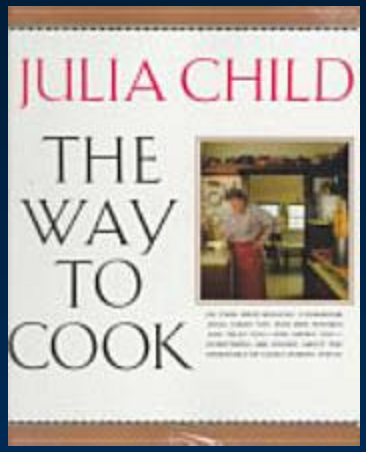
Key Characteristics of Climate-Smart Conservation

Bruce Stein
Director, Climate Change Adaptation
National Wildlife Federation

Guidance for Climate-Smart Conservation

- NWF-led expert workgroup developing criteria and guidance for "climate-smart" conservation
- Broad federal, state, NGO collaboration
- Not a recipe book
  - Rather, "the way to cook"

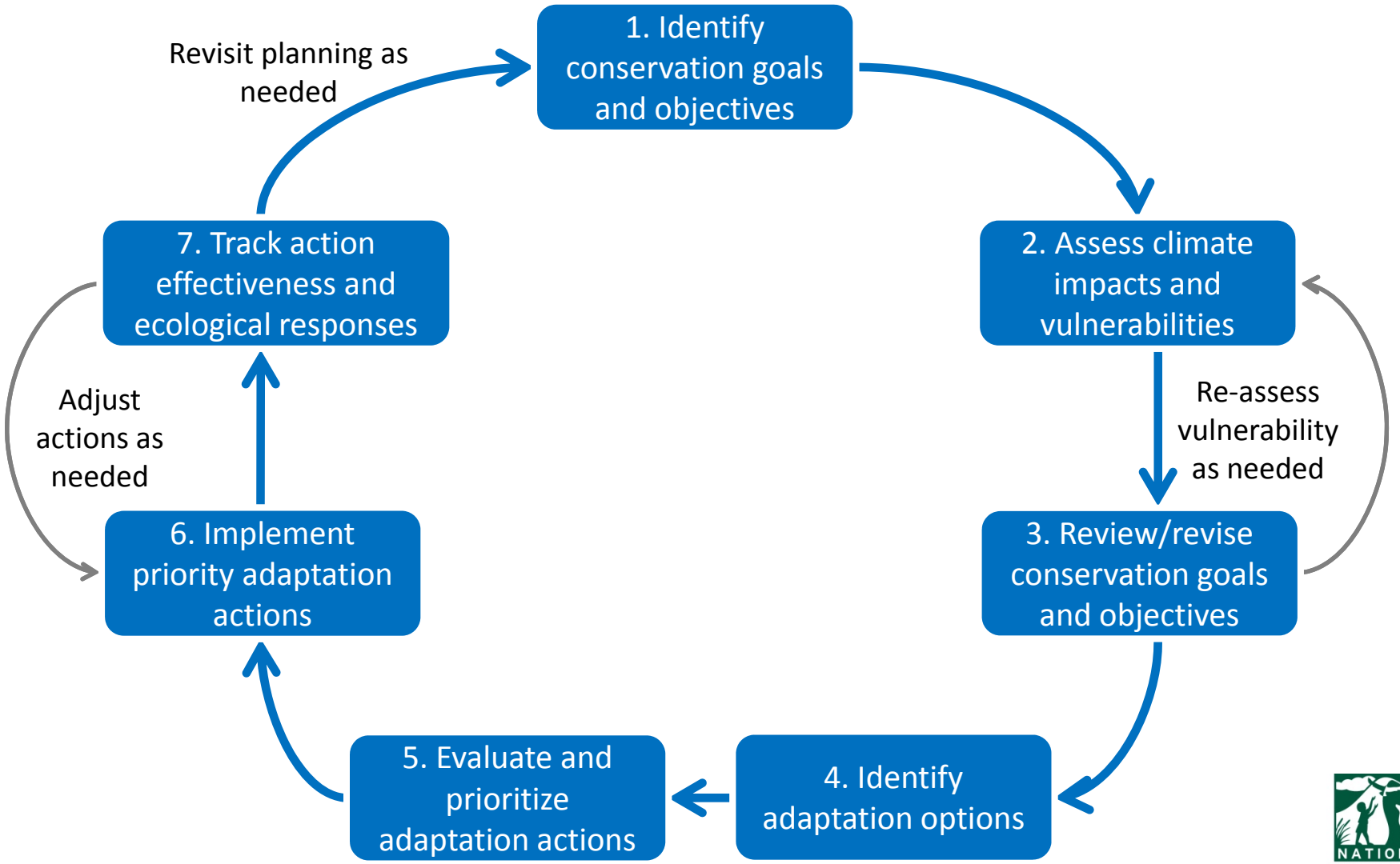


The Secret Sauce for Successful Adaptation

Intentionality

In the face of climate change,
Good Conservation Isn't Good Enough!

Adaptation Planning and Implementation Framework



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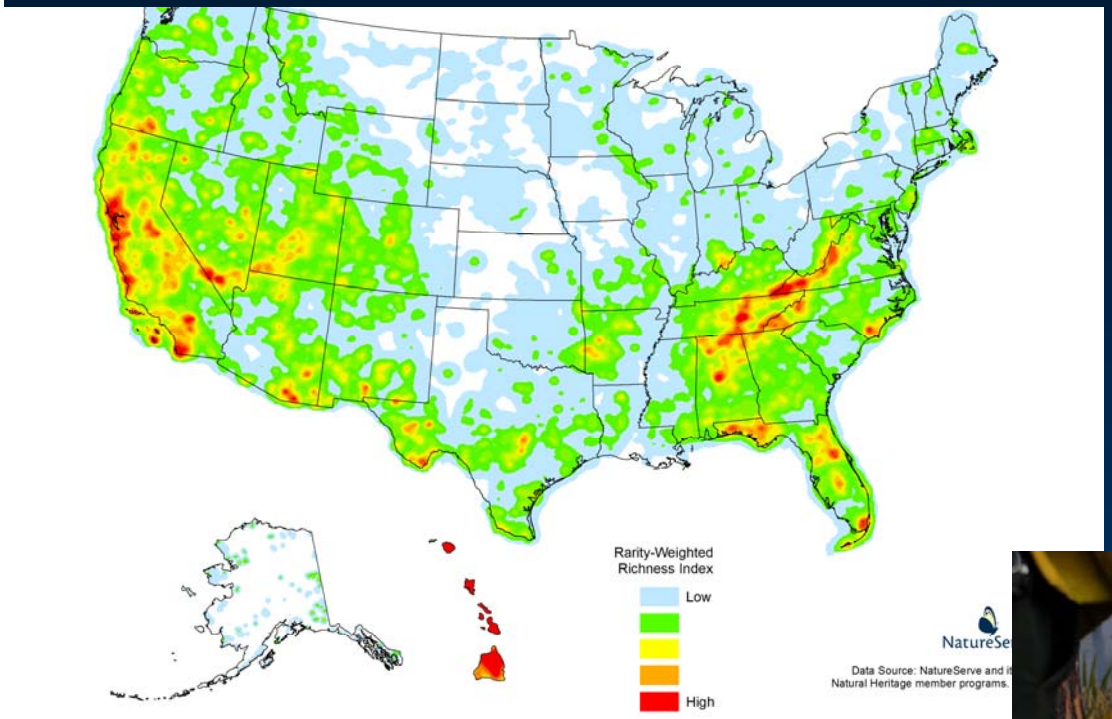
Reconsidering Goals

- Goals are the *what* and *why*; strategies the *how*
- Goals are a reflection of human values
  - Multiple goals can apply to same resource/landscape
  - Conservation goals evolve
  - But… psyschologically demanding
- Need is for "climate-informed conservation goals"
  - Not just "climate-change goals"

From Pattern to Process



Sustaining Pattern at Larger Scales

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Key Characteristics of Climate-Smart Conservation

Forward-Looking Goals

- Be explicit about goals
  - ensure they are climate-informed
- Look forward, but consider historical variability
- Buying time may still have a place

Actions Linked to Climate Impacts

- Show your work!
- Climate lens important even if you continue doing the same thing
- Address short-term threats in a longer-term context

Broader Landscape Context

- Shifting patterns will require broader geographic perspective
- Most actions are local
  - But should have landscape context
- Geographic and institutional boundaries

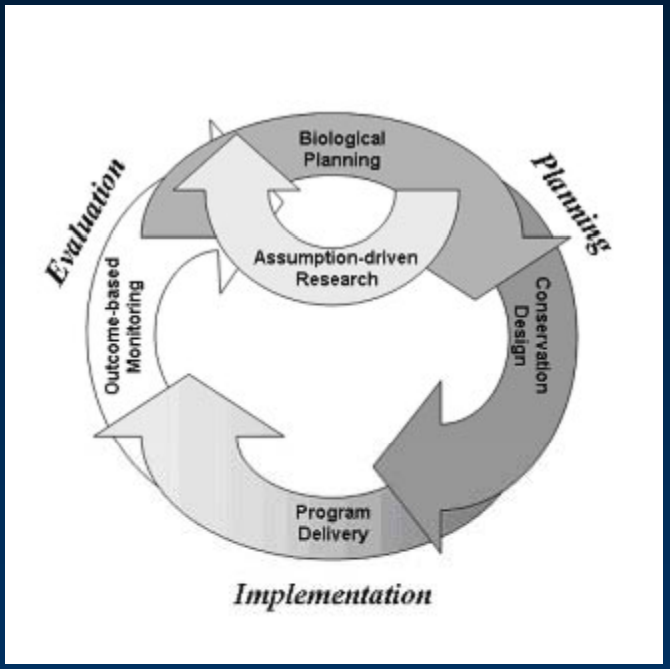
Wyoming fossil palm

Robust in an Uncertain Future

- We will be surprised!
  - Climate shifts
  - Ecological response
  - Human response
- Look for solutions that work across multiple possible futures
  - But some strategies will be scenario-specific

Agile and Informed Management

- Transparency is key
- Continuous and dynamic learning
  - to deal with surprises and uncertainty
- Adaptive management one, but not only approach



FWS Strategic Habitat Conservation framework

Minimizes Carbon Footprint

- Don’t contribute to underlying global warming problem
- Minimize energy use
  - No air conditioners for polar bears!
- Supports ecosystem ability to cycle and sequester carbon/ methane

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Climate Influence on Project Success

- Two types of projects
  - Designed specifically to address climate impacts
  - Existing projects in need of climate “retrofit”
- Consider vulnerability of projects to climate impacts
- Avoid clearly compromised investments
  - Unless part of a considered transition strategy

Degrading wetlands, coastal LA

Safeguards People and Wildlife

- Sustaining ecosystems is important for people too!
- Ecosystem-based adaptation
  - Focuses on using ecological services to reduce human vulnerabilities to climate change

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Avoids Maladaptation

- In addressing one impact, consider consequences for other resources
- Evaluating trade-offs will be increasingly important
- However, one person's adaptation may be another's maladaptative response!

Striving for "Mindfulness" in Adaptation

- Adaptation Intentional
  - Designed to address specific climate impacts
  - Focuses on reducing key vulnerabilities
- Adaptation Consistent
  - Consistent with general adaptation principles, but not linked to specific impacts or vulnerabilities
- Adaptation Neutral
- Maladaptive
  - Actions that increase vulnerabilities or undermine ecosystem resilience

Your Mission:
To Guard Against

Back-off man. I'm a scientist .
– Dr. Peter Venkman

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