

Memorandum

CLIMATE-RELATED

FINANCIAL REPORTING

August 1, 2024

To: Members of the Board

From: Robin M. Gilliam, Assistant Director

Thru: Monica R. Valentine, Executive Director

Subject: Climate-Related Financial Reporting Framework - (Topic D)

INTRODUCTION

The objectives of this agenda session are twofold. The first objective is to address those member questions posed at the June 2024 Board meeting by presenting an education session of climate-related subject matter experts.

The second objective is to gain feedback and Board approval on a proposed climaterelated financial reporting framework.

REQUEST FOR FEEDBACK BY AUGUST 13, 2024

Prior to the Board's August 2024 meeting, please review the attached staff analysis and

respond to the ensuing question by **AUGUST 13, 2024**. Please submit responses to Robin Gilliam at gilliamr@fasab.gov with a cc to Monica Valentine at valentinem@fasab.gov.

NEXT STEPS

Based on Board feedback and any decisions made during the August meeting, staff will begin working on the climate-related financial reporting framework.

All briefing materials are electronically available at www.fasab.gov. They are prepared by staff to facilitate Board discussion at meetings and are not authoritative. Official positions of FASAB are determined only after extensive due process and deliberations.

⁴⁴¹ G Street NW, Suite 1155, Washington, DC 20548 (202) 512-7350 Fax 202 512-7366

ATTACHMENTS

- 1. Staff Analysis
- 2. Fast Track Act Committee Synthesis of Agency Climate Services, March 2023
- **3.** June 2024 Member Feedback Mapped to the Proposed Climate-related Financial Reporting Framework.
- 4. Member Comment Form

Staff Analysis

CLIMATE-RELATED FINANCIAL REPORTING

AUGUST 1, 2024

Attachment 1

CONTEXT

At the December 2023 meeting, the Board agreed on the following vision for the Climate-related Financial Reporting Framework:

The vision for climate-related financial reporting is to provide users relevant information on the current and potential impact of climate-related events and risks on a federal reporting entity's financial position, condition, and key performance results.

At the June 2024 meeting, the Board reviewed which approximately 158 IFRS S2 (S2) disclosures could be relevant for FASAB's climate-related financial reporting framework (framework). Staff recommended 11 proposed reporting items based on the Board's climate-related financial reporting vision in the briefing material.

Preliminary email comments indicated that members were interested in scaling down the 11 recommended reporting items. Staff merged the 11 recommendations into the following three proposed reporting items for deliberation.

- 1. Discuss the material effects of climate-related events that have occurred on
 - a) the reporting entity's financial position, financial condition, or key performance results for the reporting period; and
 - b) the potential estimated financial effects going forward. Estimates may be disclosed in a single amount or a range.
- 2. Explain material impacts to the reporting entity's financial position, financial condition, or key performance results from adaptation, mitigation, or resilience activities undertaken to manage climate-related risks or opportunities for physical, transition, or credit portfolio risks.
- Discuss climate-related spending which occurred during the reporting period, the funding instruments used (i.e., loans or grants), and the climate-services provided. If actual costs are not available, the explanation should include obligations incurred or associated outlays.

At the June 2024 Board meeting members discussed the three reporting proposals and provided staff with a myriad of feedback related to developing a climate-related financial reporting framework. Staff has categorized that feedback as member comments, recommendations, or requested research.

Staff has numbered the members' feedback using the following abbreviations:

- Member comments = MC#
- Member recommendations = MR#
- Member requested research = MRR#

The following tables explain how staff classified member feedback into comments, recommendations, or requested research. Feedback tracking numbers were then used in Attachment 3, *June 2024 Member Feedback Mapped to the Proposed Climate-related Financial Reporting Framework.* Attachment 3 maps the June 2024 member feedback to what will be addressed in the education session and what influenced the proposed framework structure.

Staff classified the following remarks, observations, or statements **as member comments**.

Feedback Tracking #	Member Comments	
MC1	Keep the framework at a high level.	
MC2	Consider that reporting estimates may be problematic for climate- related risks due to uncertainty and a lack of available information.	
MC3	Keep in mind that agencies have challenges separating climate-related spending from other operational costs for accrual accounting.	
MC4	Understand why the Board is considering climate as separate from other risks (for example, cybersecurity).	
MC5	Keep cost/benefit in mind when developing this framework.	
MC6	Include reporting of material changes, significant opportunities, and significant risks as part of the MD&A process.	

Staff classified the following specific suggestions for the framework as **member recommendations**.

Feedback Tracking #	Member Recommendations		
MR1	Keep the second proposed reporting item because it is related to climate risk, which was the focus of the project when the Board added it to the technical agenda.		
MR2	Merge the first and third proposed reporting items.		
MR3	Include trend information to report how climate-related costs are changing over time.		
MR4	Promote flexibility to allow agencies to tell their story while including common threads of information to weave comparative information for government-wide reporting.		
MR5	Report climate-related information in required supplementary information (RSI).		
MR6	Understand how much of a material change is climate-related.		
MR7	Include a separate RSI section in MD&A about forward-looking information.		
	a. What climate-related risks is the agency facing today (for its own resilience or for climate-service programs?		
	b. What is the strategy to address these risks and how does the entity prioritize these risks?		
	c. What is the agency trying to accomplish?		
	d. Is there funding to address these risks?		
	i. What has been spent?		
	ii. Is there an available budget to address risks?		
	iii. How much could it cost to address these risks in the future?		
MR8	Address this project in a multi-phased approach. For example, what can be accomplished now and what can be accomplished when more information becomes available?		

Staff classified the following questions and research statements as **member requested research**.

Feedback Tracking #	Member Requested Research	
MRR1	Define climate services.	
MRR2	Define climate-related events.	
MRR3	Determine how the Federal Emergency Management Agency distinguishes a climate-related event from a non-climate-related event.	
MRR4	Research the availability of information to report federal spending for climate-related events.	
MRR5	Research the capability of agencies to report spending for climate-related events.	
MRR6	Determine which standards the Board should amend to address climate- related reporting.	
MRR7	Determine if GASB's modified approach for infrastructure assets could be beneficial.	
MRR8	Ascertain what climate-related types of information federal entities are including in their financial reports.	
MRR9	Determine which agencies include climate-related costs in the statement of net cost.	
MRR10	Research which states include climate-related information in their financial reports, such as California, Kentucky, and Florida. For example, Kentucky is trying to capture information about the costs associated with every aspect of preparedness for climate-related resilience.	

STAFF ANALYSIS AND RECOMMENDATIONS

Meeting Objectives

The objectives for this meeting are twofold. The first objective is to address the Board questions during the education session. The second objective is to gain feedback and Board approval on a proposed climate-related financial reporting framework.

I. Education Session

Based on the June 2024 Board meeting discussion, staff thought it best to provide an education session to address some of the Board's feedback. Staff has summarized that feedback into the following broad topics¹.

- 1. Defining climate services
- 2. Defining climate-related events;
- 3. Distinguishing a climate-related event from a non-climate-related event;
- 4. Determining the availability of federal spending information for climate-related events; and
- 5. Assessing agencies' capabilities to report spending for climate-related events
- 6. Assessing the need to report climate risk from other risks.

Staff anticipates this education panel will help members to understand the extent of fiscal exposure from climate which qualifies it for distinct reporting.

Members will hear from climate-related subject matter experts who will address **the following questions:**

A. How Does the Federal Emergency Management Agency (FEMA) distinguish a climate-related event from a natural disaster/non-climate-related event?

FEMA does not have a formal definition of a climate-related event, but FEMA is planning for increases in the frequency, intensity, and duration of some weather events as a result of climate change. These weather events are increasingly expected to overwhelm the capacity of state and local governments to respond.

¹ See Attachment 3, *June 2024 Member Feedback Mapped to the Proposed Climate-related Financial Reporting Framework*. Attachment 3 maps the member feedback that will be addressed in this education session.

FASAB welcomes Jesse Rozelle. Jesse manages FEMA's Natural Hazards Risk Assessment Program (NHRAP). Jesse will provide an overview of how FEMA defines hazards, risks, and disasters.

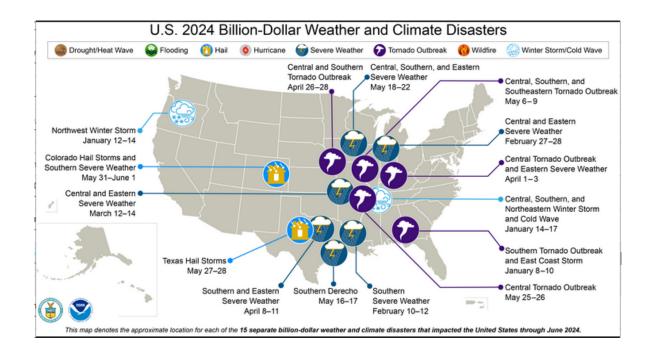
B. Has the federal government defined a "climate-related event"?

Staff has not found a standard federal definition for "climate-related event". However, the National Oceanic and Atmospheric Administration (NOAA) does track billion-dollar "weather and climate disasters".

0	https://www.ncei.noaa.gov/access/billions/	t
		View summary data in <u>Summary Stats</u>

2024 in Progress...

In 2024 (as of July 9), there have been 15 confirmed weather/climate disaster events with losses exceeding \$1 billion each to affect United States. These events included 13 severe storm events and 2 winter storm events. Overall, these events resulted in the deaths of 106 people and had significant economic effects on the areas impacted. The 1980–2023 annual average is 8.5 events (CPI-adjusted); the annual average for the most recent 5 years (2019–2023) is 20.4 events (CPI-adjusted).



FASAB welcomes Dr. Sarah Kapnick. Sarah is a climate scientist with experience across the public and private sectors. She is presently serving as Chief Scientist at the National Oceanic and Atmospheric Administration (NOAA). In this role, she is responsible for advancing policy and program direction for NOAA's science and technology priorities. Her academic research spans climate prediction and projection, mountain hydroclimate, extreme storms, water security, climate risk and climate

economics. She has also held positions at JPMorgan, Goldman Sachs, a carbon registry, and a renewable energy forecasting startup. Her expertise in climate science and its economic impacts has made her a trusted resource across the federal government and for national and international outlets and publications such as The New York Times, The Wall Street Journal, PBS, BBC, the Today Show and NPR. She earned a Ph.D. from UCLA and A.B. in mathematics with a certificate in Finance from Princeton.

Sarah will discuss how NOAA defines "weather and climate disasters" and the science and data behind physical risks.

C. How does the federal government define "climate services"?

The U.S. Global Change Research Program (USGCRP) defined **climate services** as:

- scientifically based, usable information, products, and activities that enhance knowledge and understanding about the impacts of climate change on potential decisions and actions.
- The accelerating pace of climate change and its impacts, being felt now across the country, emphasizes the urgent and expedient need for the federal government to expand and advance climate services.
- The vision is to create an integrated federal ecosystem of products, tools, and people that is accessible to decision-makers, businesses, and frontline communities facing the impacts of climate change, where these stakeholders will have seamless access to the full suite of federal knowledge and tools to help inform decisions relating to adaptation, mitigation, and building resiliency.

In March 2023, the Executive Office of the President, Fast Track Action Committee on Climate Services of the National Science and Technology Council published *A Federal Framework and Action Plan for Climate Services*. To provide a comprehensive view of climate services, staff includes Box 4.1. *Synthesis of select FTAC member agencies' authorities, capabilities, and applications relevant to the development, delivery, and use of climate services* as Attachment 2.

FASAB welcomes Julian Reyes, PhD, Climate Adaptation Program Lead, Bureau of Land Management (BLM), Julian was formerly Deputy Director for Services at the U.S. Global Change Research Program, and Assistant Director for Climate Services at the White House Office of Science and Technology Policy. He helped to catalyze the Federal government's implementation of a whole-of-government approach to climate services, while also building internal capacity at various agencies – USDA and BLM – to effectively use climate services for adaptation and resilience efforts.

Julian will share his expertise and experience about Federal climate services.

D. What is the availability of climate-related information and the capability of agencies to report spending for climate-related events?

FASAB welcomes Joe Thompson, Assistant Director and Zoe Need, Senior Analyst from GAO's Natural Resources and Environment team. Joe has been at GAO for almost 21 years and coordinates GAO's climate change work. Joe has a BS in environmental policy from the University of Michigan-Ann Arbor and a Master of Public Affairs from the University of Wisconsin-Madison. Most of Joe's free time is spent playing with his five year old daughter, Audra.

Zoe has been at GAO for five years and has worked in GAO's climate change portfolio for the past three years. Zoe has a BS in environmental management, a minor in studio art, and a Master of Public Affairs from Indiana University-Bloomington.

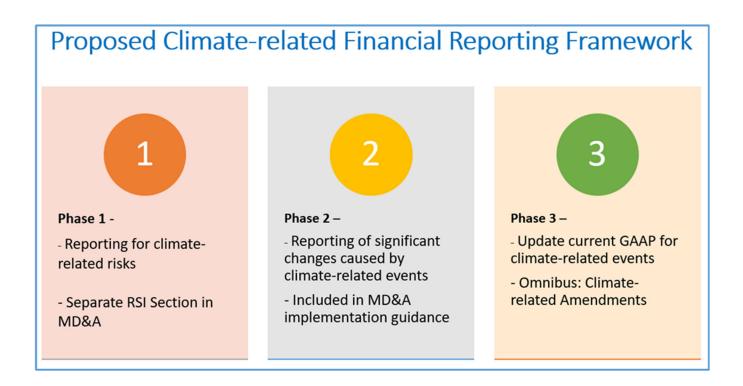
GAO is researching the availability of climate-related information and agencies' capacity to report that information. Joe and Zoe will share these findings with the Board.

E. Q&A

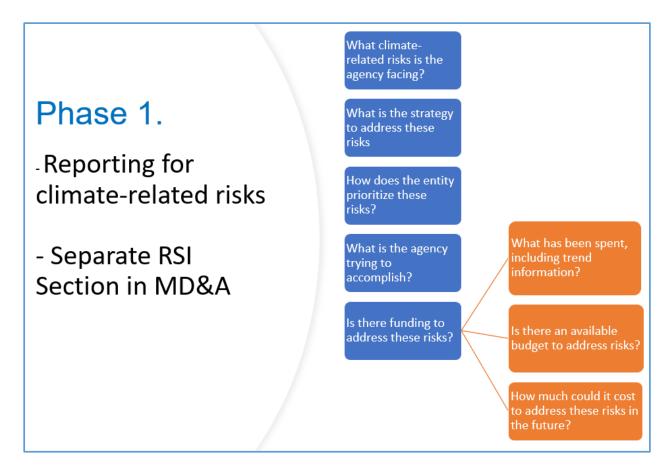
To conclude the first part of the climate session, members may engage in a question and answer session with the panelists.

II. Proposed Climate-Related Financial Reporting Framework

The second objective is to gain feedback and Board approval on a proposed climaterelated financial reporting framework (the framework). Staff recommends the following three phase approach for the framework based on the analysis of the remaining Board feedback not specifically addressed in the education session.



Phase 1 - Develop Separate RSI Section in MD&A for Climate-related Risks



Staff proposes that the following topics be addressed in Phase 1²:

- 1. Reporting estimates for climate-related risks may be a challenge due to uncertainty and a lack of available information.
- 2. Reporting climate-related costs trend information over time.
- 3. Promoting flexibility to allow agencies to tell their climate-related story with common threads of information for consolidating comparative information for governmentwide reporting.
- 4. Reporting climate-related information as required supplementary information (RSI).

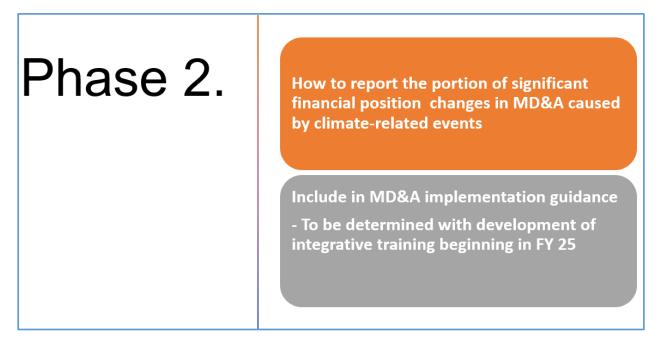
² See Attachment 3, June 2024 Member Feedback Mapped to the Proposed Climate-related Financial Reporting Framework

5. Including a separate RSI section in MD&A with climate-related forward-looking information.

Staff proposes that during Phase 1 the Board consider providing for a separate climaterelated RSI section for MD&A. This RSI section will discuss a reporting entity's climaterelated risk, strategy, risk management, funding, and trend information. These attributes or characteristics can be attributed to the Board's analysis of S2. During Phase 1 staff will focus on principle-based standards to allow agencies flexibility in relation to their missions and not as a prescribed regimented risk list. Staff will also recommend definitions of risk categories for the Board to consider which will help guide agencies in their RSI reporting.

Staff recommends the Board consider that Phase 1 provide guidance for agencies to report their climate-related risk efficiently, effectively and in a consistent manner. Consistent and comparative reporting will assist with consolidating information for government-wide reporting, which will help to reduce reporting burden.

Phase 2 - Develop Guidance for How to Report the Portion of Significant Financial Position Changes in MD&A caused by Climate-Related Events:

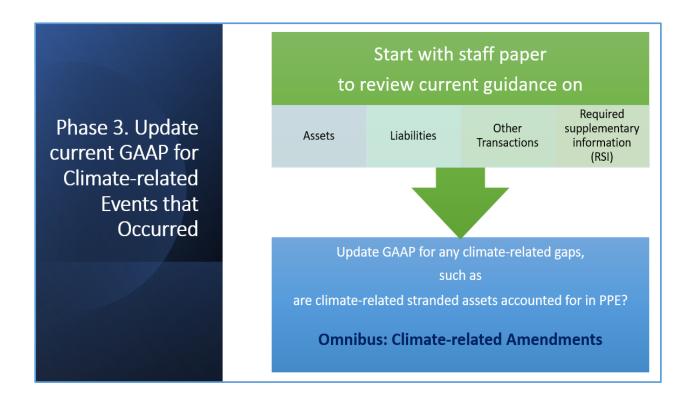


Staff proposes that the following topics be addressed in Phase 2:

- 1. Reporting material changes as part of the MD&A process.
- 2. Understanding how much of a material change in financial position is climaterelated.

Staff recommends that during Phase 2 the Board consider providing guidance on how to report the climate-related portion of a significant change in financial position.³ This guidance will address significant changes from climate-related events that have occurred. Staff recommends this be accomplished in the context of guidance for proposed SFFAS 64, *Management's Discussion and Analysis*, Standard 12.b.

Phase 3 - Update current GAAP guidance for climate-related events; Develop Omnibus: Climate-related Amendments



³ MD&A refers to "significant" instead of "material". Thus, the use of word "significant".

Staff proposes that the following topics be addressed in Phase 3:

- 1. Understanding agency challenges separating climate-related spending from other operational costs for accrual accounting.
- 2. Determining which standards may be affected by climate-related reporting.
- 3. Assessing GASB's modified approach for infrastructure assets.
- 4. Identifying agencies that include climate-related costs in the statement of net cost.
- 5. Researching states that include climate-related information in their financial reports, such as California, Kentucky, and Florida.

Staff recommends that during Phase 3 existing GAAP guidance be reviewed to determine if any Statements should be updated with climate-related guidance. This guidance would address climate-related events that have occurred. Staff proposes that Phase 3 will help to determine what climate-related information federal entities include in financial reports and what climate-related financial information is missing.

Staff, working with the task force, will begin with the staff paper *Statements of Federal Financial Accounting Standards That May Be Relevant to Climate-Related Financial Reporting,* published May 17, 2022, to determine if any amendments are needed to address climate-related reporting.

Question #1 for the Board:

Does the Board agree with the proposed climate-related financial reporting framework?

Please provide your responses and comments in the member comment form.

NEXT STEPS

Based on Board feedback and any decisions made during the August meeting, staff will begin working on the climate-related financial reporting framework.

A Federal Framework and Action Plan for Climate Services

Box 4.1. Synthesis of select FTAC member agencies' authorities, capabilities, and applications relevant to the development, delivery, and use of climate services

The following summarizes the authorities, capabilities, and applications of FTAC member agencies with respect to climate services. The information illustrates the diversity of ways in which agencies engage the climate services knowledge value chain (see Section 2.2), as well as how information is shared across agencies. Additional details regarding agency contribution to, and applications of, climate services are provided in agencies' <u>Climate Adaptation Plans</u>.



The U.S. Department of Defense (DOD) is mandated by numerous Executive Orders, public laws, departmental directives, and via Congressional appropriations to enhance the Nation's resilience to threats caused by climate change and extreme weather. DOD's core capabilities relevant to climate services include numerical modeling, forecasting, environmental analysis, and enhanced sensing, data processing, and dissemination technologies for characterizing the environment. Priority needs for climate services to support DOD's ability to make climate-informed decisions include enhanced information on atmospheric dynamics and coastal inundation.



The U.S. Department of Transportation (DOT) is authorized to deliver climate services through Executive Orders, Congressional authorizations, and departmental directives. DOT primarily uses climate data and information from other federal agencies to develop resources and tools for state, local, and tribal transportation agencies to facilitate the integration of climate resilience into transportation decision-making. For example, DOT developed a <u>Vulnerability Assessment and Adaptation Framework</u> to help transportation agencies assess the vulnerability of infrastructure to extreme weather and climate impacts and a <u>CMIP Climate Data Tool</u> that translates downscaled climate projections into relevant statistics for transportation planners. DOT is also developing training materials to ensure that staff across the Department have the knowledge to make decisions that are grounded in the best-available scientific understanding of climate change risks, impacts, and vulnerabilities.



The U.S. Environmental Protection Agency (EPA) is mandated by numerous laws, federal regulations, and Executive Orders to incorporate climate-related vulnerability and risk into agency decisions and to support the monitoring and reporting of greenhouse gas emissions. EPA's core capabilities relevant to climate services include the provision of technical information on climate change and responses; the synthesis, assessment, and translation of climate science to inform decisions; and the development of climate products and information for the public. EPA facilitates stakeholder engagement regarding the design and implementation of environmental regulatory actions. Priority needs for climate services include access to authoritative climate information that is consistent across the Federal Government.



The Federal Emergency Management Agency (FEMA) in the U.S. Department of Homeland Security is authorized to deliver and use climate services via Executive Orders and Memos, authorization and appropriation bills, and organizational charters. FEMA provides climate service capabilities through multiple mechanisms. These include its contributions of climate and resilience information to online tools such as the <u>Climate Mapping for Resilience and</u> <u>Adaptation</u> (CMRA) Portal and the <u>Climate Risk and Resilience</u> (ClimRR) Portal; climaterelated data analysis as needed in collaboration with stakeholders; and the provision of climate services through programs such as <u>Hazard Mitigation Planning</u> and <u>Building</u> <u>Resilience Infrastructure and Communities</u> (BRIC). In addition, FEMA uses climate data and

August 2024 Topic D, Climate Attachment 2

Fast Track Act Committee (FTAC) Synthesis of Agency Climate Services March 2023

A Federal Framework and Action Plan for Climate Services

	services from other agencies to meet its goals of building a climate-resilient Nation, to empower risk-informed decision making, and to meet current and emergent threats.
GSA	The General Services Administration (GSA) has authority to use and develop internal-only climate services through multiple Executive Orders and public laws, including the <u>Disaster</u> <u>Resiliency Planning Act of 2022</u> . GSA conducts climate risk screening, assessment, and climate adaptation planning as part of its effort to support mission continuity, secure federal investments, and provide reliable performance over the intended service life of those investments. GSA depends on climate services to ensure climate-informed decisions in asset management, capital planning, and supply chain risk management.
	Although the U.S. Department of Health and Human Services (HHS) does not develop or deliver climate data, its authority to use and apply climate services is inherent in its mission to enhance the health and well-being of all Americans. For example, the Centers for Disease Control and Prevention's (CDC) <u>Climate and Health Program</u> and the National Institute of Health's <u>Climate Change and Health Initiative</u> use climate data for research purposes under the Department's general public health authority and in response to EO 14008. The Department's climate service capabilities lie in translating climate data for use in public health tools such as the <u>National Environmental Public Health Tracking Networking</u> (CDC) and integrating climate data into tools that assess the health impacts of climate change (NIH). The collection and distribution of climate data by other federal agencies, in particular temperature, precipitation, and greenhouse gas data, is essential to HHS's climate and health research and enabling health departments and the health and human services sectors more broadly to prepare for and respond to the health impacts of climate change.
AND LINE AND DEVE OPHIC	The U.S. Department of Housing and Urban Development's (HUD) authority to acquire, develop, deliver, or use climate data, information, and services is linked to HUD's mission to create strong, sustainable, inclusive communities and its role in managing billions of dollars in disaster recovery funding. HUD's relevant capabilities include data analytics, science translation, application development, risk assessment, stakeholder engagement, and adaptation planning. For example, HUD's <u>Community Resilience Toolkit</u> can be used to help Community Planning and Development grant recipients understand how natural hazard risks may impact their community. As a user of climate services, HUD benefits from comprehensive and modernized data collection on climate and HUD assets, and, in particular, delivering the requirements of the <u>Federal Flood Risk Management Standard</u> (FFRMS). HUD grantees and staff also need training and education on how to understand how existing climate services can be used to support community needs.



The National Aeronautics and Space Administration (NASA) pursues a program of Earth observations, research, and applications to better understand the Earth, how it supports life, and how human activities affect its ability to do so in the future. One way in which NASA measures its success is through practical benefits to society. NASA manages the development of all missions that provide Earth observations for the Nation's civil space agencies, provides a progression of both novel and continuity observations to improve understanding of the global climate system, and is a steward of advancing the knowledge of the Earth system from sea surface and ice height, to land and ocean biodiversity, to atmospheric chemistry, cloud properties, and Earth energy balance. NASA's core strengths include Earth system observation, open data, data-driven modeling and prediction, climate application development (e.g., <u>Sea Level Change Portal</u>), international engagement (e.g., <u>SERVIR</u> program), and public outreach (e.g., <u>NASA Global Climate Change website</u>), and NASA strives to ensure the availability and the widest possible use of climate information. NASA is working with partners to prototype greenhouse gas monitoring and information

A Federal Framework and Action Plan for Climate Services

	capabilities. It will also enhance data visualization and tools as part of its new Earth Information Center. NASA applies climate data internally to plan operations and ensure the resiliency of facilities, and it provides climate information and tools to enable more than a dozen other agencies to meet their missions. NASA is also developing innovative and practical tools and techniques to use the latest climate projections for extreme weather, sea-level rise, coastal and riverine flooding, wildfires, air quality, energy, and water resources to support decisions that build resilience.
NIST	NIST is designated by Congress as the Lead Agency for the <u>National Windstorm Impact</u> <u>Reduction Program</u> (NWIRP). NIST coordinates the NWIRP research and implementation activities for the four NWIRP agencies – FEMA, NIST, NOAA, and NSF. The <u>National</u> <u>Construction Safety Team</u> (NCST) Act authorizes NIST to establish teams to investigate building failures that could happen due to climate-related extreme weather events. The results of these failure studies inform improved design and codes for buildings. NIST has also been directed to work with NOAA and other appropriate Federal and non-Federal parties to identify a consistent and authoritative set of climate information that emphasizes forward looking climate data and projections that should be utilized in the standard-setting process. In addition, the NIST <u>Greenhouse Gas Measurements Program</u> develops tools and standards for measuring greenhouse gas emissions to support emissions management across sectors and industries.



The National Oceanic and Atmospheric Administration (NOAA) is directed to provide comprehensive weather and climate services by a number of legislative authorities. These include the National Climate Program Act of 1978, the Weather Research and Forecasting Innovation Act of 2017, the National Integrated Drought Information System Act Reauthorization Act of 2019, and the Flood Level Observation, Operations, and Decision Support (FLOODS) Act of 2022. Language referenced in the House Committee on Appropriations report for the FY2023 Omnibus "recognizes NOAA's role as the lead Federal agency providing climate services and supports the expansion of NOAA's efforts to provide climate services, information, and outreach as part of its Climate Ready Nation initiative." NOAA's core capabilities in support of the delivery of climate services range from operational observations and provision of data to fundamental research into climate monitoring and event attribution, model development and projections, social and interdisciplinary science, delivery of forecasts and warnings, and the coproduction of knowledge and decision support tools with stakeholders. NOAA currently maintains most of the Nation's sustained climate observing networks as well the Nation's permanent archive of weather, climate, atmospheric and oceanographic data, and ensures the continuity and integrity of the historical climate record. NOAA is committed to open and equitable access to data and information and supports operational best practices in service delivery. NOAA has fostered the growth of a private sector industry to meet specialized business and public sector needs. It also sponsors place-based programs to develop trusted relationships with decision makers and prioritize equitable engagement with frontline, underserved communities.



The National Science Foundation (NSF) has multiple authorities to perform and disseminate scientific research and initiate programs that strengthen research potential and education programs. NSF focuses its efforts on the scientific underpinnings that lead to robust climate services through investments that support research infrastructure, observations, and modeling. For example, through the U.S. Antarctic Program, NSF manages all U.S. scientific research and related logistics in Antarctica and the Southern Ocean, enabling the collection of long-term climatic data by NSF-supported researchers and other federal agencies. NSF-funded researchers often use climate data and projections in their research activities and/or

A Federal Framework and Action Plan for Climate Services

develop and disseminate new scientific findings on climate and Earth System processes and phenomena.
The U.S. Department of Agriculture's (USDA) overarching authorities on the application of climate services to address climate change are codified in the Global Climate Change Prevention Act of 1990 (Title XXIV of the Food, Agriculture, Conservation, and Trade Act of 1990 P.L. 101-624) and managed by the Climate Change Program Office (CCPO) located within the Office of the Chief Economist. This Act directs CCPO to coordinate policy analysis, long range planning, research, and response strategies related to climate change and to ensure that recognition of the potential for climate change is fully integrated into research, planning, and decision-making processes of the Department. Examples of USDA's work on climate services include USDA's regional Climate Hubs, activities of meteorologists in the World Agricultural Outlook Board, the Natural Resources Conservation Service's Snow Survey and Water Supply Forecasting Program, and Soil Climate Analysis Network (SCAN) Pilot Program. In addition, numerous climate-related tools have been developed and supported by the U.S. Forest Service, the National Institute for Food and Agriculture's partnership with the National Cooperative Extension System, and department-wide activities on climate change adaptation coordinated by CCPO.
The U.S. Geological Survey (USGS) in the Department of Interior, has general authorities and requirements to deliver data to the public. Accordingly, the USGS implements a systems- based approach for understanding the impacts of climate change on natural systems, and delivers that information at scales and timeframes relevant to decision-makers. The agency's unique interdisciplinary approach explores past climate, monitors current change, documents factors influencing change, and projects future conditions of the Nation's lands, waters, and biota. USGS, in cooperation with other agencies, provide information and services that support the department's broader mission to enable climate-informed, adaptive management of the Nation's fish, wildlife, lands, and waters.

	June 2024 Member Feedback Addressed in Education Session				
#	Feedback Tracking Code	Member Feedback	Where Addressed in Framework	Type of Member Feedback	
1	MRR1	Define climate services.	SME panelist to address during education session.	Member Requested Research	
2	MRR2	Define climate-related events.	SME panelist to address during education session.	Member Requested Research	
3	MRR3	Determine how the Federal Emergency Management Agency distinguishes a climate-related event from a non-climate- related event.	SME panelist to address during education session.	Member Requested Research	
4	MRR4	Research the availability of information to report federal spending for climate-related events.	SME panelist to address during education session.	Member Requested Research	
5	MRR5	Research the capability of agencies to report spending for climate-related events.	SME panelist to address during education session.	Member Requested Research	
6	MC4	Understand why the Board is considering climate as separate from other risks (for example, cybersecurity).	To be addressed in Phase 2	Member Comments	

	June 2024 Member Feedback that Influenced the Structure of the Framework			
#	Feedback Tracking Code	Member Feedback	Where Addressed in Framework	Type of Member Feedback
1	MC1	Keep the framework at a high level.	Considered in developing three phases for proposed framework. To be addressed in all phases	Member Comments
2	MR1	 Keep the second proposed reporting item because it is related to climate risk, which was the focus of the project when the Board added it to the technical agenda. 2. Explain material impacts to the reporting entity's financial position, financial condition, or key performance results from adaptation, mitigation, or resilience activities undertaken to manage climate-related risks or opportunities for physical, transition, or credit portfolio risks. 	Considered in developing three phases for proposed framework.	Member Recommendations
3	MR2	 Merge the first and third proposed reporting items. 1. Discuss the material effects of climate-related events that have occurred on a) the reporting entity's financial position, financial condition, or key performance results for the reporting period; and b) the potential estimated financial effects going forward. Estimates may be disclosed in a single amount or a range. 3. Discuss climate-related spending which occurred during the reporting period, the funding instruments used (i.e., loans or grants), and the climate-services provided. If actual costs are not 	Considered in developing three phases proposed framework.	Member Recommendations

	June 2024 Member Feedback that Influenced the Structure of the Framework			
#	Feedback Tracking Code	Member Feedback	Where Addressed in Framework	Type of Member Feedback
		available, the explanation should include obligations incurred or associated outlays		
4	MC5	Keep cost/benefit in mind when developing this framework.	To be addressed in all phases	Member Comments
5	MR8	Address this project in a multi-phased approach. For example, what can be accomplished now and what can be accomplished when more information becomes available?	Considered in developing three phases for proposed framework.	Member Recommendations
6	MRR8	Ascertain what climate-related types of information federal entities are including in their financial reports.	To be addressed in all phases	Member Requested Research

Member Feedback to be Addressed in Phase 1 Develop SFFAS for Separate RSI Section in MD&A on Strategy for and Funding of Climate-related Risks

#	Feedback Tracking Code	Member Feedback	Where Addressed in Framework	Type of Member Feedback
1	MC2	Consider that reporting estimates may be problematic for climate-related risks due to uncertainty and a lack of available information.	To be addressed in Phase 1	Member Comments
2	MR3	Include trend information to report how climate-related costs are changing over time.	To be addressed in Phase 1	Member Recommendations
3	MR4	Promote flexibility to allow agencies to tell their story while including common threads of information to weave comparative information for government-wide reporting.	To be addressed in Phase 1	Member Recommendations
4	MR5	Report climate-related information in required supplementary information (RSI).	To be addressed in Phase 1	Member Recommendations
5	MR7	 Include a separate RSI section in MD&A about forward-looking information. a. What climate-related risks is the agency facing today (for its own resilience or for climate-service programs? b. What is the strategy to address these risks and how does the entity prioritize these risks? c. What is the agency trying to accomplish? d. Is there funding to address these risks? i. What has been spent? ii. Is there an available budget to address risks? iii. How much could it cost to address these risks in the future? 	To be addressed in Phase 1	Member Recommendations

Member Feedback to be Addressed in Phase 2 Develop Guidance for How to Report — In the context of SFFAS 64-MD&A, Standard 12.b — How Much of a Significant Change in Financial Position is Climate-Related

#	Feedback Tracking Code	Member Feedback	Where Addressed in Framework	Type of Member Feedback
1	MC6	Include reporting of material changes, significant opportunities, and significant risks as part of the MD&A process.	To be addressed in Phase 2	Member Comments
2	MR6	Understand how much of a material change is climate-related.	To be addressed in Phase 2	Member Recommendations

Member Feedback to be Addressed in Phase 3 Analyze if updated guidance is needed for climate-related events/risks for current GAAP Develop a Climate-related Omnibus				
#	Feedback Tracking Code	June 2024 Member Feedback	Where Addressed in Framework	Type of Member Feedback
1	MC3	Keep in mind that agencies have challenges separating climate-related spending from other operational costs for accrual accounting.	To be addressed in Phase 3	Member Comments
2	MRR6	Determine which standards the Board should amend to address climate-related reporting.	To be addressed in Phase 3	Member Requested Research
3	MRR7	Determine if GASB's modified approach for infrastructure assets could be beneficial.	To be addressed in Phase 3	Member Requested Research
4	MRR9	Determine which agencies include climate- related costs in the statement of net cost.	To be addressed in Phase 3	Member Requested Research
5	MRR10	Research which states include climate-related information in their financial reports, such as California, Kentucky, and Florida. For example, Kentucky is trying to capture information about the costs associated with every aspect of preparedness for climate-related resilience.	To be addressed in Phase 3	Member Requested Research