

# Symposium:

## Putting Climate-Smart Conservation into Practice



# Climate Smart Conservation: Acting with Intentionality

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April 2, 2013





The future ain't what it used to be.  
-- Yogi Berra



“I skate to where the puck is going to be, not where it has been.”

--- Wayne Gretzky

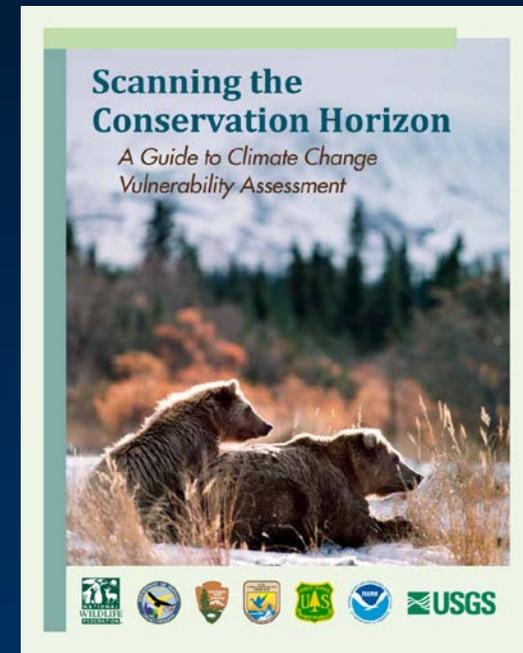
# What Constitutes Good Adaptation?

- Adaptation an emerging field
  - Still poor understanding of what climate adaptation means
- Most guidance still at very high level; little operational advice
- Danger of existing work simply re-labeled as adaptation
- Strong interest in understanding what truly constitutes climate adaptation and how it can be operationalized



# Climate-Smart Conservation Guidance

- NWF-led expert workgroup developing criteria and guidance for “climate-smart” conservation
- Follows on successful guidance publication and training on vulnerability assessment
- Products will include published guide and training course through FWS National Conservation Training Center



# Workgroup Participants

- Federal Agencies

- Fish and Wildlife Service
- National Park Service
- US Geological Survey
- Environmental Protection Agency
- NOAA
- US Forest Service
- Army Corps of Engineers

- NGOs

- National Wildlife Federation
- Wildlife Conservation Society
- EcoAdapt
- Nature Conservancy
- Geos Institute
- PRBO Conservation Science

- State Agencies

- Florida
- Maryland



# Iron Chef Adaptation Version

What's in Your Basket?

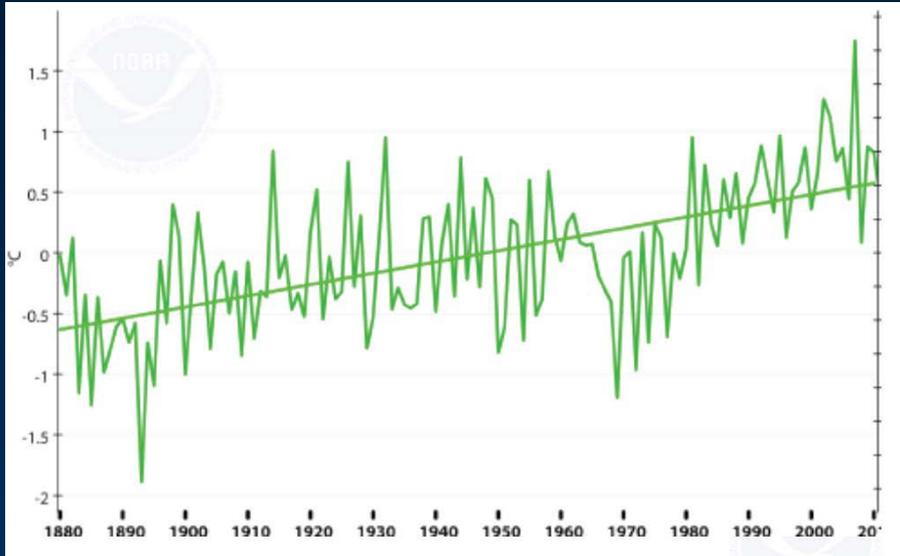


# Act with Intentionality



Need to “Show Your Work!”

# Manage for Change Not Just Persistence



Global Average January Temperatures. Source NOAA 2009

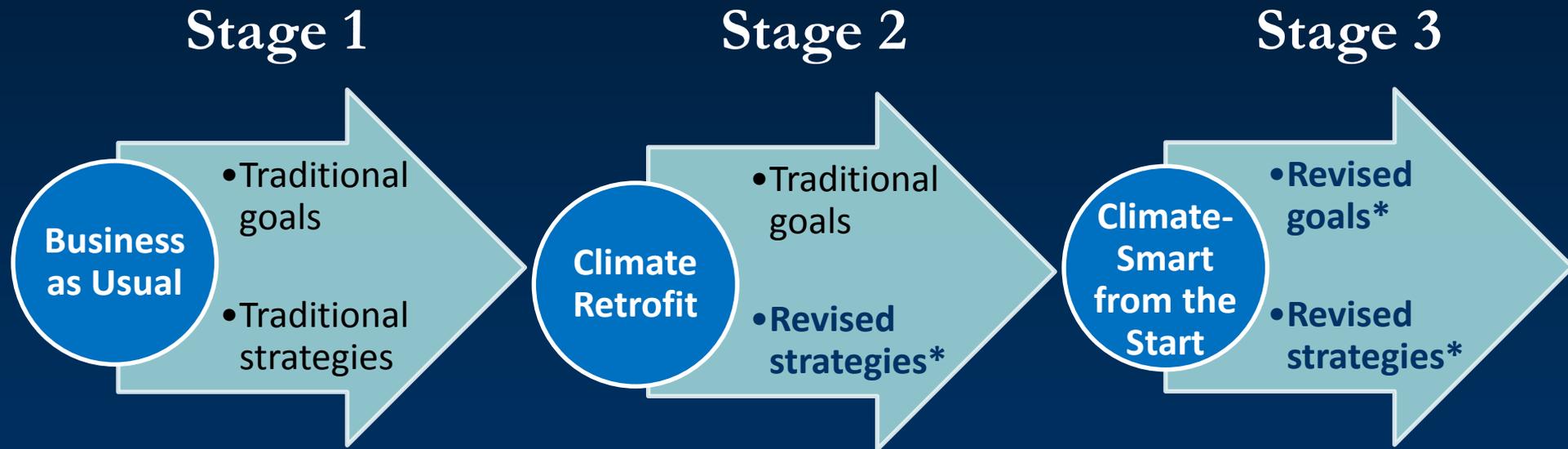


# Reconsider Conservation Goals Not Just Strategies

- Goals are the *why*; strategies the *how*
- Many current goals will no longer be feasible
- Need is for “climate-informed conservation goals”
  - Not just “climate-change goals”
  - Not just changing strategies to meet current goals



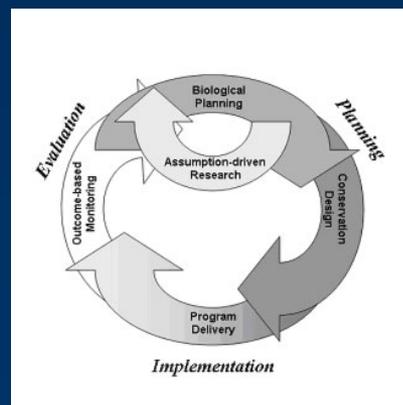
# Aligning Climate-Informed Goals and Strategies



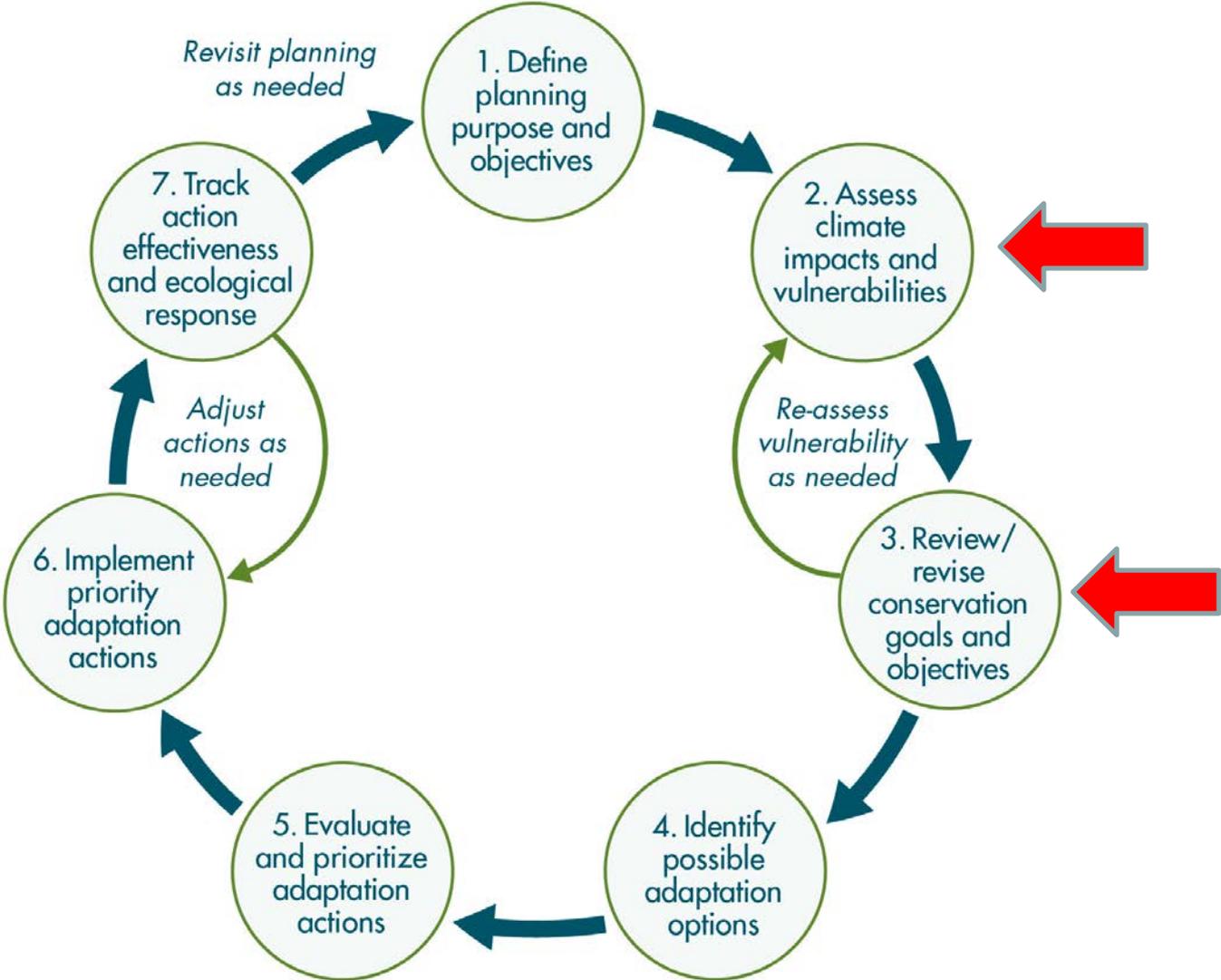
\* Review and revised as needed, based on climate change assessments.

# Integrate with Existing Work

## Not Just Stand-Alone Adaptation Plans



# Climate-Smart Conservation Cycle



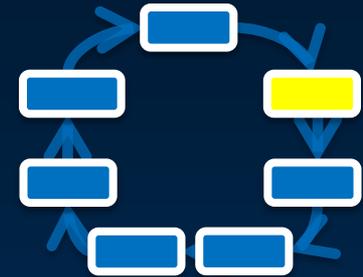
# 1. Define Adaptation Planning Purpose and Objectives

- Clarify existing conservation goals
- Identify:
  - Key problems to address
  - Stakeholders and their needs
  - Appropriate spatial and temporal scale
  - Focal resources/conservation targets
  - Resource constraints
    - money, time, capacity, data
- Based on above, can select most appropriate approach/tools



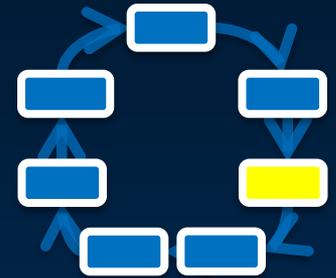
## 2. Assessing Vulnerability

- Provides essential context for adaptation
  - What's at risk?
  - **Why** is it at risk?
  - Doesn't mean should only focus on most vulnerable; might also focus on least vulnerable/most resilient
- Components of vulnerability
  - Sensitivity
  - Exposure
  - Adaptive Capacity



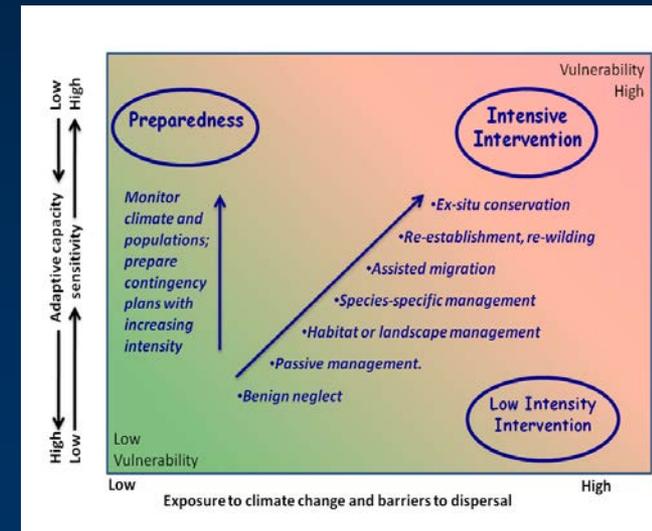
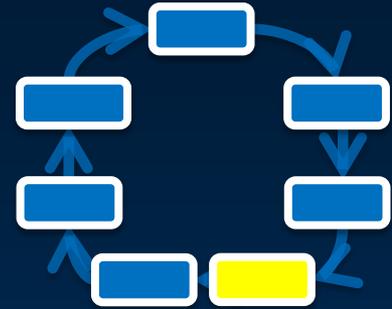
# 3. Review/Revise Conservation Goals

- Need is to review, and as necessary revise
  - May either validate existing goals, or indicate need for alteration
- Finding the right level
  - Conservation goals vs. management objectives
  - Not usually at level of agency “organic act”
- Modified “SMART” framework
  - **Achievable** in light of likely impacts
  - **Realistic** based on likely resources and constraints (e.g., legal/institutional)
  - Over what **time scale** might be feasible
  - Over what **spatial scale** might be feasible



# 4. Identify *Possible* Adaptation Options

- Depends on an understanding of system dynamics
  - Managing for change and/or persistence
- Links to climate vulnerability
  - Reduce exposure
  - Reduce sensitivity
  - Enhance adaptive capacity
- Need to think outside the box
  - What is not feasible now may be in a climate-altered future



Source: Dawson et al. 2011

# 5. Evaluate and Prioritize Adaptation Actions

- Consider ecological effectiveness
  - But also financial, social, political, legal, institutional, and technological
- Most actions will draw from existing tools and approaches
  - But may vary in when, where, why carried out
- Near vs. Long-term needs
  - Ideally, should meld near-term needs with longer-term directions
- Works across climate scenarios
  - Ideally, robust to uncertainty

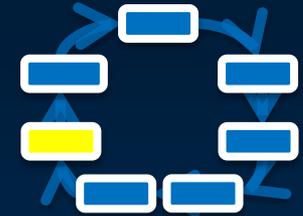


# Key Characteristics of Climate-Smart Conservation

- Actions linked to climate impacts
- Forward looking goals
- Broader landscape context
- Robust in an uncertain future
- Agile and informed management
- Minimizes carbon footprint
- Climate influence on project success
- Safeguards people and wildlife
- Avoids maladaptation

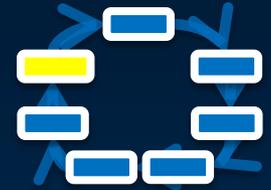
# 6. Implement Priority Actions

- Mainstreaming
  - Integrate adaptation into ongoing efforts
- Focus on cross-sector benefits and synergies
- Engage diverse partners early
- Demonstrate success
  - No matter how small
- Communications is key
  - Meet people where they are
  - Sometimes climate is not the appropriate message



# 7. Track Action Effectiveness and Ecological Responses

- Monitoring is key to agile and informed management
  - But requires careful design and link to actions
- In context of adaptation informs both
  - evaluation of project effectiveness and
  - understanding of underlying system changes
- Although shown as final step, provides feedback to many interim steps in cycle



# “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

