Conservation Leadership Forum III: Climate Change Adaptation

National Conservation Training Center
Shepherdstown, West Virginia
November 3-4, 2010

Facilitator's Summary Report
December 9, 2010

Submitted by:

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Table of Contents

Executive Summary 3
Forum Overview and Process 4
Forum Results 7
Forum Evaluation 15
Appendix A: Forum III Agenda 16
Appendix B: Forum III Participant List 19
Appendix C: Purpose, Vision and Guiding Principles Evaluation 21
Appendix D: Thursday Session 1 and Session 2 Notes 25
Appendix E: Forum III Evaluation 32

Executive Summary

The Conservation Leadership Forum III: Climate Change Adaptation was held at the National Conservation Training Center (NCTC) in Shepherdstown, West Virginia on November 3-4, 2010. This Forum built on two previous Conservation Leadership Forums held on June 1-3, 2009 and January 21-22, 2010 at NCTC. Forty-five individuals participated in Forum III, representing a cross-section of leaders from the conservation community.

Forum III was convened and sponsored jointly by the Department of the Interior (with U.S. Fish and Wildlife Service (FWS) as lead agency), National Oceanic and Atmospheric Administration (NOAA), and the state wildlife agencies (with the NY Division of Fish, Wildlife & Marine Resources as lead agency).

The purpose of Forum III was to further refine the work resulting from Forums I and II and set the stage for developing a National Fish, Wildlife and Plants Climate Adaptation Strategy. The specific objectives of Forum III were to:

1. Hear from key experts on some fundamental aspects of adaptation;
2. Describe the timeline and process for developing the National Fish, Wildlife and Plants Climate Adaptation Strategy; and
3. Get advice from participants on key remaining aspects of strategy development.

To achieve the objectives, Forum III included a series of 9 sessions:

- Welcome and opening remarks
- Key things to consider in designing the Strategy
- Moving forward
- A look at other strategies
- Messages from listening sessions
- The roles of Landscape Conservation Cooperatives and Climate Science Centers
- Strategy purpose, vision and guiding principles
- Strategy audiences, elements and organization
- Strategy outreach and engagement

Results from Forum III that follow are organized under each of these 9 sessions.

Documents associated with Forums I, II and III can be found at:
http://training.fws.gov/branchsites/lkm/climate_change/index.html

Forum Overview and Process

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Forty-eight individuals participated in Forum III, representing a cross-section of leaders from the conservation community (see Appendix B for a list of participants).

Early in Forum III, participants were asked a series of questions regarding their involvement in climate change using TurningPoint. TurningPoint is a PowerPoint-based application that allows participants to "vote" on issues and questions presented on the screen in real-time. All Forum participants received a TurningPoint remote voting device. Voting was anonymous, and allowed everyone in the relatively large group to participate in the discussion in a personal manner.

Most attendees were representatives of federal agencies (59%) or non-governmental organizations (25%), with several from state agencies (11%), and some describing their affiliations as "other" (5%) (Figure 1).

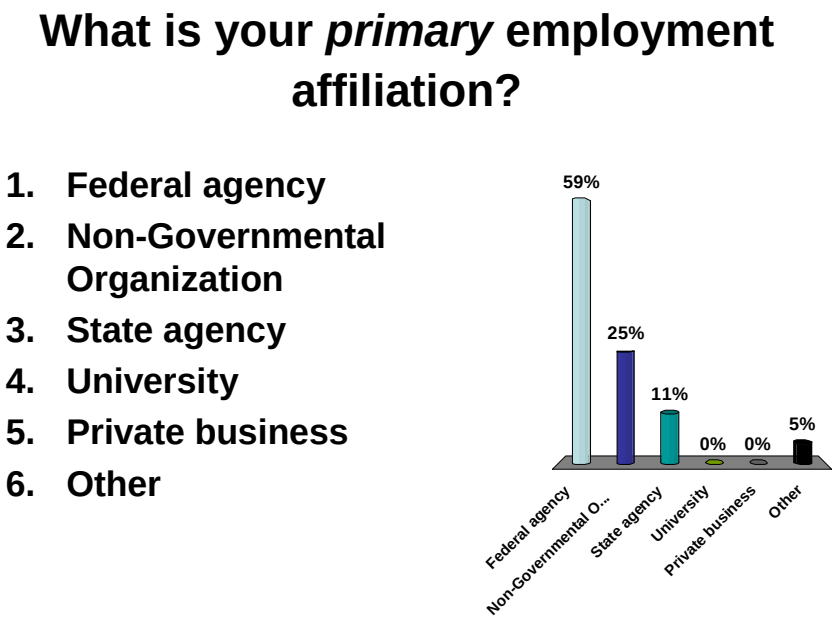


Figure 1. Affiliation of Forum participants.

Most attendees described their positions, relative to the climate change issue, as "program managers" (44%) or "administrators" (28%), with the balance being either "scientist" (9%), "public affairs" (9%), or "other" (9%) (Figure 2).

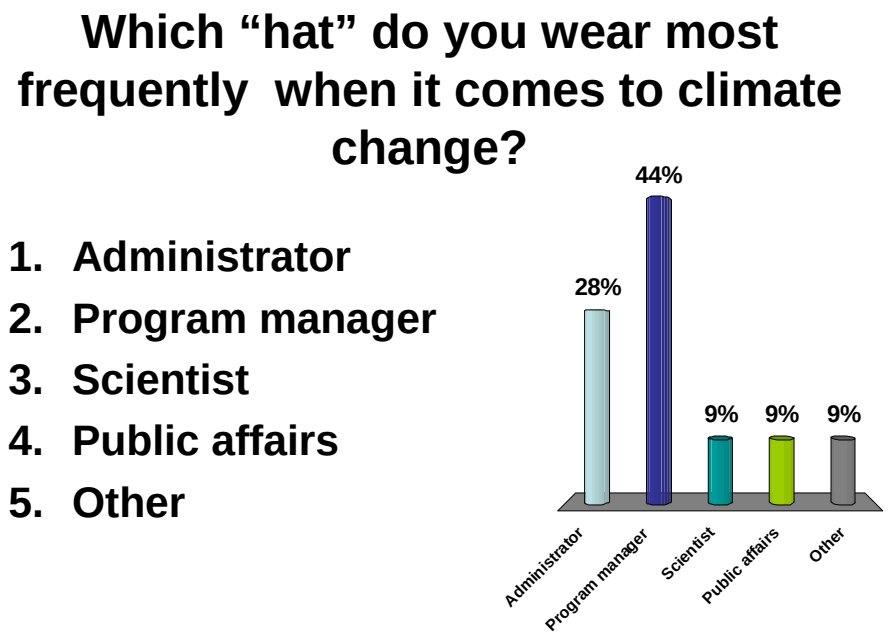


Figure 2. "Which 'hat' do you wear most frequently when it comes to climate change?"

Thirty-four percent of participants indicated they devote more than half of their time to climate change, with 33% saying climate change occupies "11 to 50%" of their time and 31% "Less than 10%" of their work time (Figure 3).

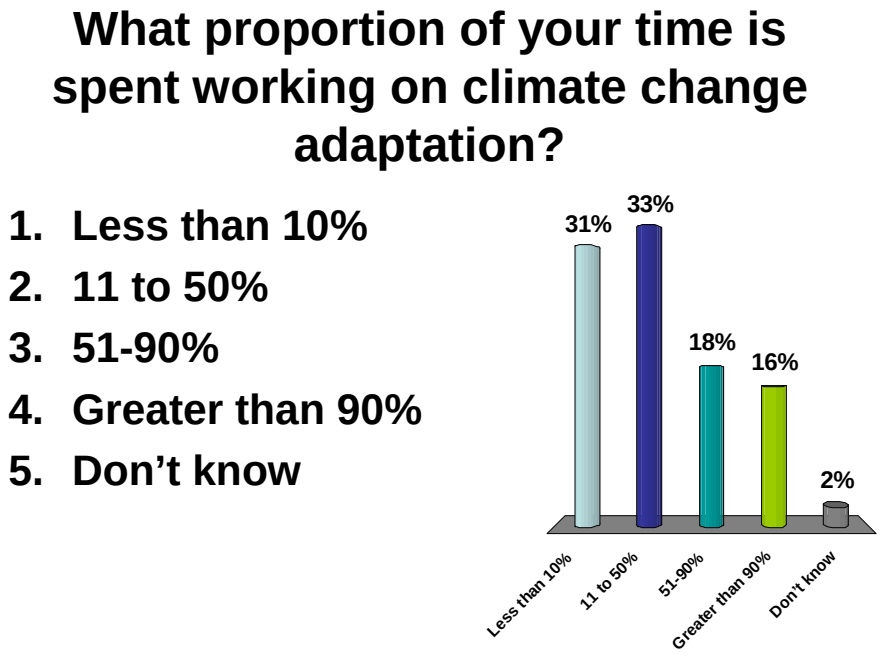


Figure 3. "What proportion of your time is spent working directly on climate change?"

A majority (67%) of the participants at Forum III did not attend either Forum I or II. Eighteen percent of participants had attended only Forum II, while 2% only attended Forum I. Thirteen percent of participants had attended both Forums I and II (Figure 4).

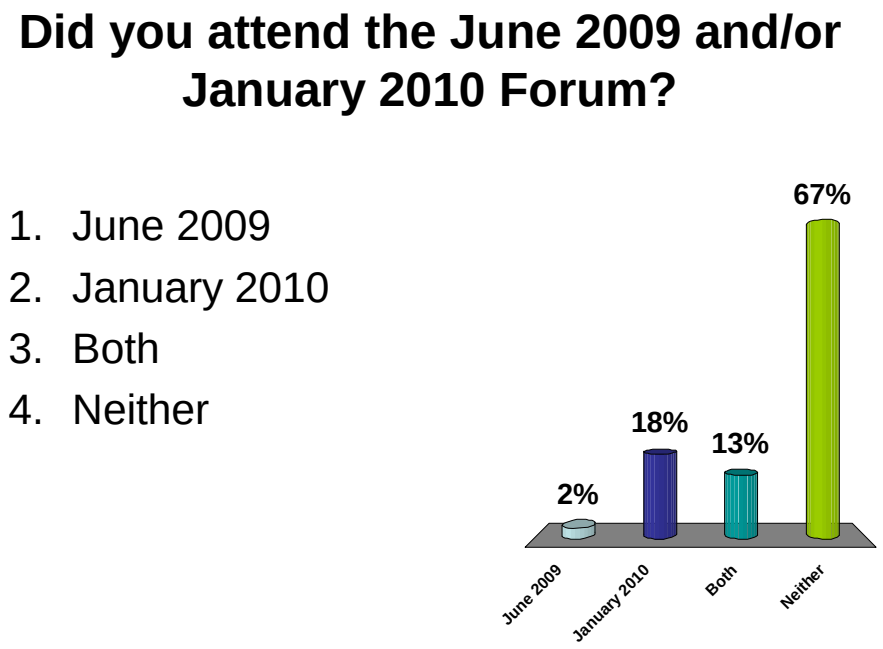


Figure 4. "Did you attend the June 2009 and/or January 2010 Forum?"

Forum III Results

Welcome and Opening Remarks

The first two sessions of Forum III were held jointly with the Landscape Conservation Cooperatives meeting which was going on concurrently at NCTC. Opening remarks included:

- Mark Shaffer, FWS. Mark provided the welcome and a brief background on the Conservation Leadership Forums and Climate Adaptation Strategy.
- Dan Ashe, FWS. Dan provided brief inspirational remarks on goals, and reminded the group that it was the late U.S. FWS Director Sam Hamilton who helped instigate the strategy.
- Eric Schwaab, NOAA, National Marine Fisheries Service. Eric stressed the importance of partnerships and moving away from single-species management to focusing on systems.

- Patty Riexinger, New York Department of Environmental Conservation/AFWA. Patty reminded the group that we can't afford a piecemeal/state-by state approach—need to align goals, ensure plans complement each other.
- Sally Yozell, NOAA. Sally commented on the changing climate in DC means we must work smarter and more efficiently.

Key Things to Consider in Designing the Strategy

A panel of thought leaders on climate change adaption offered insights based on recent research regarding designing the Strategy: The panel included:

- Introduction: Some Key Things to Consider In Designing a Climate Adaptation Strategy For Fish, Wildlife and Plants—Mark Shaffer, FWS
- When Climate Changes, Species Move, Communities Transform—Mac Hunter, University of Maine
  - Maps of paleo-distributions and range shifting show there have been dramatic changes in community composition as species respond individually to climate.
  - Suggests we should focus on protecting a diverse physical/chemical environment (altitude, slope, geology, etc.) instead of a particular set of species.
- Climate Envelopes–Some Will Come, Many Will Go—Stephen Jackson, University of Wyoming
  - Envelop and niche model predictions are complicated by ecological and biological processes, which can include adaptive capacities and resilience as well as spatial heterogeneity, climate variability, species interactions, and novel climates.
  - Need to assess adaptive capacity, vulnerability, and exposure to climate change as a framework for determining priorities and potential responses.
- When Planning For Future Diversity, Save All the Settings—Mark Anderson, The Nature Conservancy and Paul Beier, Northern Arizona University
  - Returns to the "course-filter" approach of protecting large areas/systems to protect species, over an individual species-by-species approach.
  - Underlying geology is highly predictive of species richness, suggests importance of "conserving the stage" (biophysical setting) instead of focusing on the players.
- Continued—Paul Beier, Northern Arizona University
  - In trying to design ideal corridors and habitat linkages, return to the idea of land facets as drivers of biodiversity.
  - Focused on local factors including soil, aspect, topographic position, elevation, as well as climate to map out high quality networks for a suite of species.

Presentations can be found on
http://training.fws.gov/branchsites/lkm/climate_change/index.html)

Following the presentations, an in-depth discussion and question and answer session was held with panel members centered on the question, "What's the Significance of Your Work for the Development of a National Fish, Wildlife and Plants Climate Adaptation Strategy?" Key points:

- There was concern that while the presentations focused on diversity, that isn't the only goal—we do care about managing particular species in particular places, and have a mandate to do so.
    - Responses included the need for more "fine-filter" approaches for particular priority species when necessary, as well as the idea that a "land-facet" approach as discussed here can also work well for focal species. In addition, speakers noted that in some cases there may be nothing we can do to keep species in a particular location, though this may be inconsistent with current policies. May need to change public perception and stress that the world is going to look different.
- There was also concern that presentations focused on reserve and corridor design, but opportunity for protecting more lands are very limited.
    - Responses included that even for existing areas, it is important to have a functional model of the areas we are protecting, and the perspective of past change will help inform management decisions. In addition, we must consider other ways of protecting habitat including conservation easements, certification systems, etc.

Moving Forward

Gerry Barnhart (AFWA) summarized current thinking on developing a National Fish, Wildlife and Plants Climate Adaptation Strategy. The effort will be co-lead by FWS, NOAA and the state wildlife agencies. A proposed guidance structure, process and timeline were presented and discussed. Key points:

- We need this to be a national strategy (not federal or state, but collective). Will be a blueprint for common action, not a specific work plan. Will focus on overarching philosophy, principles we encourage, what we may want to measure.
- Currently in process of setting up a steering committee, there will also be a management team as well as permanently staffed technical teams.
- Will not be chartered under FACA, so standing members of groups must be governmental employees. We do want to work together from beginning with any stakeholders from academic and NGO community who want to be involved.
- First Steering Committee will be in January. Technical teams will be identified in January; engagement sessions will begin right away. Goal is an initial draft in September 2011 and final in 2012. May try to stage partial releases if possible.

A Look at Other Strategies

A panel of experts who have intimate knowledge of other climate adaptation strategies presented some of their insights into how to organize a national strategy. Presenters included:

- Australia/Florida-Doug Parsons, Florida Fish & Wildlife Conservation Commission
  - Australia put together National Biodiversity and Climate Change Action Plan for 2004-2007 based on 2001 species review, identifies priorities for research, communication, goals for specific systems.
  - Florida started taking climate change seriously in 2007, created a Steering Committee and sub-teams for planning, used a structured decision-making model.
- California-Kevin Hunting, California Department of Fish & Game
  - Have a state-wide multi-sector adaptation plan as a framework for the natural resources plan; key elements include a vulnerability assessment, essential connectivity, and a multi-sector research effort.
- United Kingdom-Noah Matson, Defenders of Wildlife
  - UK has integrated climate change throughout government, and their Climate Change Act requires risk assessments. Describes an adaptation ladder: Objectives, Capacity, Decision-making, Action, and Feedback. What are barriers to climbing up ladder? Where are we now?

A panel discussion and question and answer session followed and focused on "Strategy Organization Issues to Consider – Scope, Scale, Levels." Key points:

- Make sure it provides science/provisions for updating it
- Embedding adaptation within programs/activities
- Setting out guidelines and best practices
- Measuring progress/evaluation/improvement
- Communication/outreach to raise awareness and capacity
- Coordination across programs and plans

Messages from Listening Sessions

Based on a recommendation coming out of Forum II in January 2010, a series of listening sessions was held across the country from March through October 2010 to engage stakeholders regarding a National Fish, Wildlife and Plants Climate Adaptation Strategy. Donna Brewer (FWS) presented a summary of major messages heard during the listening sessions. Key points:

- Timing—people wanted this faster than 2012, want short-term strategies at the same time, but also want more collaboration, need to find a balance.

- Process—don't want to see a strategy that just sits on the shelf, want to know where it will live, who will keep it current.
- Content—people like national focus, don't want it to be too descriptive, want flexibility for unique geographical needs, not too top-down, want something that is scalable, identifies new conservation tools, suggests best practices.
- Concern—there are a huge variety of expectations of what this will look like, how it will work, how to engage with LCCs: may want to release this in stages as it rolls out.

The Roles of Landscape Conservation Cooperatives and Climate Science Centers

Doug Austen (FWS) and Doug Beard (U.S. Geological Survey) made a presentation regarding:

- The roles for Landscape Conservation Cooperatives and Climate Science Centers in Strategy development and implementation.
- How the Strategy can help LCCs and CSCs fulfill their missions.

A spirited discussion and question and answer session followed. Key points:

- How these networks will incorporate the human element/cultural/social science dimensions as well as non-climate stressors.
- Interactions with existing frameworks including the National Assessment, CESUs, Cooperative Wildlife Units.

Purpose, Vision and Guiding Principles

Gerry Barnhart (AFWA), Roger Griffis (NOAA) and Mark Shaffer (FWS) led a discussion focused on providing guidance from Forum III participants to the crafters of the Strategy.

To do that, Forum participants gave their assessment via TurningPoint of the Purpose, Vision and Guiding Principles that were crafted following Forum II. Full TurningPoint results are found in Appendix C. In summary:

- Regarding the Purpose statement: The purpose of the National Fish, Wildlife and Plants Climate Adaptation Strategy is "to provide a unified approach – reflecting shared principles and science-based practices – for reducing the impacts of climate change on fish, wildlife, plants, habitats and associated ecological processes across geographic scales.
    - 78% of participants said they were comfortable or very comfortable with this statement (11% said they were uncomfortable or very uncomfortable)

- Regarding the Vision statement: The expected outcome or vision is "ecological systems will continue to sustain healthy, diverse, well-distributed and abundant populations of fish, wildlife, plants and human communities that are adapted to survive and thrive in a world impacted by unprecedented and accelerating global climate change."

    - 50% participants said they were comfortable or very comfortable with this statement (22% said they were uncomfortable or very uncomfortable).

- Regarding the Guiding Principle, "a. Strategy is a national, not federal framework for cooperative response to climate change."

    - 95% of participants said they were comfortable or very comfortable with this statement (0% said they were uncomfortable or very uncomfortable).

- Regarding the Guiding Principle, "b. Focus is on actions and investments related to U.S. natural resources, while placing high priority on global collaboration (particularly with international neighbors)."

    - 64% of participants said they were comfortable or very comfortable with this statement (9% said they were uncomfortable or very uncomfortable).

- Regarding the Guiding Principle, "c. Adopt landscape-scale approaches that integrate science and management."

    - 94% of participants said they were comfortable or very comfortable with this statement (0% said they were uncomfortable or very uncomfortable).

- Regarding the Guiding Principle, "d. Areas for particular emphasis include (1) ecological systems and function, (2) strengthened observational systems, (3) model-based projections, (4) species-habitat linkages, (5) risk assessment, and (6) active and passive adaptive management."

    - 64% of participants said they were comfortable or very comfortable with this statement (6% said they were uncomfortable or very uncomfortable).

- Regarding the Guiding Principle, "e. Ensure that the Strategy is informed by and integrated with the social and political management goals of other resource sectors (e.g., energy, forestry, water management, transportation, and agriculture)."

    - 80% of participants said they were comfortable or very comfortable with this statement (6% said they were uncomfortable or very uncomfortable).

- Regarding the Guiding Principle, "f. Move beyond professional boundaries and engage the public through communication and education to gain broad support for adaptation strategies. Identify critical scientific and management needs such as new information technology, training, or new policies and regulations."

    - 89% of participants said they were comfortable or very comfortable with this statement (3% said they were uncomfortable or very uncomfortable).

- Regarding the Guiding Principle, "g. Identify critical scientific and management needs such as new information technology, training, or new policies and regulations."

    - 89% of participants said they were comfortable or very comfortable with this statement (3% said they were uncomfortable or very uncomfortable).

- Regarding the Guiding Principle, "h. Ensure that adaptation and mitigation efforts are not carried out in isolation, but are well coordinated within context of conservation goals."

    - 86% of participants said they were comfortable or very comfortable with this statement (3% said they were uncomfortable or very uncomfortable).

- Regarding the Guiding Principle, "i. Understand that time is of the essence….and the challenges require immediate planning and action to understand and address the impacts of climate change throughout this century and beyond."

    - 77% of participants said they were comfortable or very comfortable with this statement (6% said they were uncomfortable or very uncomfortable).

Following the TurningPoint exercise, additional insights were provided by participants through a group discussion.

Strategy Audiences, Elements and Organization

Participants broke into four groups for an in-depth discussion of the questions:

- Who is the audience for this Strategy and how will it be used?
  - Key responses: State and federal agencies, NGOs and foundations, program managers, conservation planners, and technical advisors.
- What are the critical elements the strategy should include?
  - Key responses: This should act as a high-level strategy to present goals and provide guidance and best practices for planning. Must define needs, a communication strategy, integrate with ongoing efforts, and include evaluation metrics. Should discuss embedding climate change into activities.
- How should the strategy be organized?"
  - Discussed benefits and concerns with organizing strategy by region, by ecosystem, by action, or by threat or impact.

Results from each of the four Groups were presented to the full group by the break-out facilitators (see Appendix D for complete notes).

- General discussion on the question of whether the federal agencies could lay out some commitments without calling on the states and tribes to do so, and how this would affect the Strategy.
- General discussion on the question of how specific or prescriptive the Strategy should be or can be.

Strategy Outreach and Engagement

The final session of Forum III was a full group discussion of the question, "How Should Outreach/Engagement be Conducted During Strategy Development?" Full summary notes from the discussion are included at the end of Appendix D. Key points:

- Should have a series of meetings or workshops around the country to collect input from the interested public, perhaps at existing meetings and events.
- Need to think about which audiences would be most interested/concerned: include user groups, less sympathetic groups as well.
- Want to get input as well as help promote and publicize the Strategy.
- A big danger is asking for input but not doing anything about it: we should make sure we know how we are going to use information that we ask for and collect.

Forum Evaluation

At the conclusion of Forum III, attendees were asked to evaluate the Forum using TurningPoint. Full evaluation results are included in Appendix E.

In summary:

- Seventy-nine percent of attendees *agreed* (50%) or *strongly agreed (29%)* that the meeting objective had been met, to "Hear from key experts on some fundamental aspects of adaptation," 18% were "neutral" and 4% disagreed.
- Seventy-nine percent of attendees *agreed* (36%) or *strongly agreed* (43%) that the meeting objective had been met, to "Describe the timeline and process for developing the National Fish, Wildlife and Plants Climate Adaptation Strategy." The balance of participants were neutral (18%) or disagreed (4%) on whether this objective had been met.
- Almost all attendees *agreed* (68%) or *strongly agreed* (25%) that the meeting objective had been met, to "Get advice from participants on key remaining aspects of strategy development." The balance of participants were neutral (7%) on whether this objective had been met.

CONSERVATION LEADERSHIP FORUM III:
National Fish, Wildlife and Plants Climate Adaptation Strategy

November 3-4, 2010

National Conservation Training Center
Shepherdstown, West Virginia

Agenda

Wednesday, November 3

8:00 Welcome & Opening Remarks - ***Dan Ashe*** *(FWS),* ***Eric Schwaab*** *(NOAA/NMFS) and* ***Sally Yozell*** *(NOAA), and* ***Patty Riexinger*** *(NY DEC)*
Auditorium

Introductions - *All*

Meeting Mechanics - ***Dave Case,*** *Facilitator*

9:00 Panel: Some Key Things to Consider In Designing a Climate Adaptation Strategy For Fish, Wildlife and Plants - ***Mark Shaffer,*** *FWS*

When Climate Changes, Species Move, Communities Transform - ***Mac Hunter,*** *University of Maine*

Climate Envelopes –Some Will Come, Many Will Go - ***Stephen Jackson,*** *University of Wyoming*

When Planning For Future Diversity, Save All the Settings - ***Mark Anderson,*** *TNC and* ***Paul Beier,*** *Northern Arizona University*

10:30 Break

10:45 Panel Discussion: What's the Significance of Your Work for the Development of a Fish, Wildlife and Plants Adaptation Strategy?

Room 151 I-West

12:00 Lunch

1:00 Moving Forward on Developing a National Fish and Wildlife Adaptation Strategy: Proposed Plan and Timeline - ***Gerry Barnhart*** *(AFWA),* ***Roger Griffis*** *(NOAA) and* ***Mark Shaffer*** *(FWS)*
Room 151 I-West

1:30 Panel: How to Organize a National Strategy? A Look at Other Wildlife/Biodiversity Climate Change Strategies

Australia - ***Doug Parsons****, FL FWC*

California - ***Kevin Hunting****, CA DFG*

United Kingdom - ***Noah Matson****, Defenders of Wildlife*

2:30 Panel Discussion: Strategy Organization Issues to Consider – Scope, Scale, Levels

3:00 Major Messages from Listening Sessions - ***Donna Brewer****, FWS*

3:15 Break

3:30 What Are the Roles of Landscape Conservation Cooperatives and Climate Science Centers in Strategy Development and Implementation? How Can the Strategy Help LCCs and CSCs Fulfill Their Mission? - ***Doug Austen*** *(FWS) and* ***Doug Beard*** *(USGS)*

4:15 Discussion

4:45 Key Issues That Remain to be Decided: Day 2 Breakout Sessions - ***Gerry Barnhart*** *(AFWA),* ***Roger Griffis*** *(NOAA) and* ***Mark Shaffer*** *(FWS)*

5:15 Discussion

5:30 Adjourn

7:00 Reception with LCC Coordinators and CSC Directors
Auditorium

Thursday, November 4

8:00 Overview of Today's Breakout Sessions
Room 151 I-West

Appendix A: Forum III Agenda

8:15	Breakout Session 1: Who is the Audience for this Strategy and How will it be Used? What are the Critical Elements the Strategy Should Include? How the Strategy Should be Organized? *Break-out Rooms: Room 151 I-West; Room 154 I-West; Room 256 I-West; Room 160 I-West*
9:45	Break
10:00	Reports from Breakout Session #1 *Room 151 I-West*
10:45	Breakout Session 2: How Should Outreach/Engagement be Conducted During Strategy Development? *Break-out Rooms: Room 151 I-West; Room 154 I-West; Room 256 I-West; Room 160 I-West*
11:15	Break
11:30	Reports from Breakout Session 2 *Room 151 I-West*
12:00	Discussion and Next Steps
12:30	Adjourn

Appendix B: Forum III Participant List

Name	Affiliation
Anderson, Mark	Speaker, The Nature Conservancy
Andrews, Kacky	National Oceanic and Atmospheric Administration
Armstrong, Tom	U.S. Department of the Interior
Ashe, Dan	U.S. Fish and Wildlife Service
Austen, Doug	U.S. Fish and Wildlife Service
Barnhart, Gerald	Association of Fish and Wildlife Agencies
Beard, Doug	U.S. Geological Survey
Beier, Paul	Speaker, Northern Arizona University
Brown, Dawn	Ducks Unlimited
Carter, Shawn	National Park Service
Case, David	D.J. Case and Associates
Chavarria, Gaby	Office of the Science Advisor, U.S. Fish and Wildlife Service
Choudhury, Arpita	Association of Fish and Wildlife Agencies
Conant, Terese	National Oceanic and Atmospheric Administration
Culver, Mary	National Oceanic and Atmospheric Administration
Cushing , Janet	U.S. Army Corps of Engineers
Eisenhauer, David	U.S. Fish and Wildlife Service
Fletcher, Kristen	Coastal States Organization
Franklin, Thomas	Theodore Roosevelt Conservation Partnership
Freund, Kate	U.S. Fish and Wildlife Service
Fry, Tom	The Nature Conservancy
Griffis, Roger	National Oceanic and Atmospheric Administration
Hunter, Malcolm	Speaker, University of Maine
Hunting, Kevin	State Rep, California Dept. of Fish and Game
Hutchins, Michael	The Wildlife Society
Iverson, Chris	U.S. Forest Service
Jackson, Stephen	Speaker, University of Wyoming
Johnson, Kurt	U.S. Fish and Wildlife Service
Kostyack, John	National Wildlife Federation
Leopold, Richard	U.S. Fish and Wildlife Service
Matson, Noah	Defenders of Wildlife
McGilvray, Laurie	National Oceanic and Atmospheric Administration
Montanio, Pat	National Oceanic and Atmospheric Administration
Morales, Raul	Bureau of Land Management
Nierenberg, Claudia	National Oceanic and Atmospheric Administration
Parsons, Doug	State Rep, Florida Fish and Wildlife Conservation Commission
Penn, Kim	National Oceanic and Atmospheric Administration
Petes, Laura	National Oceanic and Atmospheric Administration
Plumer, Christy	The Conservation Fund
Riexinger, Patty	State Rep, New York Department of Environmental Conservation

Appendix B: Forum III Participant List

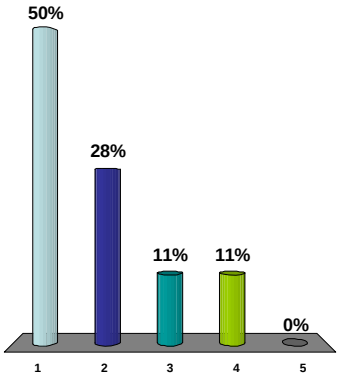
Name	Affiliation
Schwaab, Eric	National Oceanic and Atmospheric Administration
Semcer, Bart	Sierra Club
Shaffer, Mark	Office of the Science Advisor, U.S. Fish and Wildlife Service
Sobeck, Eileen	U.S. Department of the Interior
Swenson, Richard	U.S Dept. of Agriculture/National Resources Conservation Service
Taylor, Gary	Association of Fish and Wildlife Agencies
Uihlein, Bill	U.S. Fish and Wildlife Service
Thornhill, Alan	Minerals Management Service
Watermolen, Dreux	State Rep, Wisconsin Dept. of Natural Resources
Yozell, Sally	National Oceanic and Atmospheric Administration

Appendix C: Purpose, Vision and Guiding Principles Evaluation

Purpose, Vision and Guiding Principles Assessment results for Forum III captured via TurningPoint:

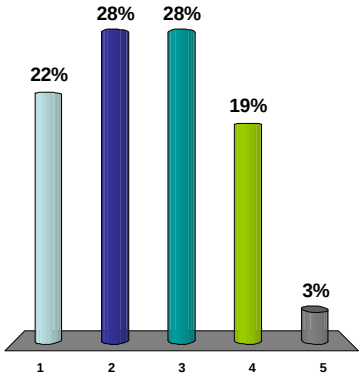
Regarding the "Purpose" (1.), I am

1. Very comfortable
2. Comfortable
3. Neutral
4. Uncomfortable
5. Very uncomfortable



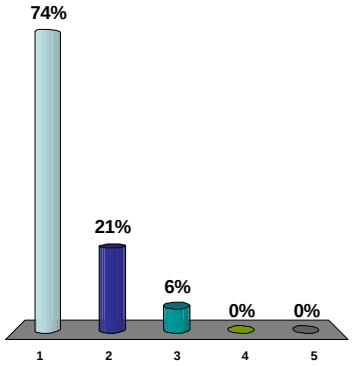
Regarding the "Vision" (2.), I am

1. Very comfortable
2. Comfortable
3. Neutral
4. Uncomfortable
5. Very uncomfortable



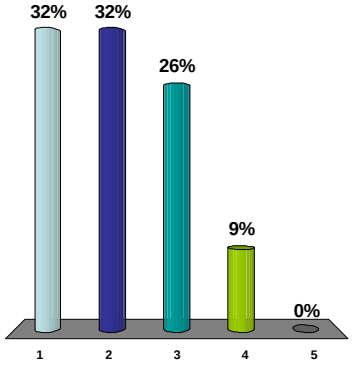
Regarding "Guiding Principle a.", I am

1. Very comfortable
2. Comfortable
3. Neutral
4. Uncomfortable
5. Very uncomfortable



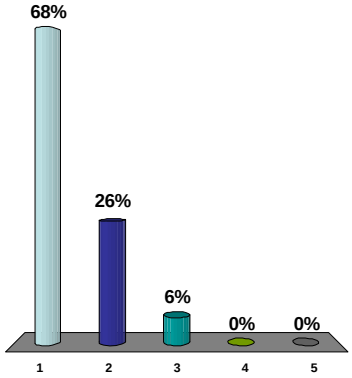
Regarding "Guiding Principle b.", I am

1. Very comfortable
2. Comfortable
3. Neutral
4. Uncomfortable
5. Very uncomfortable



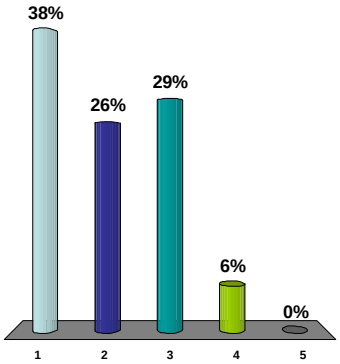
Regarding "Guiding Principle c.", I am

1. Very comfortable
2. Comfortable
3. Neutral
4. Uncomfortable
5. Very uncomfortable



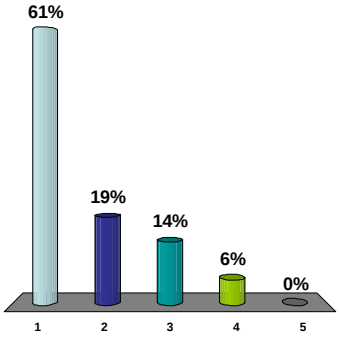
Regarding "Guiding Principle d.", I am

1. Very comfortable
2. Comfortable
3. Neutral
4. Uncomfortable
5. Very uncomfortable



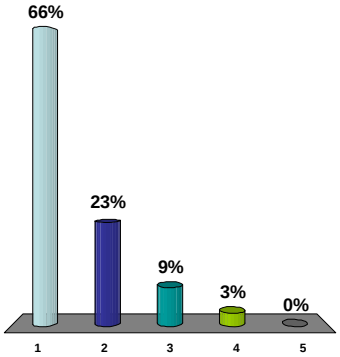
Regarding "Guiding Principle e.", I am

1. Very comfortable
2. Comfortable
3. Neutral
4. Uncomfortable
5. Very uncomfortable



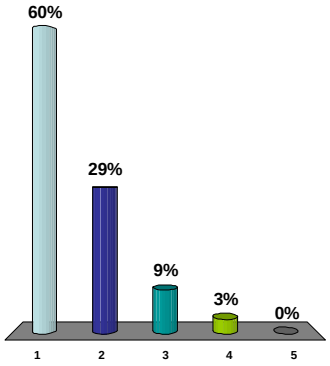
Regarding "Guiding Principle f.", I am

1. Very comfortable
2. Comfortable
3. Neutral
4. Uncomfortable
5. Very uncomfortable



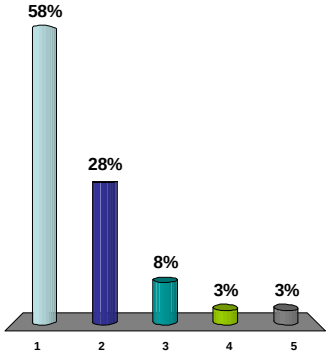
Regarding "Guiding Principle g.", I am

1. Very comfortable
2. Comfortable
3. Neutral
4. Uncomfortable
5. Very uncomfortable



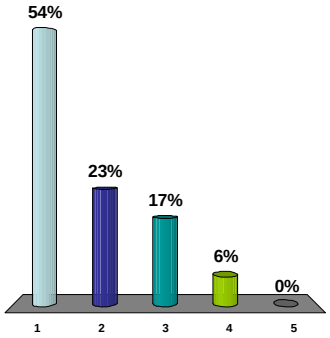
Regarding "Guiding Principle h.", I am

1. Very comfortable
2. Comfortable
3. Neutral
4. Uncomfortable
5. Very uncomfortable



Regarding "Guiding Principle i.", I am

1. Very comfortable
2. Comfortable
3. Neutral
4. Uncomfortable
5. Very uncomfortable



Appendix D: Thursday Session 1 and Session 2 Notes

Break Out Group Session 1

Group 1, Facilitator Gerry Barnhart

1. Who (audiences) will be using the strategy and how?
    1. Internal agency audience
    2. Decision-makers - all levels of government (local, state, Tribes, federal)
    3. In and out of the natural resource community (e.g. transportation planners)
    4. NGO and Foundation community
    5. Secondary audience: natural resource educators

* Note that a single document might not be sufficient

2. What are the critical elements the Strategy should include?
    1. Make a compelling case for the need for action
    2. A communications strategy – internal and external
    3. Define goal and objectives in a way that provides orientation and direction
    4. A process to step down to greater specificity
    5. A roadmap for people to think through adaptation and help them identify what they need to do or do differently- guiding principles
    6. Case studies to communicate with external audiences
    7. Timeframe: 5-yr time horizon
    8. ID tech. tools and information/data needs
    9. Way to integrate with other adaptation/management efforts

3. How should the Strategy be organized?
    1. We struggled with this one more than the others
    2. Folks were comfortable with intro materials
    3. Preference to organize by region (? About how to define region)
    4. Recognize that some elements of strategy will be National (e.g. guiding principles)
    5. Can we reach our target audiences with only one version of strategy – should we consider multiple versions?

Appendix D: Thursday Session 1 and Session 2 Notes

Break Out Group Session 1

Group 2, Facilitator Mark Shaffer

1. Who (audiences) will be using the strategy and how?
    1. Program managers
    2. Technical advisors
    3. State agencies
    4. Federal agencies
    5. Local governments
    6. Conservation organizations
    7. LCCs?
    8. Create executive summary or forward for specific groups (education institutions, public) that are not primary audiences?
    9. Be aware there will be unintended audiences

2. What are the critical elements the Strategy should include?
    1. High-level strategy to inform future planning
    2. Time frame: 5-10 years for revisiting the plan, but consider impacts up to 20-50 years out
    3. Future scenarios: look to the USGCRP, not direct specific models
    4. Ecological scale: don't chose, but talk about all
    5. Integration is a priority but a challenge
    6. Include discussion of change (Jackson)

3. How should the Strategy be organized?
    1. Impacts and responding actions (action-oriented)
    2. Include what to do, what to keep doing, what to do differently, how to integrate
    3. Not by geography—duplicating efforts
    4. Potential: What are primary impacts? What will it mean for species? What do we need to do as a result?

Break Out Group Session 1

Group 3, Roger Griffis

1. Who (audiences) will be using the strategy and how?
    1. Primary: natural resource managers and conservation planners and practitioners.
    2. High-level decision makers (Congress; Federal agencies; state, tribal, local governments; NGOs, etc.)
    3. Counterparts in other sectors (public health, energy, water, etc.) working on adaptation strategies
    4. General public
    5. Private sector, particularly:
        a. Industries that depend on natural resources (e.g. maple sugar, dive shops)
        b. Private landowners, coastal developers, land trusts
    6. International partners

2. What are the critical elements the Strategy should include?
    1. Call to action

    a. Problem statement

        i. State of our Nation's ecosystems (stressors, etc.)

        ii. Impacts of climate change on ecosystems and services

        iii. What we know vs. what we don't know (uncertainty; gaps)

    b. Value of action (benefits to action)

        i. We have enough information to act, even in the face of uncertainty

        ii. Values – what do we value? Ecosystem services, etc.

        iii.Vision for the future – what are our desired outcomes?

    2. Science needs – building our understanding (physical, biological, social, behavioral, economic), integrating science into decision making
    3. Guidance, standards, best practices
    4. Embedding climate change adaptation into missions, programs, operations

   a. Adaptation not a "whole new thing" –incorporate climate change into what we manage for (e.g. existing risks)
   b. Barriers to action – need to revisit (e.g. legislation, etc.)
5. Measuring progress
   c. Performance metrics, evaluation, feedback
   d. Adaptive management – incorporating new information as our understanding grow
6. Communication: raising awareness and capacity

3. How should the Strategy be organized?

Break Out Group Session 1

Group 4, Arpita Choudhury

1. Who (audiences) will be using the strategy and how?

Approach; two-tiered system; primary and secondary audiences (and linkages between)

   1. Attention to connections between built environment and natural resources
   2. Range of audiences interacting around ecosystem-based outcomes

PRIMARY USERS:

- Federal audiences (resource managers; 13 agencies) – principles, guidelines
- State and tribal – not a mandate; better as guidance; mechanisms for a cohesive network; coordinated programs
- Key regional partnerships/networks (eg. LCC, JVs, CMSPs, etc.)
- NGOs and conservation partners

NEXT LAYER:

- Other sectors; ie. Built environment, health
- Local government
- Congress – not as a primary audience, but in terms as a vision for how the conservation community is coming together to respond to the challenge of climate change

2. What are the critical elements the Strategy should include?

- Provide science (what's changing)
- Standards, guidance and best practices (e.g. address guidance wrt uncertainty and variability; intergenerational equity and tradeoffs)
- Provide coordination mechanisms (e.g. across federal, between fed and non-fed, cross sectors)
- Embed climate change thinking into existing programs
- Communication and outreach
- Measurement and evaluation
- Network infrastructure/capacity building (to include intellectual capacity)

3. How should the Strategy be organized?

1. Enough guidance to create an overall conceptual picture – specify ways link across scales;
2. Caution about it being too prescriptive (e.g. with respect to farming/ranching community)
3. Commitments with accountability mechanisms (feds) – appendix "action plan" written by and agreed upon by each federal agency – how their individual commitments roll up in the context of the strategy
4. Organize around *categories of* management actions (address climate impacts w/in mgmt actions)

- Expectations – begin the process of communication
  - Prescriptive for the feds – principles to apply as decisions are made, accountability
  - General Principles of adaptation
    - Prioritize No regrets
- Drive toward coordinated responses; identify best practices for "regional" mechanisms; (not so unique to climate change – use analogies like transportation (interstate, air), power grids, communication
- Identify categories of management actions (across scales)
- Make sure writing team reflects needs of the plan

Session 2: How Should Outreach/Engagement Be Conducted During Strategy Development?

- For now: how will we communicate with the group? All meeting information will be up on the website, will keep you all informed as we develop a group website.
- CLFs and listening sessions are all part of this engagement strategy—need to continue process.
- Want all our partners to have substantial input before we start writing (March 2011)—next four months will be most critical time for engagement.
- May not have time to do this perfectly—but best way would be to have series of meetings across the country with relevant people and get input/feedback, and bring that into strategy.
- Perhaps a day or a workshop where we could engage in more depth, and react to a draft.
- Need to anticipate where there would be voices of concern: perhaps user groups (fishermen, farmers, etc), need to engage people in natural resource agencies that are strongest links to these communities. Also think about who are most sympathetic audiences within these groups (landowners, industry, users) to speak back to their constituencies, mobilize those who already reach out to those sectors and leverage through them.
- But impossible to do in one meeting? How to do this with limited resources/limited time?
- Want to get substantive input but also want to sell the idea—need to think about both.
- So far have limited the engagement to one type of folks, don't want to wait too long to engage others. Recommendations to Steering Committee: figure out how to engage other groups in limited time—use SC members themselves?
- Also: want to be as inclusive as possible, but also want to get something done in quick timeframe—need to prioritize the audience, recognize that some groups will be uncomfortable.
- Could have a few listening sessions or workshops before March in DC or possibly elsewhere around country. Roll out to relevant offices in DC?
- Anticipate SC will meet 4-6 times, could have listening sessions there? But maybe too late?
- Big danger: asking for input but not doing anything about it—don't ask for input that we are not going to use, make sure we know how we are going to use information.
- Consider what the role of the technical teams will be? They will also be engaging with partners, getting input throughout writing process.

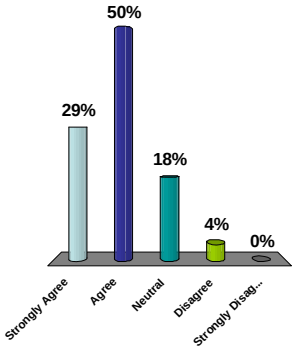
- Next step: “Straw man” idea of what this is going to be/look like, then ask for input on that: example, if we want to do a plan that talks about impacts and actions, have opportunities to weigh in on that. Need to give people something to respond to even if it is off base.
- Engagement strategy needs to consider beyond the writing of it—need a communications strategy to sell it after it is completed
- Really three periods: pre-writing, writing, and roll-out: continuous engagement process.
- Question: will there be a CLF 4? Not sure but may not be necessary for this issue—may use the device again for other issues or as needed. Been very positive in terms of input received as well as sense of partnership. Possible to do this as part of the roll out?

Appendix E: Forum III Evaluation

Evaluation results for Forum III captured via TurningPoint:

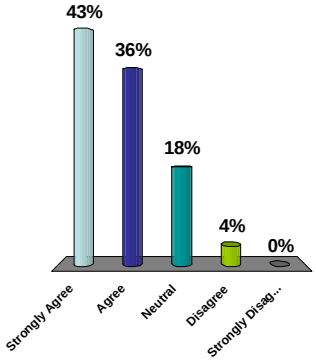
The meeting objective **"1. Hear from key experts on some fundamental aspects of adaptation"** ***was met.***

1. **Strongly Agree**
2. **Agree**
3. **Neutral**
4. **Disagree**
5. **Strongly Disagree**



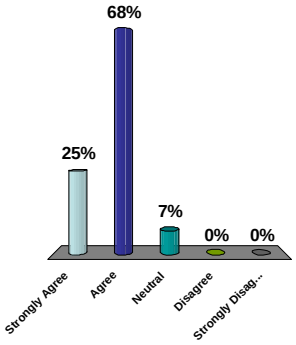
The meeting objective **"2. Describe the timeline and process for developing the National Fish, Wildlife and Plants Climate Adaptation Strategy"** ***was met.***

1. **Strongly Agree**
2. **Agree**
3. **Neutral**
4. **Disagree**
5. **Strongly Disagree**



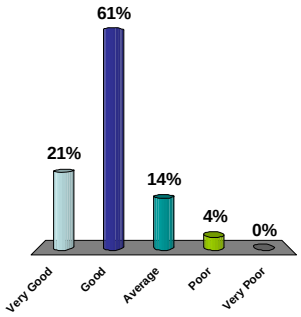
The meeting objective **"3. Get advice from participants on key remaining aspects of strategy development "** ***was met.***

1. **Strongly Agree**
2. **Agree**
3. **Neutral**
4. **Disagree**
5. **Strongly Disagree**



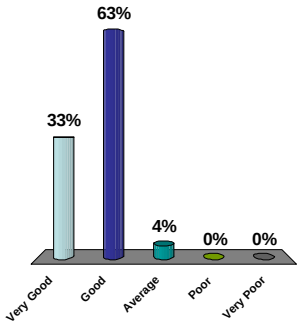
The structure of the meeting was:

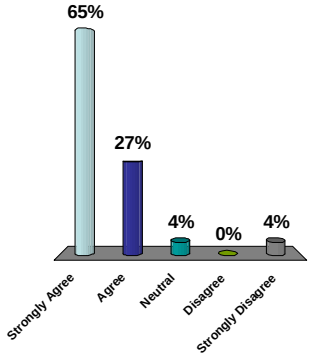
1. Very Good
2. Good
3. Average
4. Poor
5. Very Poor



The meeting's facilitation was:

1. Very Good
2. Good
3. Average
4. Poor
5. Very Poor



The TurningPoint technology (voting things) was a useful tool.

1. Strongly Agree
2. Agree
3. Neutral
4. Disagree
5. Strongly Disagree