



**Statement of the Climate Science Legal Defense Fund**

**On**

**Brain Drain: Rebuilding the Federal Scientific Workforce**

**Before the House Committee on Science, Space, and Technology**

**March 17, 2021**

The Climate Science Legal Defense Fund (CSLDF) respectfully submits this statement to the House Committee on Science, Space, and Technology. CSLDF is a non-profit organization whose mission is to protect the scientific endeavor.

The deeply concerning exodus of scientific expertise from the federal government in recent years is well-documented.<sup>1</sup> This loss has multiple causes, but surely among the most important has been the increasing politicization of science and the resulting harms.<sup>2</sup> Sidelining sound science that failed to comport with political goals—including creating environments in which many scientists felt the need to self-censor in order to keep their jobs<sup>3</sup>—fueled a decline in morale among the scientific workforce, and was a driving force behind a loss of scientific expertise and capacity in our federal agencies.<sup>4</sup>

In order to successfully address these problems, federal agencies will need to adopt stronger protections for scientific integrity. Unfortunately, existing scientific integrity policies are often lacking in key areas. For example, they do not always clearly prohibit political interference with science—or only explicitly prohibit certain categories of employees from engaging in such interference, leaving out important, sizeable groups like mid-level managers. Meanwhile, mid-level managers have been responsible for some of the most pervasive efforts to undermine politically inconvenient science, particularly climate research.<sup>5</sup> Policies at some important scientific agencies have insufficient protections regarding political interference, including the Centers for Disease Control and Prevention (CDC) and the Department of the Interior (DOI).<sup>6</sup>

Similarly, a number of federal scientific agencies also fail to adequately protect the rights of agency scientists to publicly discuss their work, or to share personal opinions as private citizens. For example, the Trump administration successfully prevented CDC

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<sup>1</sup> Annie Gowan, Juliet Eilperin, Ben Guarino, & Andrew Ba Tran, *Science ranks grow thin in Trump administration*, WASH. POST, Jan. 23, 2020, [https://www.washingtonpost.com/climate-environment/science-ranks-grow-thin-in-trump-administration/2020/01/23/5d22b522-3172-11ea-a053-dc6d944ba776\\_story.html](https://www.washingtonpost.com/climate-environment/science-ranks-grow-thin-in-trump-administration/2020/01/23/5d22b522-3172-11ea-a053-dc6d944ba776_story.html).

<sup>2</sup> For example, National Institutes of Health scientist Rick Bright resigned from his position in late 2020, citing “frustration with the Trump administration’s disregard for scientific expertise.” Giuliana Viglione, *Four ways Trump has meddled in pandemic science—and why it matters*, NATURE, Nov. 3, 2020, <https://www.nature.com/articles/d41586-020-03035-4>.

<sup>3</sup> Jacob Carter, *Government Scientists are Censoring Themselves*, SCIENTIFIC AMERICAN, Observations, Aug. 5, 2019, <https://blogs.scientificamerican.com/observations/government-scientists-are-censoring-themselves/>.

<sup>4</sup> Kelsey Brugger, *Biden Faces ‘Staggering’ Loss of Government Scientists*, ENERGY & ENVIRONMENT NEWS, Feb. 2, 2021, <https://www.eenews.net/stories/1063724147>.

<sup>5</sup> Lisa Friedman, *A War Against Climate Science, Waged by Washington’s Rank and File*, N.Y. TIMES, June 15, 2020, <https://www.nytimes.com/2020/06/15/climate/climate-science-trump.html>.

<sup>6</sup> This and other arguments articulated in this statement also appeared in a recent opinion piece by CSLDF Staff Attorney Augusta Wilson, published in Undark Magazine. See Augusta Wilson, *How Do We Protect Science From the Next Trump?*, UNDARK MAGAZINE, Feb. 25, 2021, <https://undark.org/2021/02/25/protect-science-integrity/>.

scientists, who have only weak communication rights, from speaking in February 2020 about the imminent threats from COVID-19.<sup>7</sup>

The devastating impacts when science is politicized or censored have been made all too tragically clear as the COVID-19 pandemic raged out of control over the past year. These failings have damaged climate science particularly acutely in recent years. The Trump administration dismissed climate change, despite the global scientific consensus, and notoriously impeded climate-related research.<sup>8</sup>

In addition to these important substantive gaps, existing scientific integrity policies frequently suffer from significant structural flaws. In a number of instances, policies fail to establish clear and straightforward processes for the filing, evaluation, investigation, and resolution of scientific integrity complaints. In many cases, they also do not clearly protect those who file complaints in good faith, or who participate in the investigation or adjudication of a complaint, from retaliation. These failings can discourage those who are aware of scientific integrity violations from reporting them and further contributes to low morale and, ultimately, “brain drain.”

President Biden’s January 27, 2021 Memorandum on scientific integrity requires federal agencies to review and strengthen their policies.<sup>9</sup> Improvements are sorely needed, and CSLDF has developed a model scientific integrity policy that addresses common shortcomings in existing policies.<sup>10</sup> For example, our model policy explicitly prohibits political interference with research, contains robust conflict of interest provisions, and protects the rights of those involved in scientific activities to speak freely about their research. It also establishes clear procedures for filing, investigating, and resolving a scientific integrity complaint. Many of these important improvements are also reflected in the Scientific Integrity Act, as introduced by Rep. Paul Tonko and co-sponsored by many other members of this Committee.

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<sup>7</sup> Michael D. Shear & Maggie Haberman, *Pence Will Control All Coronavirus Messaging from Health Officials*, N.Y. TIMES, Feb. 27, 2020, <https://www.nytimes.com/2020/02/27/us/politics/us-coronavirus-pence.html>.

<sup>8</sup> See Brad Plumer & Coral Davenport, *Science Under Attack: How Trump Is Sidelining Researchers and Their Work*, N.Y. TIMES, Dec. 28, 2019, <https://www.nytimes.com/2019/12/28/climate/trump-administration-war-on-science.html>. See also, Romany Webb, Lauren Kurtz & Susan Rosenthal, *When Politics Trump Science: The Erosion of Science-Based Regulation*, 50 E.L.R. 10708 (Sept. 2020), <https://climate.law.columbia.edu/sites/default/files/content/Webb%20et%20al.%20--%20When%20Politics%20Trump%20Science%20--%20Sept.%202020.pdf>.

<sup>9</sup> Pres. Memorandum on Restoring Trust in Government Through Scientific Integrity and Evidence-Based Policymaking (Jan. 27, 2021), <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/memorandum-on-restoring-trust-in-government-through-scientific-integrity-and-evidence-based-policymaking/>.

<sup>10</sup> Climate Science Legal Defense Fund, *Model Scientific Policy for Agencies, Universities, and Research Institutions*, <https://www.csldf.org/resource/model-scientific-integrity-policy/>

Strengthening agency scientific integrity policies is a crucial step towards repairing morale at scientific agencies and reinvigorating the federal scientific workforce. But it is insufficient. Even the most robust policy means little if it is not well enforced. Unfortunately, lack of confidence that scientific integrity violations will be taken seriously appears to be a significant problem: a 2020 survey by the EPA’s Office of the Inspector General found that hundreds of EPA employees were aware of scientific integrity violations but did not report them.<sup>11</sup> Many of the employees said they chose not to report because they believed it wouldn’t matter.

Agencies have too often taken off-ramps rather than confront violations of their scientific integrity policies, and recent years have shown us that this problem becomes particularly acute when the violations are committed by those in the highest rungs of power within the agency. Scott Pruitt, while he was head of the Environmental Protection Agency, publicly asserted, contrary to scientific consensus, that there is “tremendous disagreement” about carbon dioxide’s influence on climate, and that we don’t yet know if “it’s a primary contributor to the global warming that we see.” In doing so, he was clearly violating the provisions of EPA’s scientific integrity policy that require agency employees to present scientific information to the public accurately and with appropriate contextualization. Nonetheless, and probably unsurprisingly, an EPA scientific integrity review panel cleared him of wrongdoing on the dubious theory that he was simply expressing an opinion.<sup>12</sup> Similarly, when the acting chief of the National Oceanic and Atmospheric Administration succumbed to political pressure to support then-President Trump’s bizarre assertion that Hurricane Dorian would hit Alabama, an independent panel found that he and the agency’s then-communications director had violated the agency’s scientific integrity policy. Yet no one was disciplined.<sup>13</sup>

In order to create environments in which federal scientists can thrive, scientific agencies clearly need to take steps to ensure that threats to science from high-ranking officials will be independently investigated, and that meaningful remedial action will in fact be taken if those investigations do indeed reveal violations of scientific integrity. More broadly, agencies must commit themselves to fundamentally strengthening the culture of scientific integrity via thorough and consistent training on applicable scientific integrity policies. At minimum, training must include clear, specific, and detailed guidance on: (1) what constitutes a violation of scientific integrity; (2) how scientists and others can report a suspected violation of scientific integrity; (3) what the agency’s

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<sup>11</sup> U.S. Environmental Protection Agency, Office of Inspector General, *Further Efforts Needed to Uphold Scientific Integrity Policy at EPA*, 10 (May 20, 2020), [https://www.epa.gov/sites/production/files/2020-05/documents/\\_epaig\\_20200520-20-p-0173.pdf](https://www.epa.gov/sites/production/files/2020-05/documents/_epaig_20200520-20-p-0173.pdf)

<sup>12</sup> Letter from Thomas H. Sinks, Jr., Director, Office of the Science Advisor, U.S. EPA Scientific Integrity Review Panel, to Elena Saxonhouse, Senior Attorney, Joanne Spalding, Chief Climate Counsel, Sierra Club, [http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/case-documents/2017/20170801\\_docket-na\\_letter-1.pdf](http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/case-documents/2017/20170801_docket-na_letter-1.pdf).

<sup>13</sup> Seth Borenstein, *Panel: NOAA Bowed to Political Pressure in Dorian Dispute*, ABC News, June 16, 2020, <https://abcnews.go.com/Technology/wireStory/panel-noaa-bowed-political-pressure-dorian-dispute-71282013>.

process is for evaluating, investigating, and resolving scientific integrity complaints; and (4) the protections that exist for those who file a complaint in good faith, for those who are accused of committing a violation, and for those who participate in good faith in an investigation process.

This may seem like common sense, but not all federal employees who participate in scientific activities on behalf of their agencies currently receive this kind of training. A recent report by the U.S. Government Accountability Office examined nine agencies and found that four of them—the Federal Aviation Administration, the National Aeronautics and Space Administration, the National Institute of Standards and Technology, and the Office of Fossil Energy—offer no such training to their employees and affiliates, and the latter two agencies have not taken any actions at all to promote their scientific integrity policies with their staff.<sup>14</sup> Agencies need to make scientific integrity training a regular habit. Doing so will empower both current and future generations of scientists. It will help to create environments that are resilient against the kinds of threats to science we have seen all too frequently over the past four years, and help to inoculate agencies against “brain drain.”

We strongly believe that if agencies strengthen their scientific integrity policies, and take steps—like consistent training of everyone at the agency—to foster a culture of scientific integrity among their ranks, they can reinvigorate federal science and improve retention by building environments in which talented researchers are confident that they will be supported and encouraged rather than marginalized and silenced.

If you have any questions, please contact our Executive Director, Lauren Kurtz, at [lkurtz@cslidf.org](mailto:lkurtz@cslidf.org) or (646) 801-0853, or Staff Attorney Augusta Wilson, at [awilson@cslidf.org](mailto:awilson@cslidf.org) or (646) 820-6490.

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<sup>14</sup> U.S. Government Accountability Office, Report to the Ranking Member, Committee on Commerce Science, and Transportation, U.S. Senate, Scientific Integrity Policies: Additional Actions Could Strengthen Integrity of Federal Research, 12 (April 2019), <https://www.gao.gov/assets/700/698231.pdf>.