ADAPTIVE MANAGEMENT: IS IT ROBUST ENOUGH TO HANDLE CLIMATE CHANGE?

NATIONAL CONFERENCE ON ECOSYSTEM RESTORATION

ALBUQUERQUE, NM

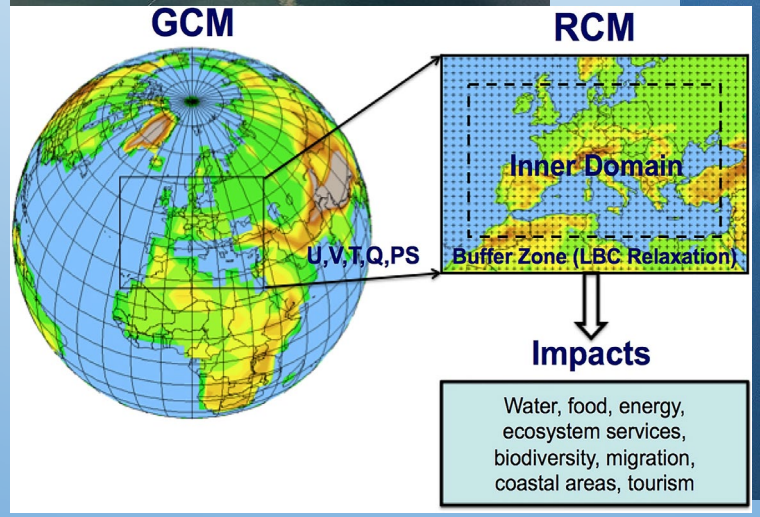
APRIL 2024

Adaptive Management

Objective: Managing complex issues when you don't have all the information

Strategy: Flexible, collaborative and science/information-based approach

Tactics: Science, Structured Decision Making, Collaboration, Constant Learning



ADAPTIVE MANAGEMENT: DESIGNED FOR FLEXIBILITY SOMETIMES ……

Why Adaptive Management?

- Complex problems
- Not enough data
- Diversity of interests

AM Design Components:

- Governance
- Agency Policies
- Science Plan with Metrics and Data
- Structured Decision - Making Process

Implementing Success is Variable and dependent on:

- Agency History
- Developing Trust
- Transparency in Process
- Developing a "new" Culture for AM
- Unanticipated Challenges and Opportunities

Components of Adaptive Management

Governance: The authority to implement Adaptive Management

Policies: Agency direction to act and provide direction for implementation

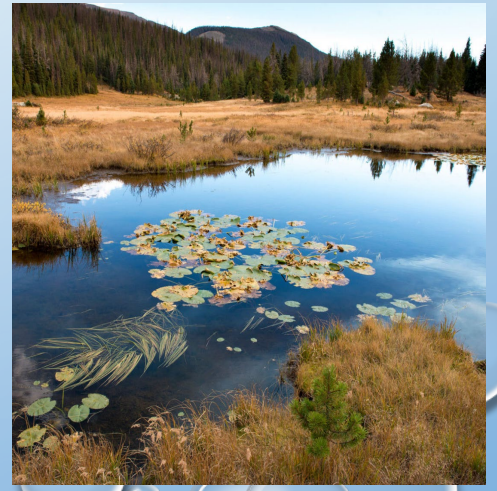
Science Plan: Combination of monitoring, applied and theoretical research, modeling and data management/sharing

Structured Decision Making: Bringing the information and data into a process for making decisions in a transparent manner focused on achieving program goals.

Adaptive Management can Assist in Identifying and Supporting:

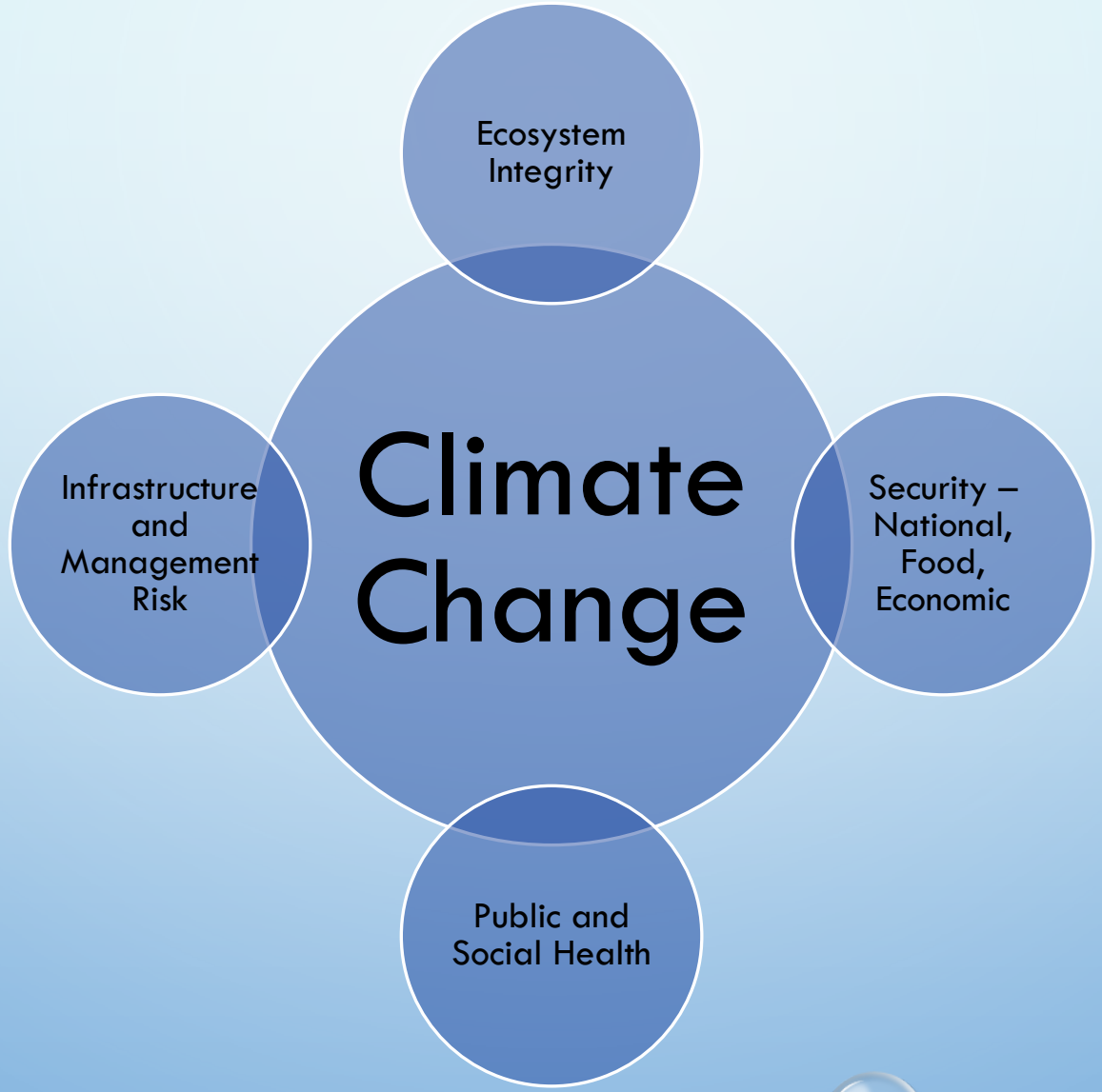
- Climate Change??
- System Resilience to Change
- Operations and Maintenance
- Ecosystem Services



Climate Change impacts:

- At every level
- Is synergistic
- Is a force multiplier
- Temporally and spatially



Our Panel Today

Dr. Roger Pulwarty
NOAA

Climate change: Science and Adaptation

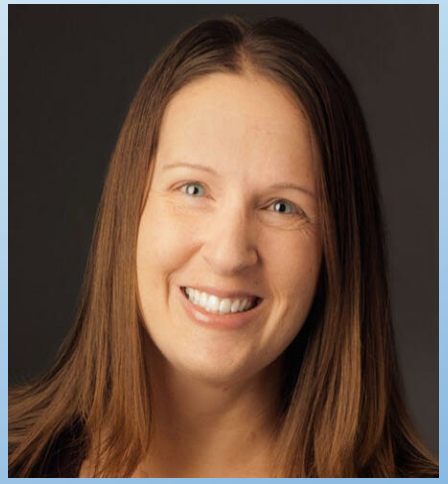
The Everglades

Dr. Fred Sklar
Everglades Foundation

Chesapeake Bay

Dr. Lorie Staver
Univ. of Maryland

Grand Canyon & Colorado River



Dr. Kim Dribble
USGS

Over the next 80 minutes or so:

- **Roger Pulwarty will provide a brief description of the challenges presented by climate change in respect to governance, management and science**
- **Case Studies where Adaptive Management is being applied to particularly complex ecosystem and water management issues:**
  - **Fred Sklar – The Everglades**
  - **Lorie Staver – Chesapeake Bay**
  - **Kim Dribble – Grand Canyon & the Colorado River**

Panel Discussion Exploring the topic:

"Is Adaptive Management robust enough to handle the challenges of climate change"