



INTERAGENCY FORUM ON CLIMATE RISKS, IMPACTS, AND ADAPTATION

CLIMATE RISK MANAGEMENT: **Best Available Science and** **Best Management Practices**

Presentation by—

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11 January 2018

National Institute of Building Sciences (NIBS)

6th Conference – “Building Innovation 2018 Conference and Expo: Sustain. Strengthen. Secure.”

10:15-11:45 AM | Panel on “Climate Resilience: Adaptive Design and Risk Management”

08-11 January 2018 | Mandarin Oriental Hotel, Washington DC

Contact Person: Dr. Richard Wright, ASCE



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INTERAGENCY FORUM
11th Year (Established 2007)

Interagency Forum

On Climate Risks, Impacts, and Adaptation



The Forum's scope includes but is not limited to aspects of the following:

A Federal Agency is mandated to

31 U.S.C. §3512

Safeguard: Funds, Property, and Other Assets

Exposure to "Material Weakness" requirements; with statutory related "Disclosure" to Congress, and to taxpayers and the public, unless a specific statutory exemption applies

Further, an Agency is mandated to

31 U.S.C. §1115

Manage High Risk Management Challenges, Identified by GAO* or IG

* "Limiting the Federal Government's Fiscal Exposure by better managing climate change risks" URL: http://www.gao.gov/highrisk/limiting_federal_government_fiscal_exposure/why_did_study



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“Knowledge Networks” = Interagency Forum

CONNECTING PRODUCERS & USERS OF CLIMATE SCIENCE: PROVEN INSTITUTIONAL ARRANGEMENTS & MECHANISMS*

* L DILLING & M C LEMOS (2011) “CREATING USABLE SCIENCE: OPPORTUNITIES AND CONSTRAINTS FOR CLIMATE KNOWLEDGE USE AND THEIR IMPLICATIONS FOR SCIENCE POLICY”; GLOBAL ENVIRONMENTAL; CHANGE, PAGES 680-689

<i>Institutional Arrangements & Mechanisms</i>	Description	Remarks: NASA’s Approach
<i>1) Information Brokers</i>	Broker is an intermediary between the user and the scientists	<i>NASA’s contractor consultant is currently SAIC</i>
<i>2) Collaborative Group Processes</i>	Many groups with a vested the outcome and where decision making is highly distributed	<i>NASA “Oversight Steering Group”: Directorate level stakeholders that coordinate efforts</i>
<i>3) Embedded Capacity</i>	Local climate scientists available to provide information and advice	<i>NASA Climate Adaptation Science Investigators (CASI) are NASA climate scientists at NASA Centers doing local applied research</i>
<i>4) Boundary Organizations</i>	Functions between the world of research and use of science to tailor information and produce value-added products; translation and customization of climate information to specific users	<i>NASA “Core Team” on Climate Risks & Adaptation: implementation team that designs workshops and information products</i>
<i>5) Knowledge Networks</i>	Comprised of policy makers, scientists, government agencies, and non-government organizations that communicate and share information across areas of practice	<i>Interagency Forum on Climate Change Impacts & Adaptations: (NASA, USACE, and others) NASA is Forum Co-Chair and uses the Forum to spin-in best practices.</i>



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The Forum seeks out examples of:

- **Best Available Science**
- **Best Management Practices**
- **Lessons Learned**



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Example Participating Federal Agencies (n>30)

NASA

U.S. Department of Agriculture

- **Agricultural Research Service**
- **Natural Resources Conservation Service**
- **Rural Development**
- **U.S. Forest Service**

U.S. Department of Commerce

- **National Oceanic and Atmospheric Administration**

U.S. Department of Defense

- **U.S. Air Force**
- **U.S. Army**
- **U.S. Army Corps of Engineers**
- **Assistant Secretary for Installations, Energy and Environment**
- **U.S. Navy**
- **National War College**

U.S. Department of Energy

U.S. Department of Homeland Security

- **Federal Emergency Management Agency**
- **U.S. Coast Guard**

Smithsonian Institution

U.S. Department of the Interior

- **U.S. Fish and Wildlife Service**
- **U.S. Geological Survey**
- **National Park Service**

U.S. Department of Justice

U.S. Department of State

- **U.S. Agency for International Development**

U.S. Department of Transportation

- **Federal Aviation Administration**
- **Federal Highway Administration**

U.S. Environmental Protection Agency

U.S. Global Change Research Program

U.S. Government Accountability Office

General Services Administration

National Academies

- **National Academy of Sciences**
- **National Research Council**

National Institutes of Health

Office of Science and Technology Policy

White House Council on Environmental Quality



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Over 100 Participants Involved



PARTICIPANTS - Geographic Extent:

West-East: Hawaii to Europe

North-South: Alaska to Florida





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Welcome to FedCenter

FedCenter.gov is the Federal government's home for comprehensive environmental and compliance assistance information for Federal facility managers.

Climate Change Adaptation

The Climate Change Adaptation Program Area supports Federal agency climate adaptation planning. Please check in periodically for new information.

- What is climate change adaptation & why do Federal agencies need to adapt?
- Background on the Implementing Instructions for Federal Agency Climate Change Adaptation
- Federal Framework for adaptation planning and guiding principles

What is Climate Change Adaptation & Why is it Important?

Climate change adaptation means adjusting to a changing climate to minimize negative effects and take advantage of new opportunities. Climate change directly affects a wide range of Federal services, operations, programs, assets, and our national security. Through adaptation planning, an agency can identify how climate change is likely to impact its ability to achieve its mission, operate, or meet its policy and program objectives. By integrating climate change adaptation strategies into its planning, the Federal Government can ensure that resources are invested wisely and Federal services and operations remain effective in current and future climate conditions.

Background on the Implementing Instructions for Federal Agency Climate Change Adaptation

Executive Order 13514, Federal Leadership in Environmental, Energy, and Economic Performance, establishes an integrated strategy for sustainability within the Federal Government. Under the Executive Order, each agency is required to evaluate their climate change risks and vulnerabilities to manage the effects of climate change on the agency's mission and operations in both the short and long term as part of the Federal Strategic Sustainability Performance Planning process. In its October 2010 Progress Report, the Interagency Climate Change Adaptation Task Force recommended that CIO issue climate change adaptation planning implementing instructions. The Implementing Instructions for Federal Agency Climate Change Adaptation Planning identify how agencies should respond to the adaptation requirements under the Executive Order.

Federal Framework for Adaptation Planning, and Guiding Principles

CIO issued its adaptation planning requirements on a six-step, flexible planning framework and eight guiding principles, as recommended by the Interagency Climate Change Adaptation Task Force. The planning framework is not meant to be prescriptive or to provide detailed recommendations for project-level adaptation; those detailed options will be developed over time by each agency with the help of a growing set of planning tools, illustrative case studies, and lessons learned. In addition, climate change adaptation planning is an iterative process; our knowledge of climate change is evolving, as is our understanding of different types of adaptive actions.

Please click on the links below for more information on specific planning actions.

"FedCenter.gov"

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Other Resources

- Interagency Forum on Climate Risk, Impacts and Adaptation
- Hosted by NASA & USACE



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(Past) SPECIAL EVENTS

- ***2nd International Technical Workshop on Climate Risks***
 - ***Special Training Event: Climate Change – Installation Adaptation & Resilience***
 - ***Special Training Event: Climate Risk Management***
 - ***Special Training Event: Climate Adaptation and Infrastructure Engineering***
 - ***Climate and Energy: Extreme Weather and Climate Events***
 - ***Special Training Event: Climate Change and Adaptation***
-
- ***Earth Day Symposium***



Source: NASA



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Next Forum – 18 JAN 2018

- ***Acts of God, Human Influence and Litigation***
– L. Patton, Earth and Water Law, LLC –
- ***Superfund Sites and Sea-Level Rise***
– J. Kiraly, American University
- ***Puerto Rico – the ‘Island of Enchantment’ after Hurricane Maria***
– J. Groman, Chief, Facilities Engineering Branch, NASA

