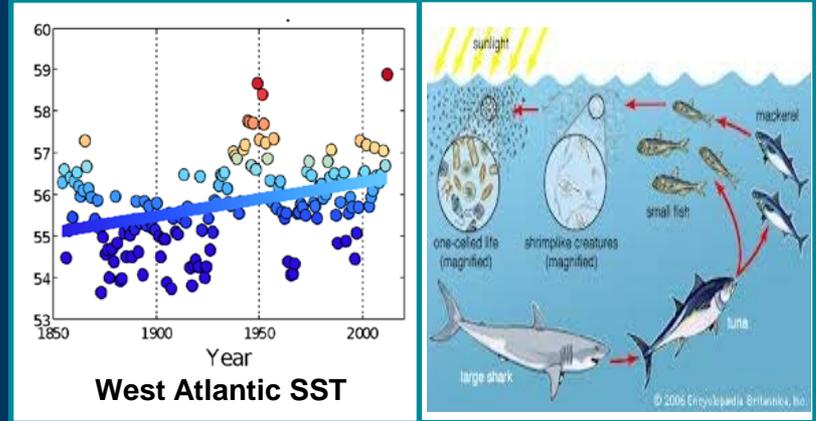


Growing Demands for Information

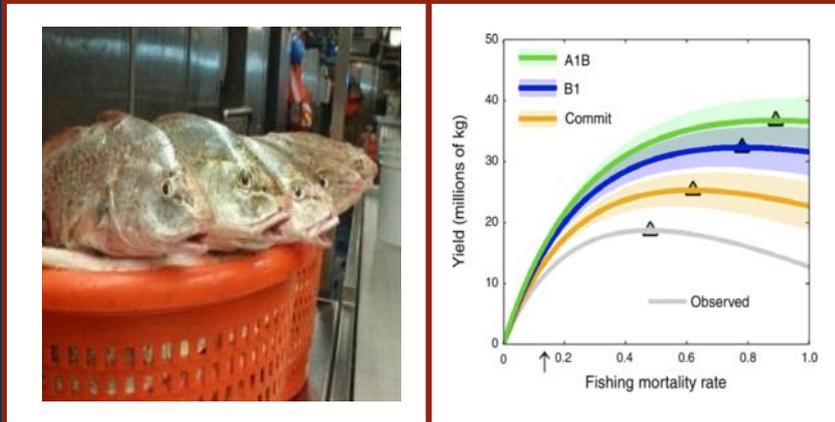
WHAT IS CHANGING?



WHY IS IT CHANGING?



HOW WILL IT CHANGE?



HOW TO RESPOND?





**NOAA
FISHERIES**

NOAA Fisheries Climate Science Strategy Highlights



NOAA FISHERIES

NOAA Fisheries Climate Science Strategy

GOAL

Increase the production, delivery and use of climate-related information to support decisions.

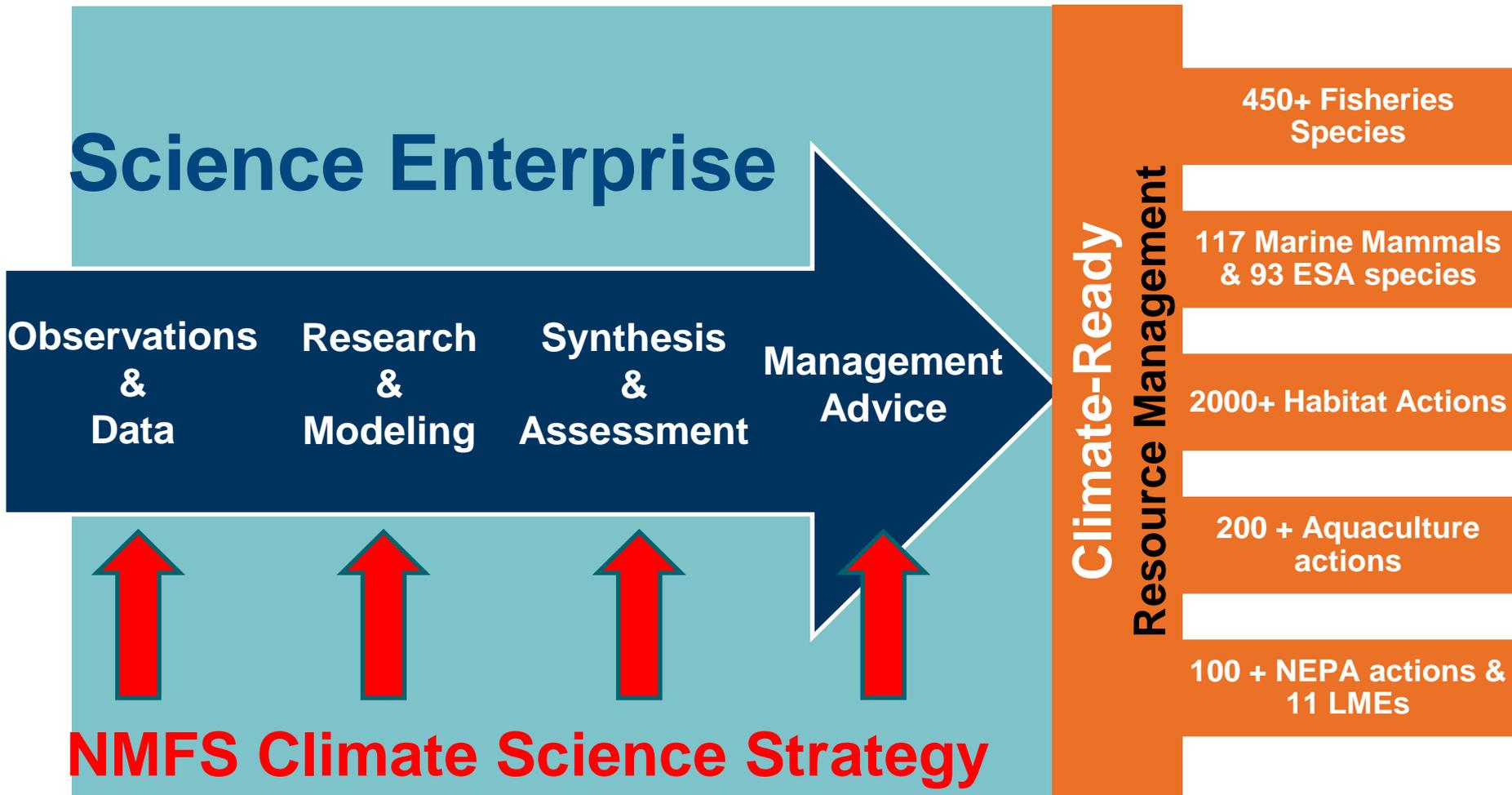
CONTENT

Identifies 7 key objectives to meet NOAA Fisheries information requirements in a changing climate.

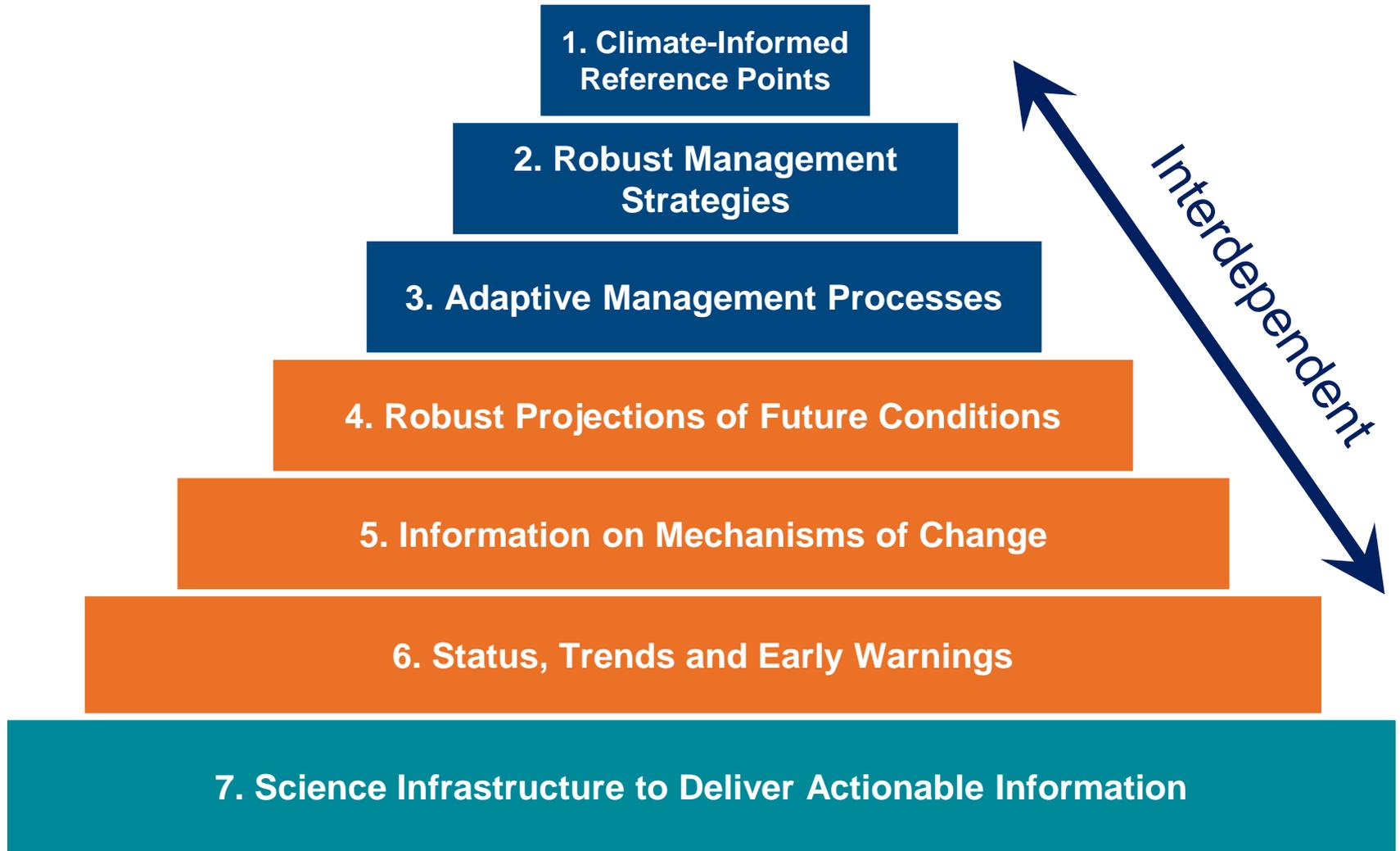
INTENDED USE

Guide development of our science enterprise at national to regional levels.

Meeting NOAA Fisheries Requirements For Climate-Related Information



Climate Science Objectives

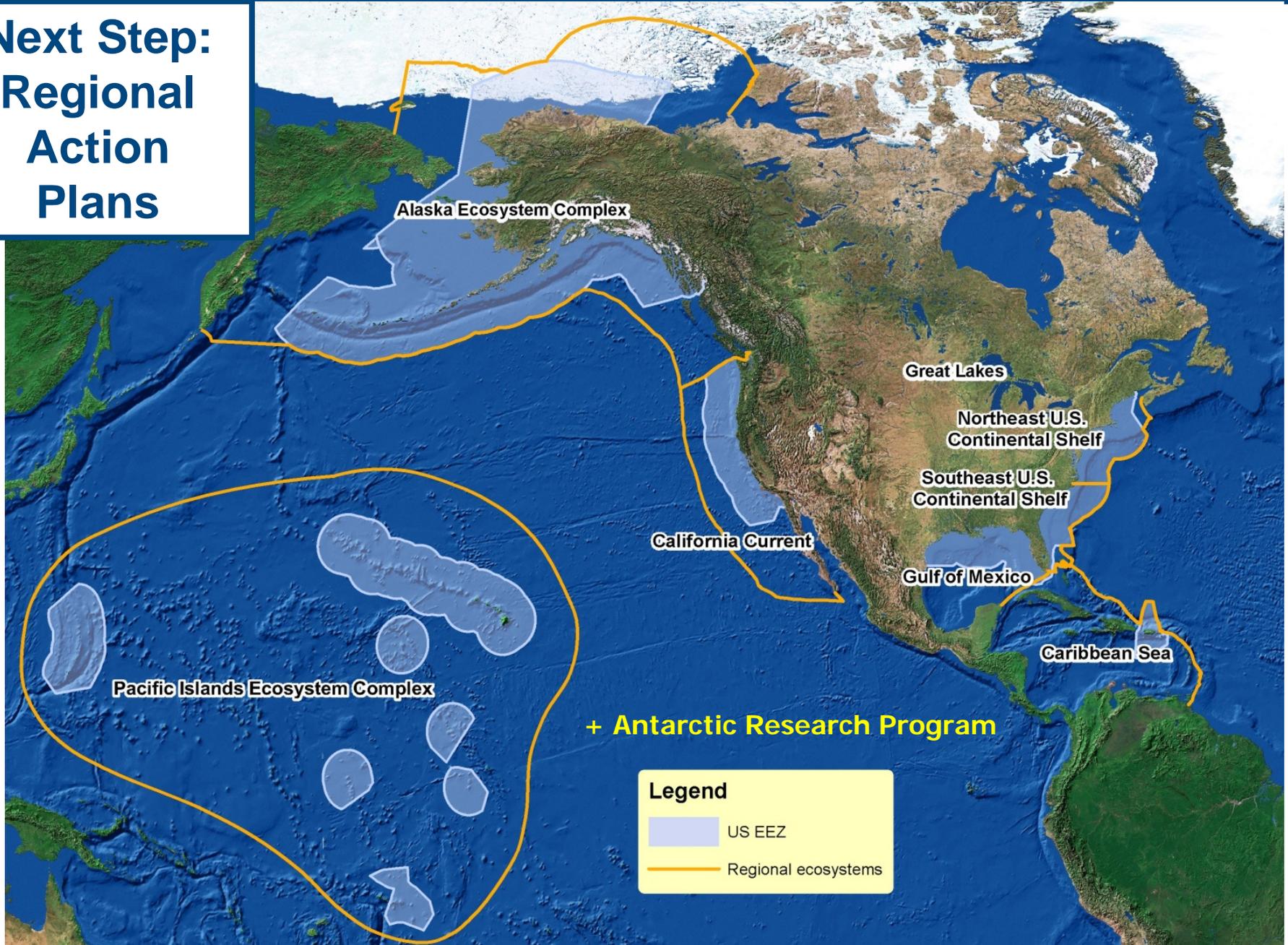


Expected Results

- ***Better tracking*** of ecosystem changes that provide early warnings of climate-related changes.
- ***Increased understanding*** of what's vulnerable and the mechanisms of change.
- ***Near and long term forecasts*** of ocean and resource conditions.
- ***Climate sensitive*** resource assessments and biological reference points.
- ***Robust management scenarios.***
- ***Reduced impacts and increased resilience.***



Next Step: Regional Action Plans



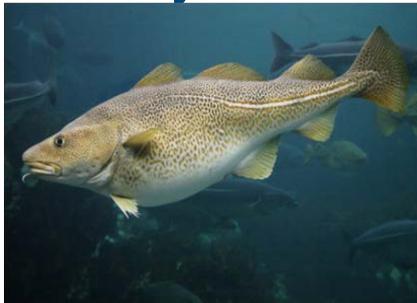
Regional Action Plans

- Customize implementation of the NCSS in each region.
- Inform future agency planning and budgeting.
- Develop with key partners.
- Build and expand partnerships.
- Leverage resources.
- Available in early 2016 for review/comment.
- Final by October 1, 2016.



We need to act now to reduce impacts and increase resilience.

Ecosystems



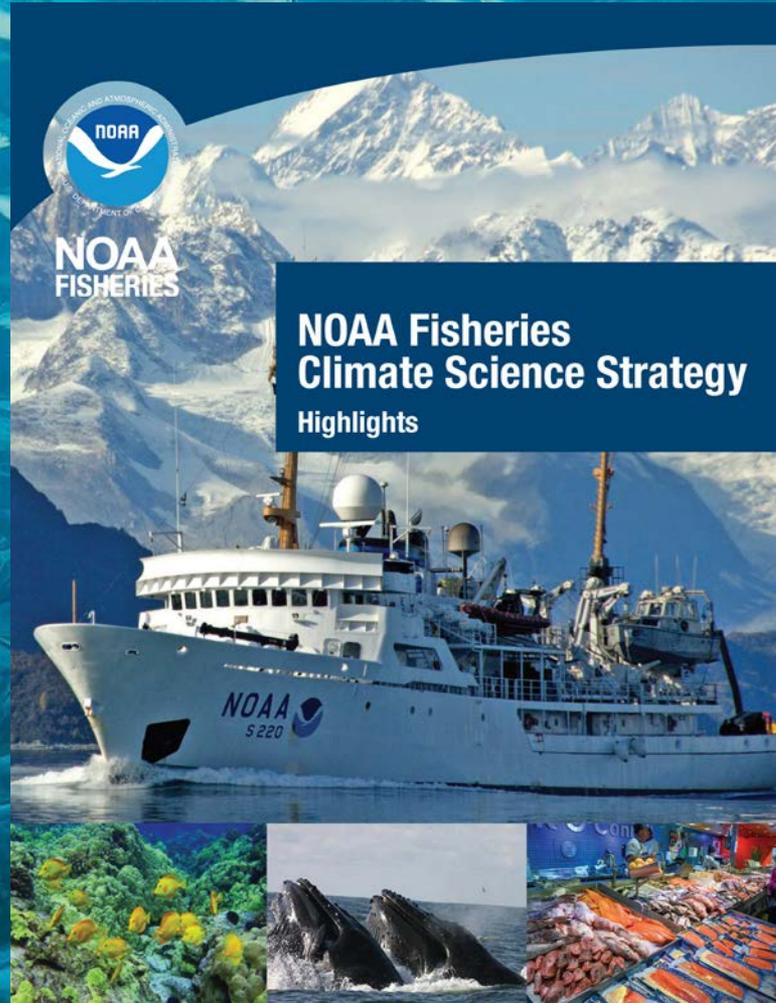
Businesses



Communities



Thank you



www.st.nmfs.noaa.gov/ecosystems/climate