

*Data and information to support
sustainable and profitable
fisheries in a changing world*

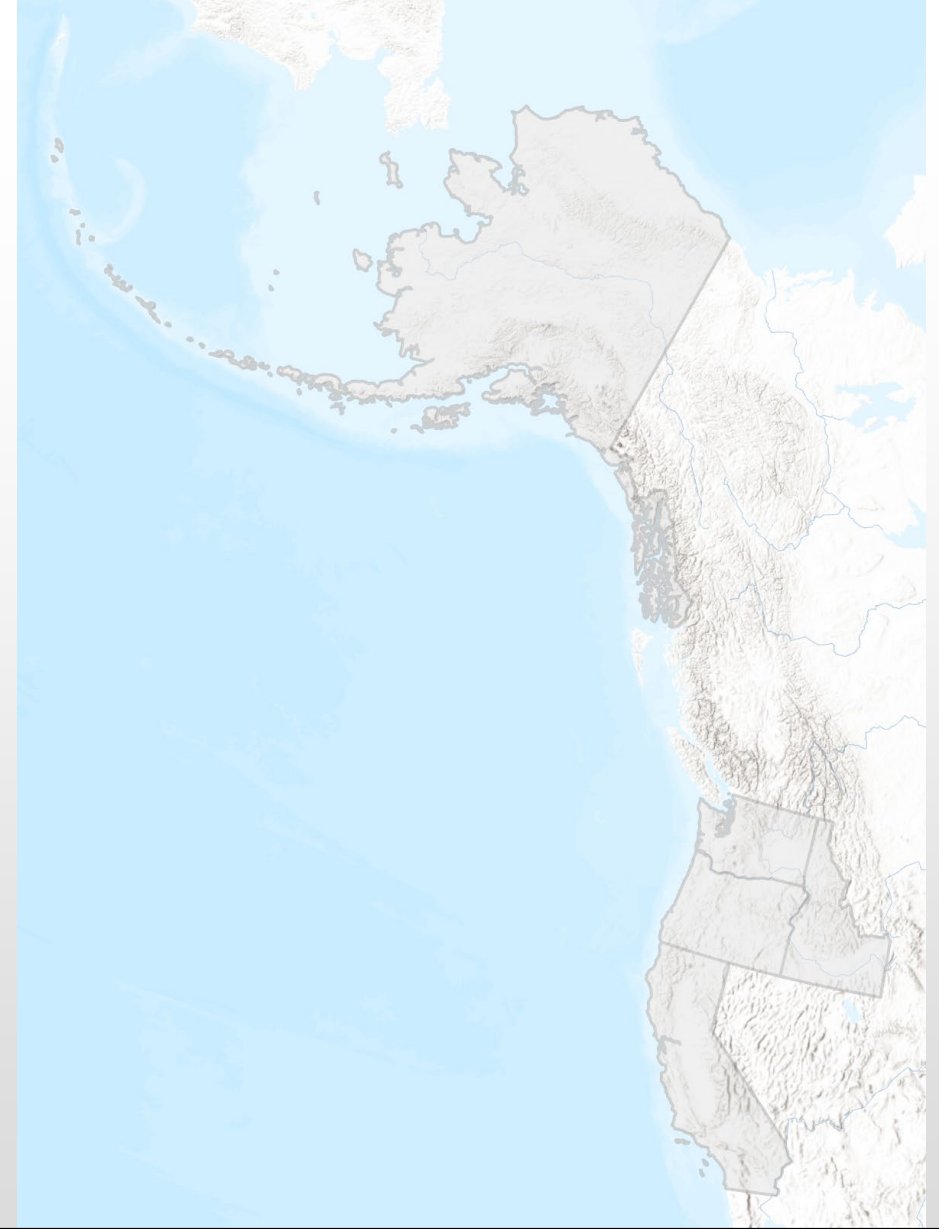
June 27, 2022

Barry Thom
Executive Director
Pacific States Marine Fisheries Commission



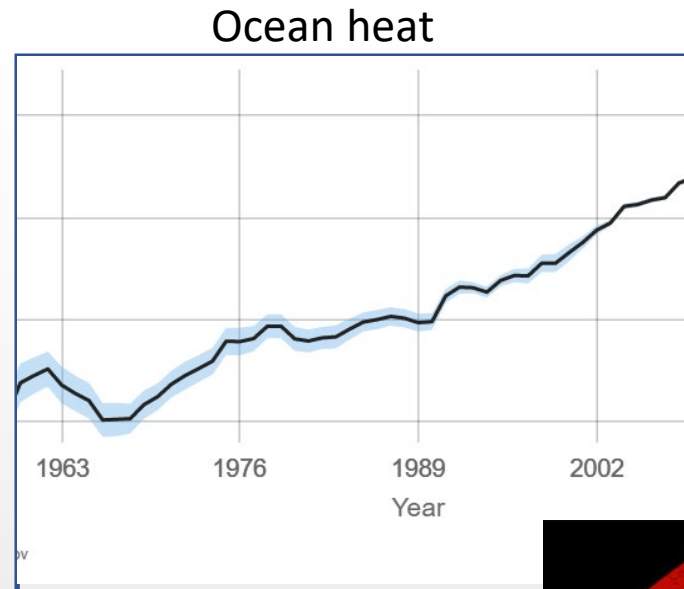
Outline

- What is actually changing?
- What do current systems look like?
- What questions do we really want answers to?
- Thoughts on future systems



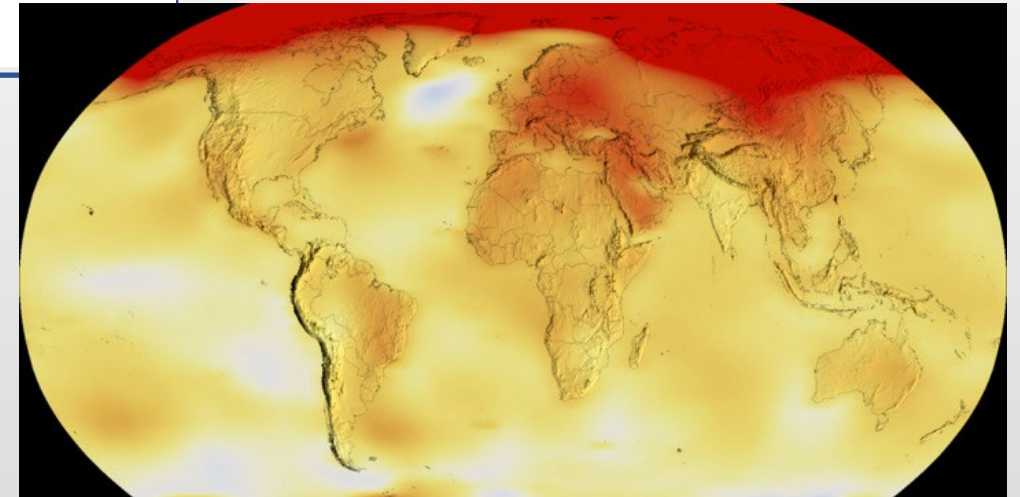
What is changing?

- The stocks themselves
- Technology
- Costs/Investments
- Management Structures
- Markets
- Climate/Ocean Conditions



Credit: NOAA/NCEI World Ocean

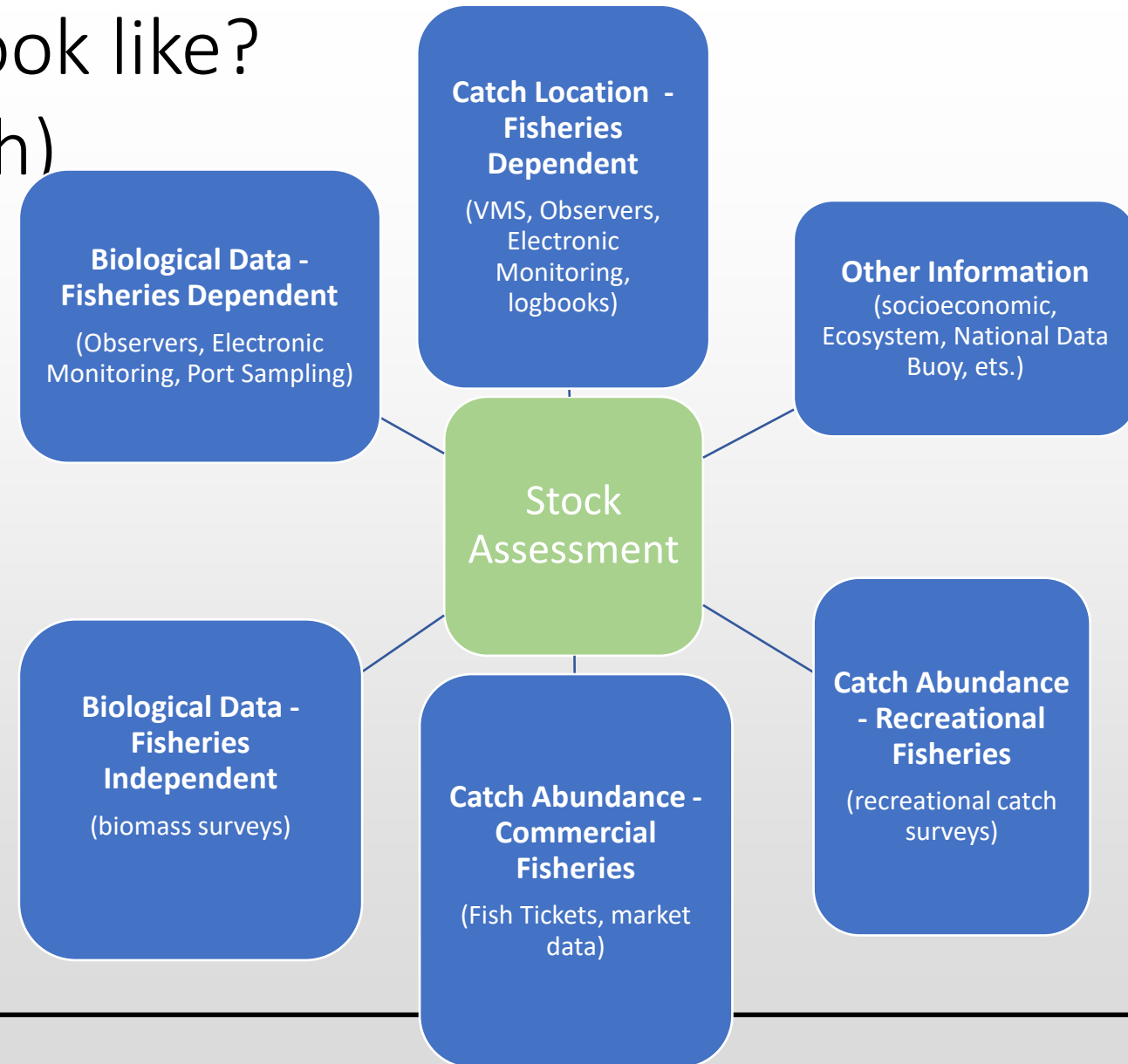
Global Temperature Change



Credit: NASA's Scientific Visualization Studio

What do current systems look like? (U.S. West Coast Groundfish)

- Independent Fisheries Surveys (abundance, size, age)
- Catch records (catch, general location)
- Human Observer Data (size, bycatch)
- Electronic reporting/monitoring
- Ocean and Ecosystem Conditions



What questions do we really want answers to?

- What do managers need?
 - What is the estimate of abundance by stock over time and space?
 - What are acceptable catch levels (targets)?
 - What are the levels of actual catch? Target and non-target
- Which requires:
 - Information to manage the stock
 - Information to manage the fishery
 - Information to manage the fishery in a changing climate



What does the future look like?

- Design and maintain data collection for the long term
- Use of genetics
- Increased electronic data collection
- Oceanographic analysis
- Socio/economic performance
- Data systems to support an increase in data/analysis

