



NATIONAL *fish, wildlife & plants*
CLIMATE ADAPTATION STRATEGY

*Shared solutions to
protect shared values*



Photos: Chase Fountain, James Jordan, George Andrejko

Progress Report To Steering Committee

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Presentation From The Management Team
June 1, 2011

U.S. Fish & Wildlife Service
National Ocean and Atmospheric Administration
with support from
Association of Fish & Wildlife Agencies



Overview of Today's Conversation

1. Review Strategy Background
2. Report on Progress
3. Opportunities for Input
4. Q&A/Discussion

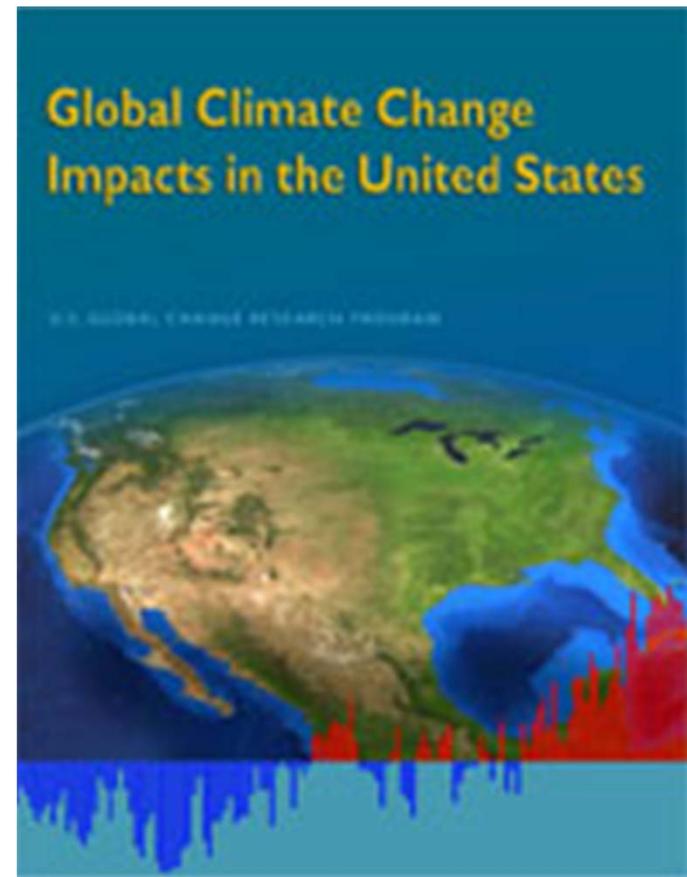


Why Do We Need a National Strategy?

Adverse impacts of climate change will not respect administrative boundaries.

No single entity or level of government can safeguard wildlife and society against the effects of climate change.

We can't do this alone.





What is a National Fish and Wildlife Climate Adaptation Strategy?

- ***A multi-partner response*** to the threat of climate change in the United States.
- ***A unified approach to promote adaptation*** to climate change impacts on fish, wildlife, and plants and on the human uses, values and benefits that are derived from those resources.
- ***A response to directives*** from the Congress and Administration calls to safeguard our valuable natural resources.

In short—a blueprint for common action.



Target Audiences

- Primary
 - Natural resource agencies (fed, state, tribal)
 - Government decision makers in various sectors (executive and legislative)
 - Non-Governmental organizations
 - Natural resource industries, agriculture and private landowners
- Secondary
 - International conservation partners
 - Educators
 - Interested public(s)



Strategy Outline

1. Executive Summary
2. Introduction
3. Purpose, Vision, Guiding Principles
4. Goals
5. National Strategies (crosscuts)
6. Ecosystem Specific Strategies
 1. Marine
 2. Coastal
 3. Forest
 4. Grassland-Deserts
 5. Inland Waters

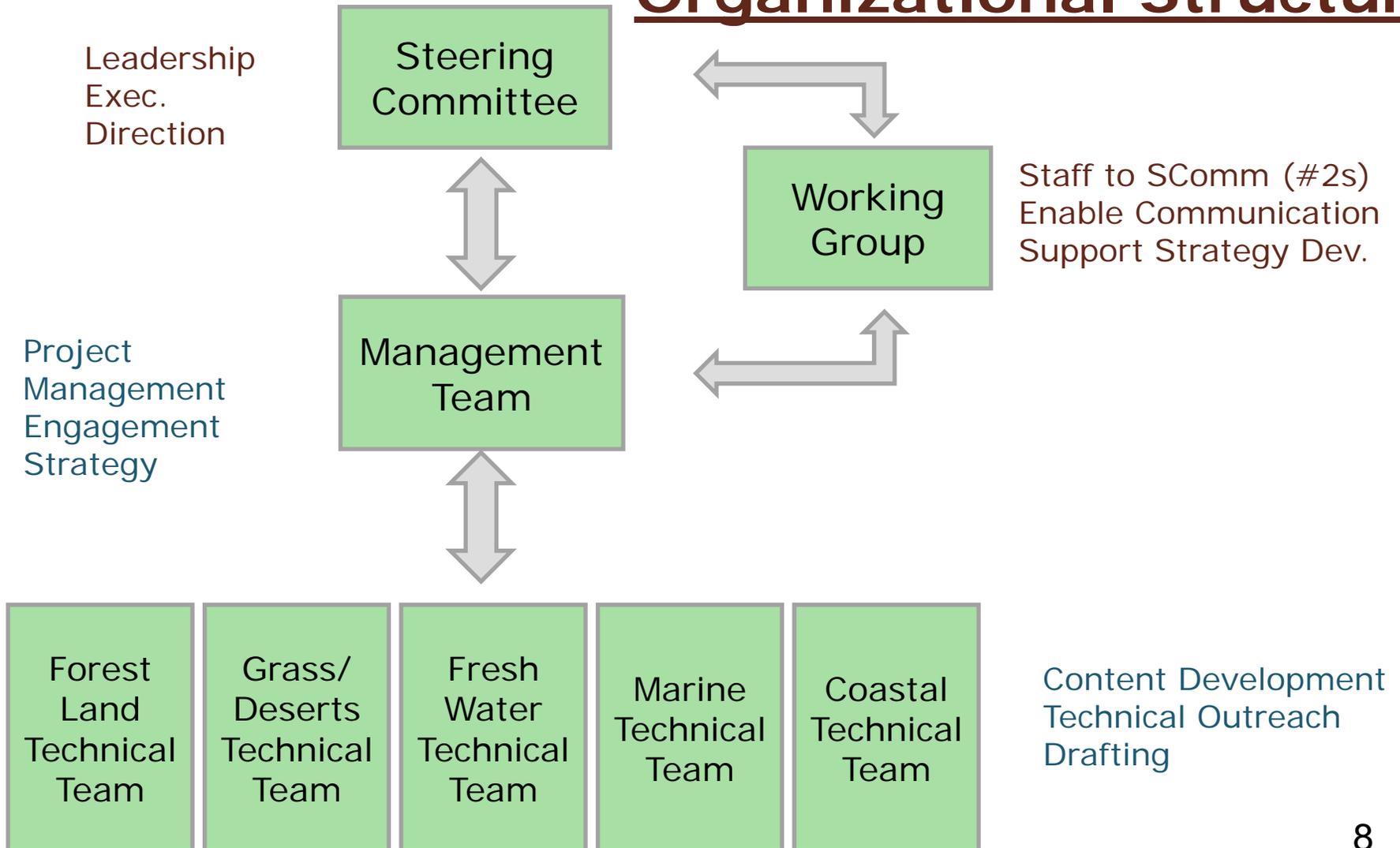


Updated Timeline

First Steering Committee meeting	January 2011
Technical Team Drafting and Work Sessions (1-3)	March – Aug 1, 2011
Assemble Draft Strategy	August 2011
Agencies Review Draft	Sept-Oct 2011
Public Review Draft	Dec 2011 – Jan 2012
Technical Teams Revisions	Feb-March 2012
Assemble & Review Final Strategy	April 2012
Release Strategy	May 2012



Organizational Structure





Progress Report

- Technical Teams
- Strategy Framework
- Example Strategies and Actions
- Engagement and collaboration



Technical Team Assignments

1. Forests (16)
2. Grass/Shrublands and Deserts (14)
3. Inland Waters (25)
4. Coastal (17)
5. Marine (15)



Photo: Tim Torrell



Tech. Team Leadership

Tech Team	State Co-chair	Federal Co-chair	Tribal Co-Chair	Facilitator
Marine	Karen Chytalo, New York Department of Env. Conservation	Richard Merrick, NOAA		Roger Griffis, NOAA
Coastal	Doug Parsons, FL Fish & Wildlife Cons. Comm.	Kim Penn, NOAA		Laurie Mcgilvray, NOAA
Inland Waters	Dave Day, PA Fish & Boat Commission	Dan Shively, U.S. Fish & Wildlife Service	Laura Gephart, Columbia River Intertribal Fish Commission	Gerry Barnhart, Association of Fish & Wildlife Agencies
Forests	John O'Leary, MA Division of Fisheries & Wildlife	Rick Kearney, U.S. Fish & Wildlife Service	Mark Petruncio, Yakama Nation	Arthur (Butch) Blazer, Great Lakes Indian Fish & Wildlife Commission
Grass, Shrub, Deserts	Armand Gonzales, CA Department of Fish & Game	David Olson, U.S. Fish & Wildlife Service; Peggy Olwell, BLM		Mark Shaffer, U.S. Fish & Wildlife Service



Technical Team Progress

1. Two very successful meetings (Mar, May)
2. Work plans developed
3. Benchmarking other adaptation strategies
4. Ecosystem definitions/boundaries drafted
5. Climate change impacts/stressors ID'd
6. Organizing framework established
7. Candidate strategies & actions drafted
8. Third Technical Team meeting (June)



Strategy Framework

1. Purpose
2. Vision
3. Guiding principles
4. Over-arching goal
5. Goals (7)
6. Strategies
7. Actions



Strategy Purpose

The purpose of the National Fish, Wildlife and Plants Climate Adaptation Strategy is to inspire natural resource professionals and other decision makers to take action to safeguard fish, wildlife and plant resources and the human uses, values and benefits they provide in a changing climate.



Strategy Vision

Ecological systems will sustain healthy, diverse and abundant populations of fish, wildlife and plants that continue to provide cultural, economic and environmental benefits in a world impacted by global climate change.



Strategy Guiding Principles

- Build a national framework for cooperative climate response
- Respect jurisdictional authorities – foster communication and collaboration
- Provide blueprint for collective action
- Focus on resources of US & Territories
- Landscape/seascape-based approach that integrates science & adaptive management



Strategy Guiding Principles (cont.)

- Integrate with adaptation plans of other sectors
- Engage the public
- Identify critical scientific and management needs
- Integration of adaptation/mitigation efforts
- Time is of the essence



Strategy Overarching Goal

Provide a nation-wide, unified approach – reflecting shared principles and science-based practices - to safeguard the nation’s biodiversity, ecosystem functions and sustainable human uses of fish, wildlife and plants in a changing climate.



Purpose:

The purpose of the Strategy is to inspire natural resource professionals and other decision-makers to take action to safeguard fish, wildlife and plant resources and the human uses, values and benefits they provide in a changing climate.

Vision:

Ecological systems will sustain healthy, diverse and abundant populations of fish, wildlife and plants that continue to provide valuable cultural, economic and environmental benefits in a world impacted by global climate change.

Overall Goal:

Provide a nation-wide unified approach – reflecting shared principles and science-based practices – to safeguard the nation’s biodiversity, ecosystem functions and sustainable human uses of fish, wildlife and plants in a changing climate.



Goals:

1. ***Increase protection, connectivity and restoration of areas*** to ensure robust populations and ecosystem functions
2. ***Design and implement species and area management plans*** that consider climate change and promote sustainable uses.....
3. ***Decrease impacts of non-climate stressors*** to promote resiliency...
4. ***Build coordinated inventory, monitoring, information, risk assessment systems*** that facilitate risk-wise and adaptive management in the face of uncertainty.....
5. ***Build capacity for effective management*** in a changing climate...
6. ***Increase knowledge and information on impacts and responses*** of fish, wildlife and plants to a changing climate...
7. ***Increase awareness and motivate action*** to safeguard fish, wildlife and plants in a changing climate.....



Outline of Tech Team Chapters (10-15 pgs)

1. Definition of ecosystem (*1 pg*)
2. Impacts/challenges for conservation (*1-2 pgs*)
3. **Strategies for effective conservation (*5-6 pgs*)**
4. *Special cross-cutting focus areas (agric, urban, freshwater, other) (1 pg)*
5. *Indicators of success (1 pg)*
6. *Examples/case studies (text box)*
7. *References (appendix)*
8. *Images (appendix)*



Example Strategies & Actions

Goal: Protect, connect, restore

Strategy: Develop and enhance marine managed areas (MMAs) as a tool for understanding, adapting to, and mitigating climate change effects to fish, wildlife, plants and associated habitats within seascapes

Action: Encourage all MMA management plans to explicitly address climate change impacts on their subject habitats and species.



Example Strategies & Actions

Goal: Manage species/areas

Strategy: Ensure genetic conservation of native grassland species

Action: Support and promote seed-banking activities including the propagation and storage of genetic material for priority species



Example Strategies & Actions

Goal: Reduce vulnerability by decreasing impacts of non-climate stressors

Strategy: Water resources infrastructure optimization

Action: Upgrade wastewater treatment systems to reduce water contamination problems from flooding and combines storm water/sewer overflows



Example Strategies & Actions

Goal: Build coordinated inventory, monitoring, information management, risk-assessment, decision-making and policy systems

Strategy: Develop, maintain, and enhance a long-term, robust national climate change monitoring/sentinel site system

Action: Use existing systems and platforms to develop nationally agreed criteria to identify species and ecosystems most likely to be affected by climate change



Example Strategies & Actions

Goal: Build capacity for effective management

Strategy: Incorporate climate change considerations into existing federal, state and tribal natural resource plans

Action: Promote integration of climate change into the CZMA, floodplain plans and hazard mitigation plans



Example Strategies & Actions

Goal: Increase knowledge and information

Strategy: Build understanding and improve assessment of forest species range shifting in response to climate change

Action: Create and implement a continental tracking system for species range shifts



Example Strategies & Actions

Goal: Increase awareness and motivate action

Strategy: Prepare and educate the public about coming changes to grassland habitats

Action: Develop demonstration projects illustrating predicted impacts to local ecosystems



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Engagement & Collaboration

- Identify and engage key stakeholders
- Engage key sector/state/local associations (e.g. NASF, CSO)
- Communications Package
 - Interactive website
(www.wildlifeadaptationstrategy.gov)
 - Newsletter piece
 - Talking points
- G2G consultation with Tribes
 - Added tribal representative to MT (Arthur “Butch” Blazer)
 - Consultation with DOI re process
 - **Regional workshops with tribes**



Engagement & Collaboration

- ✓ Stakeholder briefings and input
- ✓ Coordination with other Adaptation efforts (CEQ)
- ✓ Public input opportunities at Steering Committee meetings (next mtg Sept)
- ✓ Public comment opportunity (until July 1; Federal Register Notice of Intent)
- Public comment on draft (Dec-Jan 2012)
- Regional input sessions (4) (Jan 2012)



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- Marine TT: Roger.B.Griffis@noaa.gov



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Photos: Chuck Olsen, Tom Woodward, Jane Pellicciotto, Lynette Schimming

Common solutions to protect common values

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