



# EPN Comments on the List of Candidates for the U.S. EPA Science Advisory Board for FY2026

September 4, 2025

The Environmental Protection Network (EPN) harnesses the expertise of more than 700 former Environmental Protection Agency (EPA) career staff and confirmation-level appointees from Democratic and Republican administrations to provide the unique perspective of former regulators and scientists with decades of historical knowledge and subject matter expertise.

#### Overview

EPN's comments discuss important factors that EPA should consider in the selection of members of the Science Advisory Board (SAB). High-quality, independent science reviews are essential for EPA to protect human health and the environment and for restoring the scientific credibility of the agency. Given the complexities and multidisciplinary attributes of SAB review activities, we also stress the critical need to establish and use SAB standing committees, including but not limited to a "standing agriculture-related committee" required by statute, and ad hoc panels to advise the SAB.

# **Comments**

42 U.S. Code § 4365 of the Environmental Research, Development, and Demonstration Authorization Act (ERDDAA) of 1978 specifies that "[e]ach member of the Board shall be qualified by education, training, and experience to evaluate scientific and technical information on matters referred to the Board." This statutory language clearly indicates that all members must have strong scientific and technical credentials in the most critical disciplines that are needed for EPA review of scientific and technical matters. The SAB charter emphasizes that the SAB "is identified as a scientific/technical advisory committee" whose objective is to "provide independent advice and peer review to EPA's Administrator on the scientific and technical aspects of environmental issues." Further, the "SAB will review scientific issues, provide independent scientific and technical advice on EPA's major programs, and perform special assignments as requested by Agency officials."

Under ERDDAA, EPA must make available to the SAB any "proposed criteria document, standard, limitation, or regulation, together with relevant scientific and technical information in the possession of the Environmental Protection Agency on which the proposed action is based" when any of the aforementioned are provided to any other Federal agency for formal review and comment. In response, the SAB may decide for itself whether to develop "advice and comments on the adequacy of the scientific and technical basis of the proposed criteria document, standard, limitation, or regulation, together with any pertinent information in the Board's possession." Thus, the SAB has a statutorily required role to review scientific and technical information that informs assessments or decisions as herein listed. While the SAB may elect not to provide such a review, the EPA must provide the SAB with information that is timely and complete to enable it to conduct a review if it so chooses.

Per the May 1, 2025 Federal Register notice requesting nominations of experts to serve as members of the SAB, EPA emphasized that "[m]embers of the SAB constitute a distinguished body of non-EPA scientists,

engineers, and economists who are nationally and internationally recognized experts in their respective fields."

Furthermore, EPA sought individuals with "expertise or extensive experience in the following scientific disciplines and topics as they relate to human health and the environment: air quality; agricultural sciences and economics; analytical chemistry; atmospheric sciences; benefit-cost analysis; biostatistics; citizen science; community environmental health; dose-response assessment; drinking water; drinking water engineering; ecological sciences; ecological risk assessment; ecosystem services; economics; energy and the environment; engineering; epidemiology; exposure assessment; forestry; geochemistry; health sciences; human health risk assessment; hydrology; hydrogeology; medicine; microbiology; modeling; pediatrics; chemical risk assessment, public health; physiologically based pharmacokinetic (PBPK) modeling; risk assessment; social, behavioral and decision sciences; statistics; sustainability; radiological risk assessment; toxicology; uncertainty analysis; water quality; water quantity and reuse; and waste management."

The highest priority should be placed on complementing the statutory members of SAB with independent external scientific experts who have the requisite training, expertise, and knowledge to address, collectively, the extensive list of scientific disciplines and topics. Consistent with well-established and validated past practices, the review of conflicts of interest for new members should be given the priority that it has been traditionally given.

We propose the following criteria EPA should consider in selecting SAB members as well as members of SAB standing committees and ad hoc panels. These include:

- 1. Strong scientific expertise and experience, thereby ensuring that only the best scientists from academia, industry, and the private sector are rigorously vetted for conflicts of interest. The SAB is a scientific expert committee, not a representative stakeholder committee. The purpose of SAB is for the federal government to obtain a consensus opinion of experts in a given field. As such, the selection criteria for members of the SAB should focus on breadth, depth, and diversity of scientific expertise, experience, and perspectives. The SAB is not a "representative" committee and therefore is not intended to reflect the positions and observations of specific interest groups, stakeholders, or politically-oriented interests. Members should be recognized experts in relevant fields.
- 2. SAB members should have a demonstrated record of following and supporting practices to ensure high scientific information quality. In addition to their specific scientific expertise, SAB members should have a demonstrated record of contributing to, and participating in, practices designed to maximize scientific information quality, including objectivity, transparency, utility, and integrity of scientific information. Nominees' familiarity with federal information quality guidelines, participation on EPA or other agency scientific peer review panels, and support of open data and open access publication should be considered as positive criteria in selecting members.
- 3. **SAB** members should be unconflicted. Per the call for nominations, "absence of financial conflicts of interest and absence of an appearance of a loss of impartiality" are essential.
- 4. Expertise for standing committees and ad hoc advisory panels. The SAB has the following standing committees as enumerated in the May 1, 2025 Federal Register notice: (1) Agricultural Science Committee; (2) Chemical Assessment Advisory Committee; (3) Drinking Water Committee; (4) Economic Analysis Committee; (5) Radiation Advisory Committee. There should be an adequate

- number of SAB members, each with the requisite scientific or technical training, expertise, and experience, to serve on each of these committees.
- 5. The SAB is periodically augmented with ad hoc review panels to address specific topics. Per prior EPA requests for nominations, selection criteria to be used for panel membership include:
  - a. Scientific and/or technical expertise, knowledge, and experience (primary factors);
  - b. Availability and willingness to serve;
  - c. Absence of financial conflicts of interest;
  - d. Absence of an appearance of a lack of impartiality;
  - e. Skills working in committees, subcommittees and advisory panels.

In examining the list of 165 candidates, we see a number of highly-qualified candidates with the scientific expertise, leadership, credibility, and experience needed to ensure continuity and high-quality credible reviews and recommendations required of the SAB. EPA will, however, need to consider additional candidates to provide the breadth, depth, and variety of expertise, experience, and perspectives needed for SAB standing committees and ad hoc panels.

We provide herein the results of our comprehensive evaluation of the 165 individuals under consideration for appointment to the SAB, as identified in the Federal Register Notice of May 1, 2025. The evaluation is based on a multi-layered analysis that scrutinizes the candidates' professional and research credentials, their affiliations with advocacy or regulated entities, and their public-facing commentary, all in the context of the governing legal frameworks: the Federal Advisory Committee Act (FACA), 42 U.S. Code § 4365, and the SAB Charter.

The findings indicate that while many candidates possess strong professional and academic credentials, a significant number raise concerns regarding their suitability for a role requiring unbiased and independent scientific judgment. These concerns fall into several categories:

- Affiliations with Ideological and Advocacy Groups: Several candidates are publicly affiliated with
  organizations known for their political advocacy and for promoting views that are contrary to
  mainstream climate and environmental science. Their professional narratives emphasize public
  advocacy and non-peer-reviewed content over established scientific discourse.
- Direct Employment by Regulated Industries: A substantial group of candidates are currently employed by, or are consultants to, corporations and industries that are directly regulated by the EPA. This creates a potential for a conflict of mission and an appearance of a loss of impartiality.
- Lack of Active Research Record: Certain candidates, while professionally accomplished, do not have
  a discernible record of consistent, peer-reviewed scientific research or competitive grant funding,
  which is a hallmark of the independent scientific expertise required for the SAB.

A central tenet of FACA is the requirement that a committee's membership be "fairly balanced in terms of the points of view represented and the functions to be performed." This "fair balance" is intended to promote a diversity of perspectives, but it does not mandate that the committee be a representative of competing stakeholder interests. The law further stipulates that a committee's advice and recommendations should be "the result of the advisory committee's independent judgment" and "not be inappropriately influenced by the appointing authority or by any special interest." This language is critical, as it places the

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<sup>&</sup>lt;sup>1</sup> FRN Volume 90, Number 83, Pages 18657 - 18658

burden on the appointing authority to select individuals whose professional history and public record do not suggest a pre-existing bias that would compromise their independence. A candidate's record should not have a pattern of public advocacy for specific policy outcomes, but rather should demonstrate the impartial evaluation of science based on relevant training, expertise, and experience in pertinent scientific disciplines.

# Candidates Affiliated with Ideological and Advocacy Groups

The biosketches and other source materials identify several candidates who are affiliated with think tanks and advocacy organizations known for their public stances on climate and environmental policy. These affiliations raise significant questions about the ability of these individuals to provide the unbiased and independent judgment required by FACA.

- Individuals associated with The Heartland Institute: The provided materials indicate that H. Sterling Burnett and Laurence I. Gould have direct affiliations with The Heartland Institute. Dr. Burnett is the director of the Institute's Arthur B. Robinson Center on Climate and Environmental Policy and the editor of their Climate Change Weekly email. His published commentary from external sources explicitly states that "there is no scientific consensus for their theories" related to human-induced global warming. Similarly, Dr. Gould, a reviewer for Heartland publications, promotes an "anti-alarmist" view of climate change, suggesting that "alarmist" claims are "political- and media-driven" and that a "massive amount of scientific evidence" contradicts the idea of man-made global warming. Dr. Willie Soon has been a speaker at the Heartland climate conference, and has claimed that climate change is due to changes in the sun and orbits. These statements are not supported by the large body of scientific evidence. Dr. S. Stanley Young has served as a policy advisor to the Heartland Institute.
- The CO<sub>2</sub> Coalition: Several candidates, including Gordon J. Fulks, Steve Goreham, Dennis Hedke, Rafaella O. do Nascimento, Fred Rumak, and S. Stanley Young are affiliated with the CO<sub>2</sub> Coalition. The biosketches for these individuals highlight their roles within the organization. A professional narrative for Dr. Fulks indicates he promotes the idea that "[o]ur emissions of CO<sub>2</sub> are inherently beneficial" and that "[t]he failure of the climate models to correctly predict the absence of warming ... has been the Achilles Heel of Global Warming Alarmism." Mr. Goreham is the Executive Director of the "Climate Science Coalition of America" and a member of the CO<sub>2</sub> Coalition, <sup>11,12</sup> and has written books and articles that argue against the consensus on climate change. Mr. Rumak's biosketch indicates no experience with environmental science other than his self-education on

<sup>&</sup>lt;sup>2</sup> https://web.archive.org/web/20220330204930/https://www.washingtontimes.com/news/2004/feb/22/20040222-103504-1476r/

<sup>&</sup>lt;sup>3</sup> Laurence I. Gould. "Global Warming/Climate Change': Dissecting the Claims Exposing the Methods" (.ppt) Presentation at the South Windsor Rotary Club, May 13, 2009.

 $<sup>\</sup>frac{4}{https://higherlogicdownload.s3.amazonaws.com/APS/17090051-2b38-4e7f-8890-a67eedba1c81/UploadedImages/Documents/spring08.pdf}$ 

<sup>&</sup>lt;sup>5</sup> https://climateconference.heartland.org/speakers/willie-soon/

<sup>&</sup>lt;sup>6</sup> https://archive.is/Zwg6q

https://heartland.org/podcasts/the-sun-and-climate-change-guest-dr-willie-soon-the-climate-realism-show-151

<sup>8</sup> https://heartland.org/about-us/who-we-are/s-stanley-young/

<sup>&</sup>lt;sup>9</sup> https://co2coalition.org/about/#co2-coalition-members

<sup>10</sup> https://www.desmog.com/gordon-fulks/

<sup>11</sup> https://co2coalition.org/teammember/steve-goreham/

<sup>12</sup> https://www.stevegoreham.com/

<sup>13</sup> https://www.stevegoreham.com/books/

- climate change.<sup>14</sup> The biosketches for these individuals highlight public speaking, books, and articles in popular media outlets, rather than peer-reviewed discourse, which suggests a fundamental conflict with the advisory nature of the SAB.
- The Cornwall Alliance for the Stewardship of Creation: David R. Legates is affiliated with the Cornwall Alliance, <sup>15</sup> which includes as part of its mission, "to save the public, especially the young, from false environmental propaganda." <sup>16</sup> Dr. Legates is also affiliated with the Heartland Institute, <sup>17</sup> and was removed from his position with the White House Office of Science and Technology Policy in 2021 for publication of materials regarding climate change that bypassed official information quality and review processes. <sup>18</sup>

# Candidates Affiliated with Regulated Industries and Consulting Firms Whose Clients are Regulated Industries

Another area of concern arises from the substantial number of candidates who are employed by, or serve as consultants to, companies and industries that are directly regulated by EPA. While these individuals may possess valuable expertise, they may also lack impartiality and an inclination for protecting the interests of their employers.

- Direct Industry Employment: The list includes multiple candidates from The Chemours Company, which releases numerous PFAS and other chemicals of concern into the environment at multiple locations. 19,20,21 The nominees from Chemours include Dr. Michael Davis, Dr. Shawn Gannon, Dr. Allen Sievert, and Mr. Sean Uhl. Additional industry-employed candidates are from ExxonMobil Biomedical Sciences, Inc. (Dr. Gary Minsavage and Dr. Aaron Redman) and Veolia (Dr. Adam Bruner, Dr. Charles Cavalca, Mr. Jeff Maccarella, and Ms. Andrea McElroy). Their biosketches explicitly reference their roles in "regulatory compliance," "product stewardship," and "technical development" for these companies.
- Consulting Firms: A number of candidates are affiliated with consulting firms that provide services
  to regulated entities, including Ramboll, CTEH, Stantec, Hazen and Sawyer, and CDM Smith. Their
  professional duties often involve navigating EPA regulations and providing technical support for
  clients. In our opinion, the presence of these affiliations may create an "appearance of a loss of
  impartiality."

### Contrarian Views and Policy Advocacy

There are candidates with extreme contrarian views. For example, the biosketch of Dr. James Enstrom explicitly labels him as a PM2.5 epidemiological health effects contrarian.

# Lack of Scientific Research Record

<sup>14</sup> https://co2coalition.org/teammember/fred-p-rumak/

<sup>15</sup> https://cornwallalliance.org/about/who-we-are/

<sup>16</sup> https://cornwallalliance.org/about/what-drives-us/

<sup>17</sup> https://heartland.org/about-us/who-we-are/david-legates/

<sup>18</sup> https://www.washingtonpost.com/weather/2021/01/11/controversial-climate-skeptics-release-papers/

<sup>&</sup>lt;sup>19</sup> https://www.chemistryworld.com/news/chemours-ordered-to-immediately-limit-pfas-emissions-into-ohio-river/4021998.article

<sup>&</sup>lt;sup>20</sup> https://chemscore.chemsec.org/app/uploads/2023/10/Chemours-2023-Controversies.pdf

<sup>&</sup>lt;sup>21</sup> https://www.starnewsonline.com/story/news/environment/2017/06/07/toxin-taints-cfpua-drinking-water/20684831007/

An evaluation of the candidate biosketches reveals a spectrum of credentials, from exceptional scientists to individuals whose professional focus lies outside the realm of active, peer-reviewed research. A number of candidates, despite their professional accomplishments, do not appear to meet the standard of a scientific researcher as defined by regular grant funding or peer-reviewed publications. Their experience is more managerial, regulatory, or operational, which, while valuable in other contexts, is not the primary expertise required for a scientific advisory board. They would be better suited for consideration to serve on a stakeholder committee, made up of representatives from various sectors.

- Ms. Sophia Andrews (Indiana Department of Environmental Management) is a field inspector
  whose expertise is in "inspections, compliance, permits, and enforcement." Her biosketch does not
  mention any research grants or publications.
- Mrs. Jennifer Arp (Cherokee County Water & Sewerage Authority) is an Environmental Affairs
  Assistant Manager with a long career in utility work. Her profile does not list any research or
  publications, and a search of external sources also did not yield such a record.
- Mr. Michael Barak and Mr. Joseph Bastardi (WeatherBell Analytics LLC) are a CEO and a Chief Forecaster, respectively, in a meteorological consulting firm. While they possess technical knowledge, their biosketches do not mention an active record of peer-reviewed research or grants.
- Mr. Earl Fordham (retired from the Washington Department of Health) notes that as a public employee, he was "not actively engaged in research and receive[d] no research funding."
- Ms. Helen Petre (retired from USDA) is a retired plant health and trade compliance officer whose
  profile emphasizes teaching and volunteer work, with no mention of a research or publication
  record.

## Candidates Who Use the Language But Not the Peer Review Process of Science

There appear to be candidates with scientific credentials who promote views in public forums that have not been vetted through the scientific community's established peer-review process. These individuals often emphasize public presentations, books for a lay audience, Youtube videos, or blogs over a robust publication history, suggesting a focus on public-facing advocacy rather than scientific discovery. Examples of such candidates include H. Sterling Burnett and Laurence I. Gould, whose public-facing work is characterized by commentary in non-peer-reviewed outlets and lectures to lay audiences. <sup>22,23,24</sup> Mr. Steve Goreham's biosketch highlights his books and articles in popular publications like the Wall Street Journal and Fox Business Channel. <sup>25</sup> Mr. Jim Steele's professional narrative centers on a book and "40 educational videos on YouTube."

# **Qualified Candidates**

It is recommended that EPA prioritize candidates with a demonstrated history of rigorous, unbiased, independent, and peer-reviewed scientific contributions. Specifically, they should be identified based on three major considerations:

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<sup>&</sup>lt;sup>22</sup> https://heartland.org/about-us/who-we-are/h-sterling-burnett/

<sup>&</sup>lt;sup>23</sup> https://www.westernjournal.com/trumps-epa-head-lee-zeldin-needs-to-undo-the-endangerment-finding/

<sup>24</sup> https://www.voutube.com/watch?v=TnEoOmHrPCY and https://www.voutube.com/watch?v=NfgVRjrAiXA

<sup>25</sup> https://www.terrificspeakers.com/steve-goreham

- 1. A robust scientific record, including competitive grants and peer-reviewed publications;
- 2. A screening for potential conflicts of interest, specifically avoiding individuals with direct affiliations to ideological advocacy groups or regulated industries; and
- 3. A breadth and depth of expertise across the disciplinary areas requested by the EPA (e.g., Air Quality / Atmospheric Sciences, Analytical Chemistry / Geochemistry, Biostatistics / Epidemiology, Drinking Water / Engineering, Human Health Risk Assessment / Toxicology, Radiological Risk Assessment, Social, Behavioral, and Decision Sciences / Economics / Waste Management).

Using these considerations should reveal many candidates that have robust credentials, lack of apparent conflicts of interest, and diverse expertise that aligns with the SAB's mission. These appointments would serve to strengthen the Board's role as a trusted source of objective scientific advice for the American public.