

# U.S. Global Change Research Program (USGCRP): Overview and Considerations for Congress

Updated July 2, 2025

#### **SUMMARY**

#### R48478

July 2, 2025

Kathryn G. Kynett Analyst in Environmental Policy

## U.S. Global Change Research Program (USGCRP): Overview and Considerations for Congress

The U.S. Global Change Research Program (USGCRP) is an interagency program established by Congress through the Global Change Research Act of 1990 (GCRA; P.L. 101-606) to coordinate and integrate federal research on global change. *Global change* refers to global environmental changes in Earth's climate, land productivity, water resources, atmospheric chemistry, and ecological systems that may affect Earth's capacity to sustain life. USGCRP was established to enhance scientific understanding of global changes and assess their potential impacts, and for the program's results be useful for those developing policy responses.

According to the USGCRP website, accessed on June 10, 2025, "[t]he operations and structure of the USGCRP are currently under review." On July 2, 2025, the website is inactive. As the Trump Administration looks to alter USGCRP and activities related to climate change, an issue for the 119<sup>th</sup> Congress may be whether—and if so, how—to alter congressional direction and funding for USGCRP and its activities.

Pursuant to the GCRA, USGCRP coordinates global change research conducted by the federal government, undertakes scientific assessments, and facilitates international scientific cooperation. To accomplish this, USGCRP coordinates U.S. global change research activities across 15 federal agencies and departments. The program produces reports and assessments, including a mandated periodic assessment synthesizing the findings of the program, observed and projected trends in global change, and the effects of global change across various sectors. To meet this mandate, USCGRP has periodically produced the National Climate Assessment (NCA). USGCRP supports U.S. participation in international scientific initiatives, including the Intergovernmental Panel on Climate Change (IPCC). U.S. scientists have played a prominent role in authoring, reviewing, and providing technical input for IPCC assessments.

USGCRP member agencies fund and implement global change research activities, with appropriations provided directly to the member agencies rather than through a centralized USGCRP budget. USGCRP compiles a budget crosscut in its annual reports, summarizing funding that agencies self-identify as their contributions to the program. Reported funding for USGCRP-related activities has increased since the program began; reported funding was approximately \$4 billion in FY2023. (FY2023 is the last year for which USGCRP-related funding has been reported.)

Presidential Administrations and Congress have taken varying positions on the program. President Biden issued Executive Order (E.O.) 14072 directing USGCRP to develop an assessment on the "condition of nature within the United States." Pursuant to E.O. 14072, USGCRP began to develop a National Nature Assessment. In 2025, President Trump issued E.O. 14154 revoking E.O. 14072, and work on the National Nature Assessment was reportedly discontinued. In April 2025, the federal contract supporting USGCRP's National Coordination Office—which facilitated USGCRP's interagency and international coordination—was reportedly canceled. Federal staff previously involved in the program have reportedly been dismissed or are no longer working on USGCRP activities.

Members of Congress have also expressed a range of views regarding the program. For example, some Members have proposed restricting its funding, while other Members have proposed expanding the program's scope through new activities related to climate resilience. Congress may evaluate USGCRP's role under the GCRA, including whether it should remain the primary federal entity responsible for coordinating global change research, producing scientific assessments, and supporting international collaboration. Congress may also evaluate the future of USGCRP's scientific assessments, including the development of the Sixth National Climate Assessment (NCA6) and the extent of U.S. participation in international scientific assessments.

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## Introduction

The U.S. Global Change Research Program (USGCRP) is an interagency program established by Congress in 1990 to coordinate and integrate federal research on global environmental changes, including climate change. According to the Global Change Research Act of 1990 (GCRA; Title I, P.L. 101-606), the program and its activities are to advance global change research and provide scientific information that is useful for policymakers. To accomplish its functions pursuant to the GCRA, USGCRP serves as a platform for interagency coordination by facilitating meetings, supporting interagency groups, and developing strategic plans that establish research priorities. USGCRP produces scientific assessments, and it has released the National Climate Assessment (NCA)—which evaluates climate-related risks and impacts in the United States—approximately every four years. USGCRP facilitates U.S. participation in international global change research activities, including international scientific assessments, such as those conducted by the Intergovernmental Panel on Climate Change (IPCC).

USGCRP member agencies fund and implement global change research activities, with appropriations provided directly to the individual member agencies themselves rather than through a centralized USGCRP budget. USGCRP compiles a budget crosscut in its annual reports, referred to as *Our Changing Planet*, summarizing funding that agencies self-identify as their contributions to the program. Reported funding for USGCRP-related activities has increased since the program began; reported funding was approximately \$4 billion in FY2023. (FY2023 is the last year for which USGCRP-related funding has been reported.)

Presidential Administrations and Congress have taken varying positions on the program. The Biden Administration issued Executive Order (E.O.) 14072 directing USGCRP to develop a new report on the status of the nation's natural resources—referred to as the National Nature Assessment.<sup>2</sup> In 2025, the Trump Administration issued E.O. 14154, which revoked E.O. 14072; USGCRP reportedly discontinued work on the National Nature Assessment after E.O. 14154.<sup>3</sup> According to the USGCRP website, accessed on June 10, 2025, "[t]he operations and structure of the USGCRP are currently under review." On July 2—the date of publication of this report—the website is inactive. In April 2025, news organizations reported that the federal contract

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<sup>1 15</sup> U.S.C. §§2931-2938.

<sup>&</sup>lt;sup>2</sup> Executive Order 14072 of April 22, 2022, "Strengthening the Nation's Forests, Communities, and Local Economies," 87 Federal Register 24851, April 27, 2022.

<sup>&</sup>lt;sup>3</sup> Executive Order 14154 of January 20, 2025, "Unleashing American Energy," 90 Federal Register 8353, January 29, 2025; Catrin Einhorn, "Trump Killed a Major Report on Nature. They're Trying to Publish It Anyway," New York Times, February 10, 2025, https://www.nytimes.com/2025/02/10/climate/nature-assessment-trump.html; Lynda V. Mapes, "WA Scientists Plan to Publish Report on Nature That Trump Canceled," Seattle Times, February 17, 2025, https://www.seattletimes.com/seattle-news/climate-lab/wa-scientists-plan-to-publish-report-on-nature-that-trump-canceled/.

 $<sup>^4</sup>$  U.S. Global Change Research Program (USGCRP), "About USGCRP," https://www.globalchange.gov/about-us, archived April 17, 2025, at https://perma.cc/NC9W-BCZW.

supporting USGCRP was canceled.<sup>5</sup> In addition, federal staff previously involved in the program have reportedly been dismissed or are no longer working on USGCRP activities.<sup>6</sup>

Members of recent Congresses have also proposed both restricting USGCRP's funding and expanding its scope. As the Trump Administration looks to alter USGCRP and other activities related to climate change, an issue for the 119<sup>th</sup> Congress may be whether—and if so, how—to alter congressional direction and funding for USGCRP and its activities.

This report provides an overview of USGCRP, beginning with background information, followed by information about its member agencies and interagency groups, scientific assessments, and international activities. This report's description of activities is largely based on USGCRP's structure and activities as they existed prior to the Administration undertaking its review of USGCRP operations and structure. The report notes staffing and organizational changes reported in 2025.<sup>7</sup> The report concludes with considerations for Congress.

## History, Functions, and Structure

USGCRP originated from interagency planning activities under the Reagan Administration.<sup>8</sup> USGCRP was established by Congress in 1990 by the GCRA (P.L. 101-606) in order to "assist the Nation and the world to understand, assess, predict, and respond to human-induced and natural processes of global change."

#### What Is Global Change?

Global change refers to large-scale shifts in Earth's environment that can affect ecosystems, resources, and human well-being. As defined by the Global Change Research Act of 1990 (GCRA; P.L. 101-606), global change means global environmental changes in climate, land productivity, oceans and other water resources, atmospheric chemistry, and ecological systems that may alter Earth's capacity to sustain life.

These changes are driven both by human activities—such as fossil fuel combustion, land-use change (agriculture, deforestation, urbanization), and industrial pollution—and natural processes, including volcanic eruptions and other geological events.

Global change research, as defined in the GCRA, includes the study, monitoring, assessment, prediction, and management of information related to the physical, chemical, and biological processes that regulate the Earth system, the changes occurring within it, and the influence of human activities.

<sup>&</sup>lt;sup>5</sup> This news was first reported by *Politico* and subsequently confirmed and reported by other news organizations including *Science*, *Nature*, and *The Washington Post*. See Zack Colman, "Trump Moves to Hobble Major U.S. Climate Change Study," *Politico*, April 9, 2025, https://www.politico.com/news/2025/04/09/trump-moves-to-hobble-major-climate-study-00280405; Paul Voosen, "Trump Administration Fires Staff for Flagship U.S. Climate Assessment," *Science Insider*, April 14, 2025, https://doi.org/10.1126/science.z7pt5eu; Jeff Tollefson, "US Pulls Back from Gold-Standard Scientific Climate Panel," *Nature*, vol. 639, no. 17 (2025); Scott Dance and Sarah Kaplan, "Trump's New Reason for Canceling Grants: 'Climate Anxiety," *Washington Post*, April 10, 2025, https://www.washingtonpost.com/climate-environment/2025/04/10/trump-princeton-funding-cuts-climate-anxiety/.

<sup>&</sup>lt;sup>6</sup> A number of news reports indicated that federal staff previously involved in USGCRP activities had been dismissed or were no longer working on the program. For examples, see Paul Voosen, "Trump Administration Fires Staff for Flagship U.S. Climate Assessment," *Science Insider*, April 14, 2025, https://doi.org/10.1126/science.z7pt5eu; Paul Voosen, "NASA Cuts Off International Climate Science Support," *Science Insider*, February 24, 2025, https://doi.org/10.1126/science.zdvyfcx.

<sup>&</sup>lt;sup>7</sup> Paul Voosen, "Trump Administration Fires Staff for Flagship U.S. Climate Assessment," *Science Insider*, April 14, 2025, https://doi.org/10.1126/science.z7pt5eu; Paul Voosen, "NASA Cuts Off International Climate Science Support," *Science Insider*, February 24, 2025, https://doi.org/10.1126/science.zdvyfcx.

<sup>&</sup>lt;sup>8</sup> National Academies of Sciences, Engineering, and Medicine (NASEM), *Accomplishments of the U.S. Global Change Research Program*, 2017, https://doi.org/10.17226/24670.

Pursuant to statute, USGCRP has four major sets of responsibilities under the GCRA:

- 1. coordinating global change research across the federal government,9
- 2. developing and distributing mandated products, <sup>10</sup>
- 3. providing scientific information to inform policy decisions, 11 and
- 4. facilitating international research coordination. 12

USGCRP coordinates global change research across federal agencies, including through its interagency groups. <sup>13</sup> USGCRP's mandated products include (1) a strategic research plan released every 10 years with updates every 3 years, <sup>14</sup> (2) a scientific assessment that synthesizes the findings of the program and analyzes the effects of global change at least every 4 years, <sup>15</sup> and (3) an annual report. <sup>16</sup> These mandated products are designed to provide scientific information that is useful to policymakers. USGCRP's annual report—*Our Changing Planet*—provides updates to Congress on its activities and budget and documents programmatic achievements. <sup>17</sup> In addition, USGCRP supports the development of datasets and tools to provide decisionmakers with accessible and policy-relevant scientific information. <sup>18</sup>

USGCRP supports international collaboration on global change research by engaging with global scientific organizations and research initiatives. USGCRP supports U.S. participation in international scientific assessments. This has included assessments by the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP), such as ozone depletion assessments and the IPCC's periodic climate change assessment reports. <sup>19</sup>

USGCRP operates under the National Science and Technology Council (NSTC) and is overseen by the White House Office of Science and Technology Policy (OSTP).<sup>20</sup> The NSTC's

<sup>&</sup>lt;sup>9</sup> 15 U.S.C. §2932(e)(2).

<sup>&</sup>lt;sup>10</sup> 15 U.S.C. §2934(a); 15 U.S.C. §2936; 15 U.S.C. §2937.

<sup>&</sup>lt;sup>11</sup> 15 U.S.C. §2932(e)(6).

<sup>12 15</sup> U.S.C. §2932(e)(5).

<sup>&</sup>lt;sup>13</sup> USGCRP, Our Changing Planet: The U.S. Global Change Research Program for Fiscal Year 2025, 2024 (hereinafter USGCRP, Annual Report, 2024).

<sup>&</sup>lt;sup>14</sup> 15 U.S.C. §2934(a); USGCRP, *The U.S. Global Change Research Program 2022-2031 Strategic Plan*, 2022 (hereinafter USGCRP, *Research Strategic Plan 2022-2031*, 2022).

<sup>15 15</sup> U.S.C. §2936.

<sup>16 15</sup> U.S.C. §2937.

<sup>&</sup>lt;sup>17</sup> Annual reports are available at USGCRP, "Reports Library," https://globalchange.govarchive.us/reports? topic%5B122%5D=122/.

<sup>&</sup>lt;sup>18</sup> For example, USGCRP supports the U.S. Climate Resilience Toolkit, which provides data, maps, and case studies to help communities assess and prepare for climate-related risks (available at https://toolkit.climate.gov/).

<sup>&</sup>lt;sup>19</sup> Intergovernmental Panel on Climate Change (IPCC), "Preparing Reports," https://www.ipcc.ch/about/preparingreports/, archived March 26, 2025, at https://perma.cc/3U7F-BR5Y. "Created in 1988 by the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP)," the IPCC "is the United Nations body for assessing the science related to climate change." IPCC, "About the IPCC," https://www.ipcc.ch/about/.

<sup>&</sup>lt;sup>20</sup> USGCRP was originally coordinated by the Committee on Earth and Environmental Sciences (CEES), as stipulated in the Global Change Research Act (GCRA). President Clinton disbanded the CEES as part of a larger science and technology reorganization effort and reconstituted these research efforts as the U.S. Global Change Research Program under a subcommittee of the National Science and Technology Council (NSTC). For more information on the administrative history of USGCRP, see National Academies of Sciences, Engineering, and Medicine, *Accomplishments of the U.S. Global Change Research Program*, 2017, p. 5, https://doi.org/10.17226/24670. For more information on the NSTC, see CRS Report R47410, *The Office of Science and Technology Policy (OSTP): Overview and Issues for Congress*, by Emily G. Blevins.

Subcommittee on Global Change Research (SGCR) and Subcommittee on Climate Services lead USGCRP's activities and coordinate interagency efforts through the USGCRP National Coordination Office (NCO) and, according to a previous website of USGCRP, 17 interagency groups. Representatives from each participating department and agency constitute USGCRP. In addition, the Executive Office of the President and other related entities have designated liaisons that participate in the SGCR. The National Academies of Sciences, Engineering, and Medicine's (NASEM's) Committee to Advise USGCRP provides ongoing guidance, including reviewing draft strategic plans. <sup>23</sup>

According to a 2022 Government Accountability Office (GAO) report, USGCRP's NCO provides operational support and technical expertise to the program by planning, coordinating, and assisting USGCRP activities; in FY2020, the NCO's budget was \$8.1 million.<sup>24</sup> GAO also reported that, as of August 2022, USGCRP had three employees on detail from participating agencies within its NCO and 25 contractor staff. GAO further reported that the USGCRP NCO was managed by a consultancy contract with the National Aeronautics and Space Administration (NASA).<sup>25</sup> As stated earlier in this report, the contract was reportedly canceled in April 2025.<sup>26</sup>

## **Member Agencies and Departments**

USGCRP coordinates global change research across 15 federal agencies and departments that either conduct global change research or rely on it to carry out their missions.<sup>27</sup> This research spans multiple disciplines and includes Earth observations through long-term continuous data collection, studies of past changes in the Earth system, quantitative modeling to predict future conditions, and interdisciplinary research examining interactions among physical, chemical, biological, and social processes related to global change.

Federal agencies and departments engage in different aspects of this research depending on their statutory mandates, missions, and areas of expertise. Each agency has distinct authorities, expertise, and research networks, as well as separate program and budget structures. USGCRP has no authority over individual agency missions or budgets (see "Budget Information"). USGCRP provides a framework to coordinate research activities—to ensure they are complementary, reduce duplication, and collectively advance understanding of global change.

<sup>&</sup>lt;sup>21</sup> USGCRP, "Interagency Groups," https://www.globalchange.gov/our-work/interagency-groups, archived March 24, 2025, at https://perma.cc/X3JJ-LEAS.

<sup>&</sup>lt;sup>22</sup> Other participants include representatives from the Office of Science and Technology Policy (OSTP), Council on Environmental Quality (CEQ), Office of Management and Budget (OMB), Climate Change Technology Program (CCTP), and the Office of the Federal Coordinator for Meteorology (OFCM).

<sup>&</sup>lt;sup>23</sup> NASEM, Review of the U.S. Global Change Research Program's Draft Decadal Strategic Plan, 2022-2031, 2022, https://doi.org/10.17226/26608.

<sup>&</sup>lt;sup>24</sup> U.S. Government Accountability Office (GAO), Federal Research and Development: Funding Has Grown, GAO-23-105396, December 2022, p. 49 (hereinafter GAO, Federal Research and Development: Funding Has Grown, 2022).

<sup>&</sup>lt;sup>25</sup> GAO, *Federal Research and Development: Funding Has Grown*, 2022. The contract was with the consultant ICF Incorporated LLC, also referred to as ICF International. While the contract is not publicly available, some additional information can be found in the National Aeronautics and Space Administration's (NASA's) press release about the contract award. See NASA, "NASA Awards Global Change Research Support Services Contract," press release, April 8, 2021, https://www.nasa.gov/news-release/nasa-awards-global-change-research-support-services-contract/, archived April 17, 2025, at https://perma.cc/GG9L-URD9.

<sup>&</sup>lt;sup>26</sup> Paul Voosen, "Trump Administration Fires Staff for Flagship U.S. Climate Assessment," *Science Insider*, April 14, 2025, https://doi.org/10.1126/science.z7pt5eu.

<sup>&</sup>lt;sup>27</sup> USGCRP, Annual Report, 2024.

Participating agencies and departments have included the

- Department of Agriculture;
- Department of Commerce;<sup>28</sup>
- Department of Defense;
- Department of Energy;
- Department of Health and Human Services;
- Department of Homeland Security;
- Department of Housing and Urban Development;
- Department of the Interior;
- Department of State;
- Department of Transportation;
- Environmental Protection Agency;
- National Aeronautics and Space Administration;
- National Science Foundation;
- Smithsonian Institution; and
- U.S. Agency for International Development.

## **Budget Information**

In the USGCRP annual report to Congress, USGCRP reports budget data on activities supporting USGCRP for many of its member agencies and departments—that is, the budget crosscut shows the funding self-identified by agencies and departments as their contributions to USGCRP.

**Table 1** presents selected fiscal year information, by agency, drawn from the publicly available budget crosscuts (which are available through FY2023), adjusted for inflation. The budget crosscut does not include all agency investments directly relevant and necessary for USGCRP to carry out its objectives. For example, costs related to observing networks such as satellite systems—which provide important data for observing global change—are not included in the budget crosscut. In addition, not all agencies report costs. For example, the Department of Defense has not recently reported funding through the USGCRP budget crosscut. Each agency develops and implements its own activities as part of its contribution to USGCRP, with funds appropriated directly to the agency for those activities. These activities may or may not be explicitly identified as USGCRP-related in agency budget justifications or other publicly available materials. USGCRP does not have authority over agency budgets and does not control how funds are allocated.

<sup>&</sup>lt;sup>28</sup> The National Oceanic and Atmospheric Administration (NOAA) and the National Institute of Standards and Technology (NIST) have comprised Department of Commerce's participation in USGCRP.

Table 1. Crosscut by Agency for Expenditures in Support of USGCRP, Selected Years, Inflation-Adjusted 2023 Dollars

Funding amounts are shown in millions of dollars and are rounded to the nearest million

	FY 1990	FY 2000	FY 2010	FY 2020	FY 2021	FY 2022	FY 2023
National Aeronautics and Space Administration	763	1,589	1,350	1,597	1,727	1,815	1,774
National Science Foundation	86	255	384	267	709	764	836
U.S. Agency for International Development	_	_	43	_	_	_	_
U.S. Department of Commerce	28	91	434	333	478	501	588
U.S. Department of Agriculture	33	72	133	121	127	145	198
U.S. Department of Energy	78	154	205	278	328	367	380
U.S. Department of Health and Human Services	_	62	5	11	31	30	187
U.S. Environmental Protection Agency	20	28	25	20	21	20	21
U.S. Department of the Interior	20	31	76	41	222	241	252
U.S. Department of Transportation	_	_	5	0	I	2	2
Smithsonian Institution		9	8	9	9	8	9
Total	1,028	2,291	2,668	2,677	3,653	3,893	4,247

**Source:** Prepared by CRS from U.S. Global Change Research Program (USGCRP) annual report (*Our Changing Planet*) data. Annual reports are available at USGCRP, "Reports Library," https://globalchange.govarchive.us/reports?topic%5B122%5D=122. Inflation adjustment calculated using Bureau of Economic Analysis, *National Data: National Income and Product Accounts*, "Table 5.9.4. Price Indexes for Gross Government Fixed Investment by Type," line 4, September 27, 2024, https://apps.bea.gov/iTable/?reqid=19&step=2&isuri=1&categories=survey.

## **Interagency Groups**

Interagency groups have coordinated and supported implementation of global change research activities within and across USGCRP agencies and departments. USGCRP's interagency groups have historically been composed of representatives from federal agencies and departments responsible for activities in each area.

USGCRP has convened 17 interagency groups. It is uncertain if these working groups will continue to convene under the Trump Administration. USGCRP has convened working groups focused on Earth system processes, such as carbon and water cycles.<sup>29</sup> Other working groups have focused on social sciences and public health.<sup>30</sup> A number of working groups have address adaptation and resilience, including assessing risks to ecosystems, infrastructure, coastal and urban areas, and national security.<sup>31</sup> Additional working groups specialized in data collection,

<sup>&</sup>lt;sup>29</sup> These include the Carbon Cycle Interagency Working Group (CCIWG) and the Integrated Water Cycle Group (IWCG).

<sup>&</sup>lt;sup>30</sup> These include the Social Sciences Coordinating Committee (SSCC) and the Interagency Crosscutting Group on Climate Change and Human Health (CCHHG).

<sup>&</sup>lt;sup>31</sup> These include the Coasts Interagency Group (CoastsIG), Interagency Task Force on Sea Level Change (TF-SLC), Urban Interagency Group (UrbanIG), Working Group on National Security (WGNS), and Federal Adaptation and Resilience Group (FARG).

climate modeling, and decision-support tools.<sup>32</sup> USGCRP also had working groups dedicated to public engagement and education, scientific assessments, and international coordination.<sup>33</sup>

## **Scientific Assessments**

According to the GCRA, the purpose of USGCRP scientific assessments is to integrate, evaluate, and interpret USGCRP findings; discuss the scientific uncertainties associated with such findings; analyze the effects of global change; and analyze current trends in global change.

USGCRP periodically produces the NCA pursuant to statute; it also initiated, in 2022, a new periodic assessment—the National Nature Assessment (NNA)—pursuant to an executive order that was later revoked in 2025.<sup>34</sup> These assessments are discussed below.

#### **National Climate Assessment**

The GCRA requires USGCRP to develop an assessment of global change "not less frequently than every four years." In response to this mandate, USGCRP has periodically produced an assessment titled the National Climate Assessment; these NCAs have synthesized the state of climate science and climate-related risks and impacts across each U.S. region and across major sectors of the economy. The NCA does not direct federal agencies to take specific actions; rather, it provides scientific information that agencies, policymakers, and stakeholders may use to support decisions such as those related to infrastructure resilience, disaster preparedness, economic risk assessment, and environmental planning.

To date, USGCRP has released five NCAs:

- 1. First National Climate Assessment (NCA1; 2000);<sup>36</sup>
- 2. Second National Climate Assessment (NCA2; 2009);<sup>37</sup>
- 3. Third National Climate Assessment (NCA3; 2014);<sup>38</sup>

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<sup>&</sup>lt;sup>32</sup> These include the Integrated Observations Interagency Working Group (ObsIWG), Greenhouse Gas Measurement and Monitoring Interagency Working Group (GHG IWG), Interagency Group on Integrative Modeling (IGIM), Indicators Interagency Working Group (IndIWG), and Climate Services Technical Working Group (CS-TWG).

<sup>&</sup>lt;sup>33</sup> These include the Climate Engagement and Capacity-Building Interagency Group (CEC), Sustained Assessment Working Group (SAWG), and International Activities Interagency Working Group (IAIWG).

<sup>&</sup>lt;sup>34</sup> USGCRP has developed a number of other scientific assessments, including the first and second *State of the Carbon Cycle* reports, as well as reports focused on climate change and food and on climate change and human health. A. W. King et al., eds., *First State of the Carbon Cycle Report*, U.S. Climate Change Science Program and the Subcommittee on Global Change Research, 2007; N. Cavallaro et al., eds., *Second State of the Carbon Cycle Report*, USGCRP, 2018; A. J. Crimmins et al., eds., *The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment*, USGCRP, 2016; M. E. Brown et al., *Climate Change, Global Food Security, and the U.S. Food System*, USGCRP, 2015.

<sup>&</sup>lt;sup>35</sup> The GCRA specifies that each National Climate Assessment (NCA) must assess the potential effects of global change on a range of sectors and activities, including the natural environment, agriculture, energy, land and water resources, transportation, human health, social systems, and biodiversity. Each assessment must consider observed and projected trends, evaluate scientific advancements, and analyze climate-related risks over both near-term (25-year) and long-term (100-year) time frames.

<sup>&</sup>lt;sup>36</sup> National Assessment Synthesis Team, Climate Change Impacts on the United States: The Potential Consequences of Climate Variability and Change, USGCRP, 2001.

<sup>&</sup>lt;sup>37</sup> Thomas R. Karl et al., eds., Global Climate Change Impacts in the United States, USGCRP, 2009.

<sup>&</sup>lt;sup>38</sup> Jerry M. Melillo et al., eds., *Climate Change Impacts in the United States: The Third National Climate Assessment*, USGCRP, 2014.

- 4. Fourth National Climate Assessment (NCA4; 2017, 2018);<sup>39</sup> and
- 5. Fifth National Climate Assessment (NCA5; 2023).40

The NCAs have been written by hundreds of experts, including scientists working in federal government, academia, and the private sector. Each NCA has undergone multiple rounds of expert and governmental review, including evaluation by federal agencies, external experts, the public, and a NASEM review committee.41

According to USGCRP in 2023, NCA5 was the most comprehensive analysis of climate change in the United States. 42 In 2024, USGCRP began developing the Sixth National Climate Assessment (NCA6).<sup>43</sup> To comply with the requirement to produce an assessment every four years, the deadline to submit NCA6 to Congress is 2027. 44 In early 2025, under the second Trump Administration, work on NCA6 reportedly stopped and the report's authors were reportedly dismissed.45

#### National Nature Assessment

In 2022, the Biden Administration issued E.O. 14072, "Strengthening the Nation's Forests, Communities, and Local Economies," directing USGCRP to provide a comprehensive evaluation of the condition of nature in the United States. 46 In response, USGCRP initiated the First National Nature Assessment (NNA1) and defined its scope as follows:<sup>47</sup>

The scope of NNA1 is to assess the status, observed trends, and future projections of America's lands, waters, wildlife, biodiversity, and ecosystems and the benefits they provide, including connections to the economy, public health, equity, climate mitigation and adaptation, and national security.

<sup>&</sup>lt;sup>39</sup> The Fourth National Climate Assessment was published in two volumes, covering climate science (Vol. I, 2017) and climate impacts, risks, and adaptation strategies (Vol. II, 2018). D. J. Wuebbles et al., eds., Climate Science Special Report: Fourth National Climate Assessment, Volume I, USGCRP, 2017; D. R. Reidmiller et al., eds., Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II, USGCRP, 2018.

<sup>&</sup>lt;sup>40</sup> C. W. Avery et al., eds., Fifth National Climate Assessment, USGCRP, 2023.

<sup>&</sup>lt;sup>41</sup> NASEM, Review of the Draft Fifth National Climate Assessment, 2023, https://doi.org/10.17226/26757.

<sup>&</sup>lt;sup>42</sup> USGCRP, "U.S. Global Change Research Program Releases Fifth National Climate Assessment," press release, November 14, 2023.

<sup>&</sup>lt;sup>43</sup> USGCRP, Annual Report, 2024.

<sup>&</sup>lt;sup>44</sup> 15 U.S.C. §2936 requires that a report assessing global change be submitted to the President and Congress "not less frequently than every four years." Following the first National Climate Assessment (2000), the second assessment was not released until 2009. In 2005, a U.S. District Court ruled that the delay violated the statute and ordered the Administration to comply. See Center for Biological Diversity v. Brennan, 571 F. Supp. 2d 1105 (N.D. Cal. 2007).

<sup>&</sup>lt;sup>45</sup> Paul Voosen, "Trump Administration Fires Staff for Flagship U.S. Climate Assessment," Science Insider, April 14, 2025, https://doi.org/10.1126/science.z7pt5eu; Paul Voosen, "NASA Cuts Off International Climate Science Support," Science Insider, February 24, 2025, https://doi.org/10.1126/science.zdvyfcx; Brad Plumer and Rebecca Dzombak, "All Authors Working on Flagship U.S. Climate Report Are Dismissed," New York Times, April 28, 2025, https://www.nytimes.com/2025/04/28/climate/national-climate-assessment-authors-dismissed.html.

<sup>&</sup>lt;sup>46</sup> Executive Order 14072, "Strengthening the Nation's Forests, Communities, and Local Economies," 87 Federal Register 24851, April 22, 2022.

<sup>&</sup>lt;sup>47</sup> OSTP, "Framing the National Nature Assessment," 87 Federal Register 65622, October 31, 2022. Department of the Interior (DOI), "Request for Public Nominations for Authors and Scientific/Technical Inputs for the First National Nature Assessment," 88 Federal Register 80747, November 20, 2023.

A draft outline was released for public comment in 2024.<sup>48</sup> USGCRP anticipated releasing a draft for public comment in early 2025 and releasing the final report in 2026.<sup>49</sup>

In 2025, the Trump Administration issued E.O. 14154, "Unleashing American Energy," which revoked a number of executive orders from the Biden Administration, including E.O. 14072.<sup>50</sup> USGCRP's efforts to develop NNA1 were reportedly discontinued.<sup>51</sup>

## International Coordination and Research

Under the GCRA, USGCRP is charged with coordinating global change research activities with other nations and international organizations. USGCRP, its interagency groups, and member agencies have participated in a variety of international activities, including international scientific assessments and collaborative research efforts, as well as meetings and conferences.

USGCRP, in coordination with the U.S. Department of State, has provided U.S. representation at international meetings and conferences on global change research and supported U.S. scientists' participation in international scientific assessments. For example, USGCRP has managed the nomination process for U.S. scientists, served as the point of contact for communication with international scientific bodies, and coordinated interagency review and input. These international assessments have included those conducted by the UNEP, WMO, IPCC, and others. The findings from these assessments provide the scientific basis for international conventions and protocols, including the Montreal Protocol on Substances That Deplete the Ozone Layer and the United Nations Framework Convention on Climate Change. 52

USGCRP has historically collaborated with international and regional research initiatives and scientific organizations, and supported global monitoring networks. USGCRP has contributed to the development and maintenance of global monitoring systems that track environmental change, and facilitates data sharing and coordinates research on global change issues.<sup>53</sup>

In February 2025, the Trump Administration reportedly restricted U.S. scientists' participation in an international planning meeting to develop the IPCC's Seventh Assessment Report (AR7).<sup>54</sup> At the time, the United States was serving as a co-chair of IPCC Working Group III, which focuses on climate mitigation. NASA's chief scientist, who had been designated to serve as co-chair of that IPCC working group, was removed from the role.<sup>55</sup>

In the absence of federal coordination, a newly established nongovernmental organization—the U.S. Academic Alliance for the IPCC (USAA), hosted by the American Geophysical Union (AGU)—has taken steps to maintain U.S. engagement in the assessment process. In April 2025,

<sup>&</sup>lt;sup>48</sup> DOI, "Draft Outline for the First National Nature Assessment," 89 Federal Register 76867, September 19, 2024; USGCRP, Annual Report, 2024.

<sup>&</sup>lt;sup>49</sup> USGCRP, Annual Report, 2024, p. 65.

<sup>&</sup>lt;sup>50</sup> Executive Order 14154 of January 20, 2025, "Unleashing American Energy," 90 Federal Register 8353, January 29, 2025.

<sup>&</sup>lt;sup>51</sup> Catrin Einhorn, "Trump Killed a Major Report on Nature. They're Trying to Publish It Anyway," *New York Times*, February 10, 2025, https://www.nytimes.com/2025/02/10/climate/nature-assessment-trump.html.

<sup>&</sup>lt;sup>52</sup> USGCRP, Research Strategic Plan 2022-2031, 2022.

<sup>&</sup>lt;sup>53</sup> For example, USGCRP participates in the World Climate Research Programme (WCRP), AmeriGEO, and the Inter-American Institute for Global Change Research (IAI). USGCRP, *Annual Report*, 2024.

<sup>&</sup>lt;sup>54</sup> Jeff Tollefson, "US Pulls Back from Gold-Standard Scientific Climate Panel," Nature, vol. 639, no. 17 (2025).

<sup>55</sup> Jeff Tollefson, "US Pulls Back from Gold-Standard Scientific Climate Panel," Nature, vol. 639, no. 17 (2025).

the USAA issued a call for nominations of U.S. experts, authors, and review editors to contribute to AR7.<sup>56</sup>

## **Considerations for Congress**

USGCRP began as a presidential initiative under the Reagan Administration in 1989 and was established by Congress in 1990 under the GCRA to develop a comprehensive and integrated U.S. research program to assist both the nation and the world in understanding, assessing, predicting, and responding to global environmental change. The Trump Administration is reviewing executive branch activities related to climate change, including the structure and operations of USGCRP, and has initiated changes affecting the program. USGCRP-related issues for the 119<sup>th</sup> Congress may include whether—and if so, how—to alter congressional direction and funding for USGCRP and its activities, whether to reverse or codify in statute actions that may be taken by the Trump Administration, and whether to conduct oversight and investigation to inform USGCRP's actions.

Decisions related to altering USGCRP encompass not only the funding and scientific resources dedicated to supporting USGCRP activities and the extent to which those funds and resources may or may not be diverted to other research endeavors, but also the potential implications of changes for the type, reliability, accessibility, coordination, and transparency of global change data and research. These data and research changes may have implications for global change scientific assessments and the policy and investment decisions the assessments inform.

Members of Congress may consider whether to support USGCRP continuing its activities under the GCRA. Alternatively, Members may consider how USGCRP's role and structure could change, or how the types of scientific activities and information USGCRP supports could change. USGCRP has aimed to provide publicly accessible scientific information on global change, such as assessments, datasets, and tools, that inform domestic and international policymakers, including by addressing global-change-related scientific confidence, uncertainty, and research gaps. Members may consider whether it serves the American public for the federal government to continue performing this role and, if so, whether USGCRP should remain the primary entity coordinating these efforts.

In past Congresses, Members have expressed a range of views. Some Members have proposed restricting the use of federal funding for USGCRP.<sup>57</sup> Other Members have sought to expand its scope, including by directing USGCRP to establish new working groups or undertake additional activities, such as initiatives related to extreme weather and resilience.<sup>58</sup>

USGCRP has periodically produced the NCA, synthesizing scientific understanding of climate trends and sectoral and regional impacts, as well as produced usable information for policymakers to formulate effective strategies related to global change. The first Trump Administration was critical of USGCRP activities, including the NCAs.<sup>59</sup> Under the Biden Administration, USGCRP

<sup>&</sup>lt;sup>56</sup> American Geophysical Union, "New U.S. Academic Alliance for the IPCC Opens Critical Nomination Access," press release, 2025, https://news.agu.org/press-release/usaa-ipcc-opens-nominations-seventh-assessment/.

 $<sup>^{57}</sup>$  For example, see H.Amdt. 1163 (118th Congress), H.Amdt. 597 (118th Congress), H.Amdt. 758 (113th Congress), and H.Amdt. 671 (113th Congress).

<sup>&</sup>lt;sup>58</sup> For example, see H.R. 2872 (117<sup>th</sup> Congress), S. 1420 (117<sup>th</sup> Congress), H.R. 2748 (116<sup>th</sup> Congress), S. 1482 (116<sup>th</sup> Congress), H.R. 2760 (117<sup>th</sup> Congress), S. 1282 (117<sup>th</sup> Congress), H.R. 5994 (116<sup>th</sup> Congress), and S. 3349 (116<sup>th</sup> Congress).

<sup>&</sup>lt;sup>59</sup> White House, "Press Briefing by Press Secretary Sarah Sanders, Director of the NEC Larry Kudlow, and NSC Advisor John Bolton," press release, November 27, 2018, https://trumpwhitehouse.archives.gov/briefings-statements/(continued...)

completed NCA5 and initiated the development of NCA6. The second Trump Administration has reportedly canceled NASA's contract with consulting firm ICF International. This firm provided staff and services that supported USGCRP activities, including the development of the NCA6. <sup>60</sup> The authors working on NCA6 were dismissed, according to news reports. <sup>61</sup> It is uncertain if the second Trump Administration will continue efforts to produce NCA6—relying on authors other than those that were reportedly dismissed—or whether it will pursue an alternative approach to comply with the GCRA-mandated assessment. Members may consider supporting the completion of NCA6, directing USGCRP to halt the assessment, or having USGCRP focus on certain aspects of global change, among other actions.

The reported cancellation of NNA1 in 2025 raises considerations for Congress regarding the development and dissemination of this scientific assessment. USGCRP initiated NNA1 in 2022 and was anticipating releasing the first draft in early 2025.<sup>62</sup> Congress may seek to clarify whether or not USGCRP should publicly release this scientific assessment. Alternatively, Congress might redirect efforts toward other priorities. Some researchers involved in NNA1 have expressed interest in publishing their findings independently through academic journals or other nongovernmental platforms. While this approach could make this information publicly available, it may lack the authoritativeness of a government report.

USGCRP facilitates U.S. participation in international scientific global change research efforts. For example, USGCRP, together with the U.S. Department of State, has facilitated U.S. participation in developing scientific assessments conducted by the IPCC. According to USGCRP in 2022, the U.S. government played a pivotal role in establishing the IPCC, and U.S. experts have contributed to every assessment. <sup>63</sup> The Trump Administration has reportedly restricted U.S. scientists' participation in the next IPCC assessment. <sup>64</sup> While recent actions by the Trump Administration have limited the participation of federal scientists in international assessments, these restrictions do not apply to scientists affiliated with academic institutions or nongovernmental organizations. The nongovernmental organization U.S. Academic Alliance for the IPCC issued a call for nominations for U.S. scientists to participate in the IPCC's Seventh Assessment Report.

Members may consider the role of USGCRP in facilitating U.S. participation in IPCC assessments and whether the federal government should continue to play a prominent role in international scientific assessments. Historically, federal participation has meant that U.S. scientific perspectives and priorities across the federal government have often been integrated into international global climate assessments, which in turn inform domestic policy and international negotiations. A shift to nonfederal participation—for example, through academic institutions or nongovernmental organizations—could maintain some level of U.S. scientific contributions but may reduce the ability of the United States to (1) coordinate input from other

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press-briefing-press-secretary-sarah-sanders-director-nec-larry-kudlow-nsc-advisor-john-bolton-112818/; Scott Waldman, "Trump Official Who Tried to Downplay Major Climate Report Now Will Oversee It," *Politico E&E News*, March 3, 2025.

<sup>&</sup>lt;sup>60</sup> Paul Voosen, "Trump Administration Fires Staff for Flagship U.S. Climate Assessment," *Science Insider*, April 14, 2025, https://doi.org/10.1126/science.z7pt5eu.

<sup>&</sup>lt;sup>61</sup> Brad Plumer and Rebecca Dzombak, "All Authors Working on Flagship U.S. Climate Report Are Dismissed," New York Times, April 28, 2025, https://www.nytimes.com/2025/04/28/climate/national-climate-assessment-authors-dismissed.html.

<sup>&</sup>lt;sup>62</sup> Catrin Einhorn, "Trump Killed a Major Report on Nature. They're Trying to Publish It Anyway," *New York Times*, February 10, 2025.

<sup>63</sup> USGCRP, Research Strategic Plan 2022-2031, 2022, p. 29.

<sup>&</sup>lt;sup>64</sup> Jeff Tollefson, "US Pulls Back from Gold-Standard Scientific Climate Panel," Nature, vol. 639, no. 17 (2025).

participants and (2) promote national scientific priorities in international assessment processes. Congress may weigh these and other considerations when deliberating on the extent of U.S. involvement in future international scientific assessments, and the scope and priorities of USGCRP's activities—and the potential impacts on efforts to understand and address climate change.

### **Author Information**

Kathryn G. Kynett Analyst in Environmental Policy

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