



**EPA Scientific Integrity
Annual Stakeholder and Partner
Meeting**

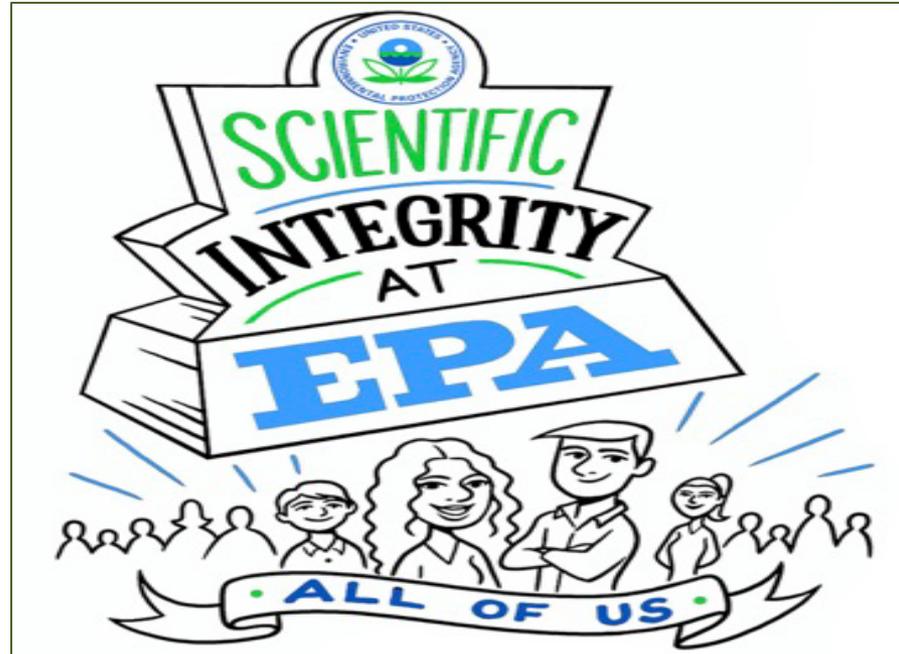
June 15, 2021

**Francesca Grifo, PhD
Scientific Integrity Official
US Environmental Protection Agency**

- **Overview of EPA's Scientific Integrity Policy**
- **Scientific Integrity Team Responsibilities**
- **Challenges to Scientific Integrity at EPA**
- **Meeting those Challenges**
- **Q & A**



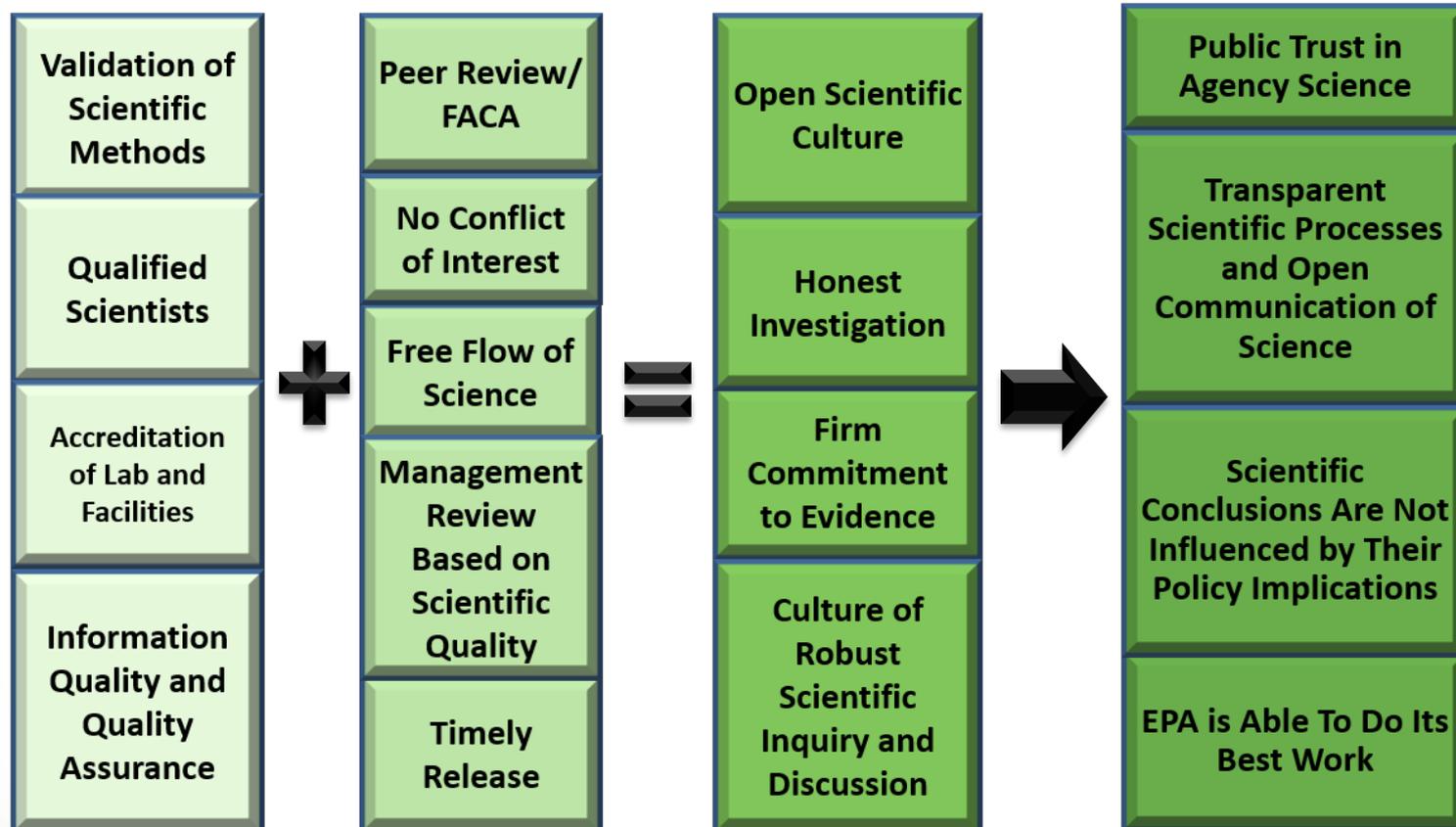
What is Scientific Integrity?



<https://youtu.be/FQJCy8BXXq8>



Ensuring Scientific Integrity





Scientific Integrity Team Responsibilities

- **Write and oversee the policies and procedures that implement the Scientific Integrity Policy**
- **Conduct outreach and training**
- **Hear concerns, give advice, and when necessary, adjudicate allegations of lapses in scientific integrity**



Team Responsibilities--Scientific Integrity Policy Work

- **Authorship and attribution**
- **Clearance**
- **Differing scientific opinions**
- **Policy compliance certification**
- **Scientific Integrity Policy updates**
- **Scientific Integrity Committee charter**



Team Responsibilities— Outreach and Training

- **Frequent outreach across the Agency including coordination with the Office of General Counsel and Office of the Inspector General**
- **Weekly office hours**
- **Mandatory onboarding training**
- **Brief all new Senior Leaders on scientific integrity**
- **Work with managers to support their roles in enhancing our culture of scientific integrity**



Team Responsibilities-- Listen, Advise, and Adjudicate

- **Hear concerns**
- **Give advice, and when necessary.**
- **Adjudicate allegations of lapses in scientific integrity**



Team Responsibilities— Listen and Advise

- **First conversation**
- **Determine if it is scientific integrity**
- **Next steps are clear**
- **Informal conversation**
- **Not directly linked to an imminent public health threat**

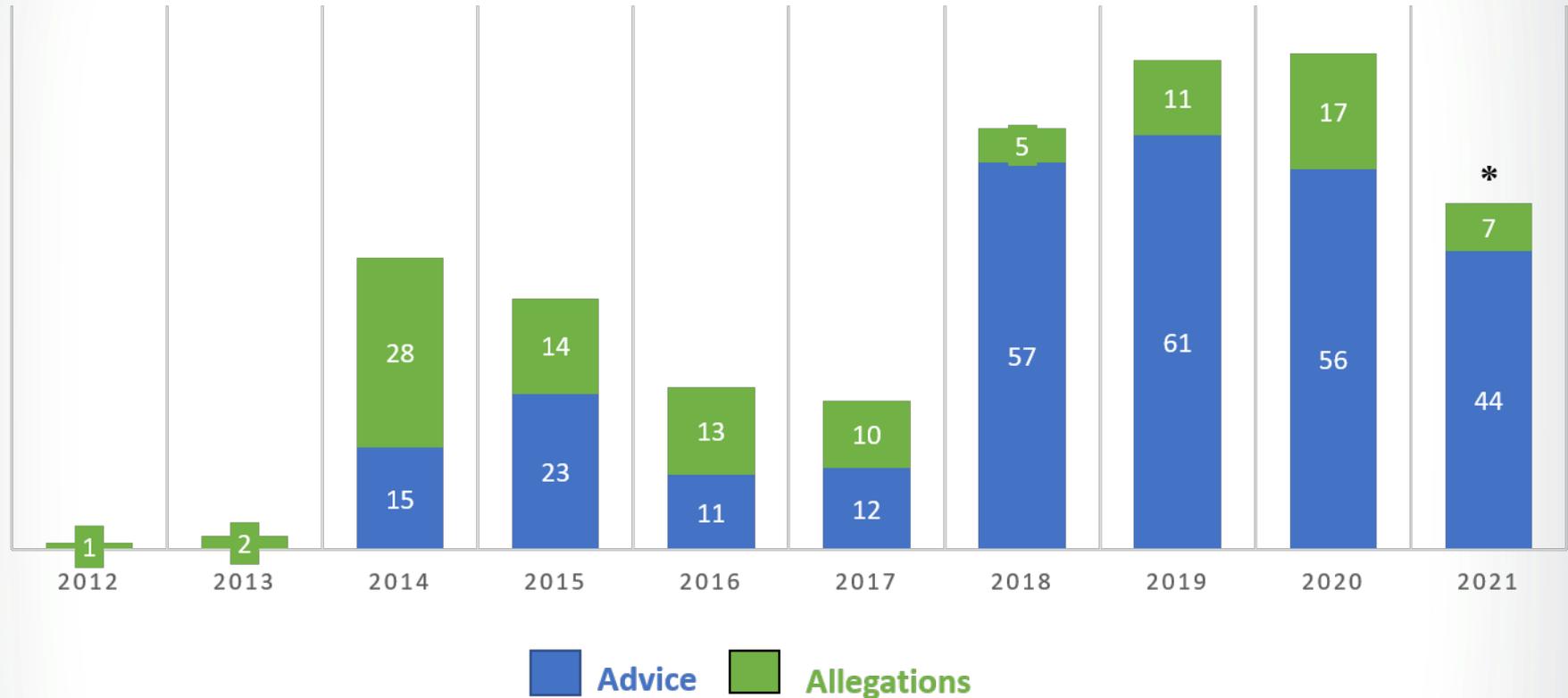


Team Responsibilities— Adjudicate Allegations

- **Based on current information – it would be a violation of the Scientific Integrity Policy**
- **The submitter wishes to proceed despite limitations on confidentiality**
- **Advice is not appropriate**
- **Previous advice not effective**
- **Urgent**
- **High profile**
- **Expertise or support of the Scientific Integrity Committee is warranted**



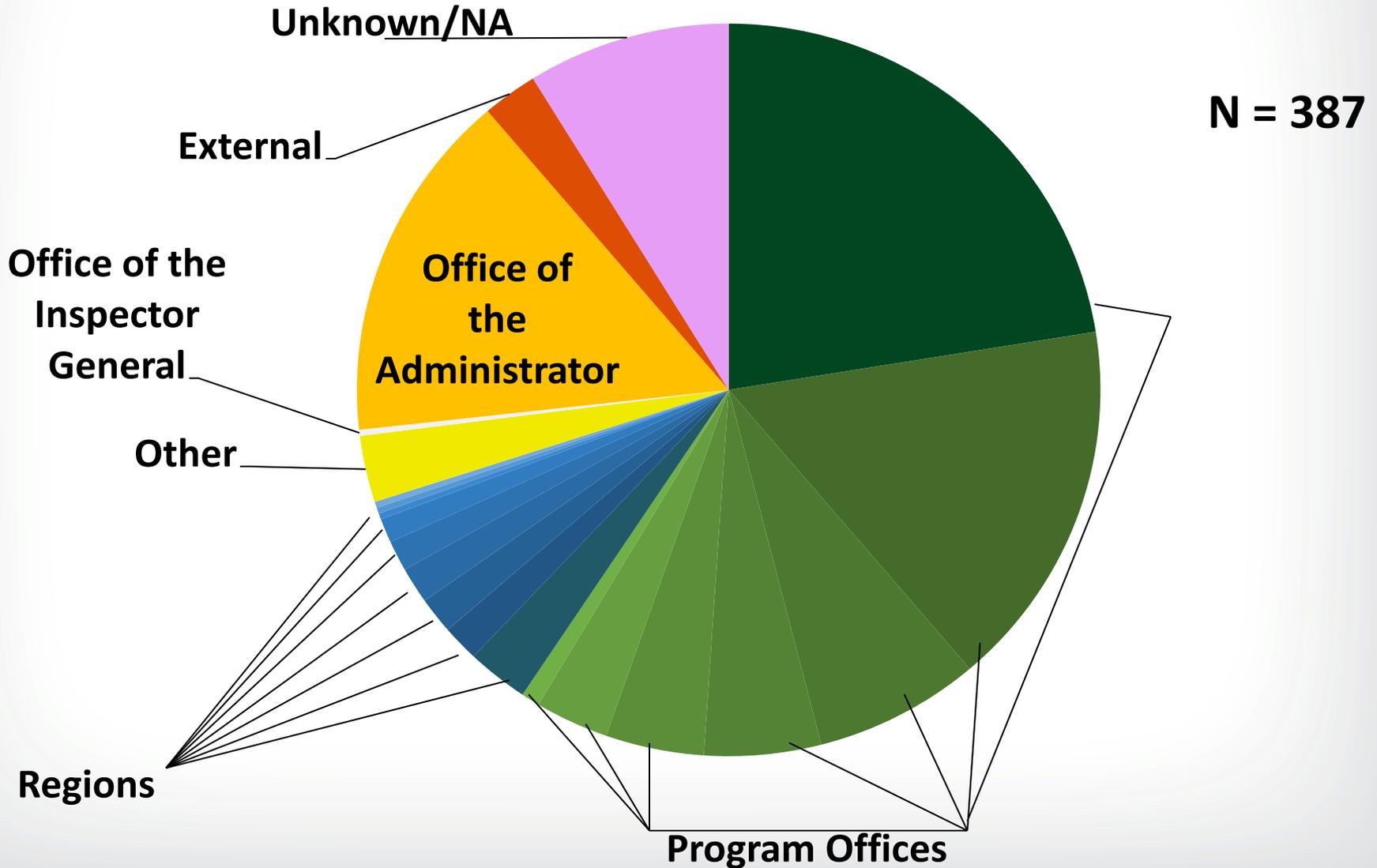
Allegations and Advice Fiscal Year 2012 thru 3/31/2021



* Fiscal Year 21 data is only for the first two quarters of 2021

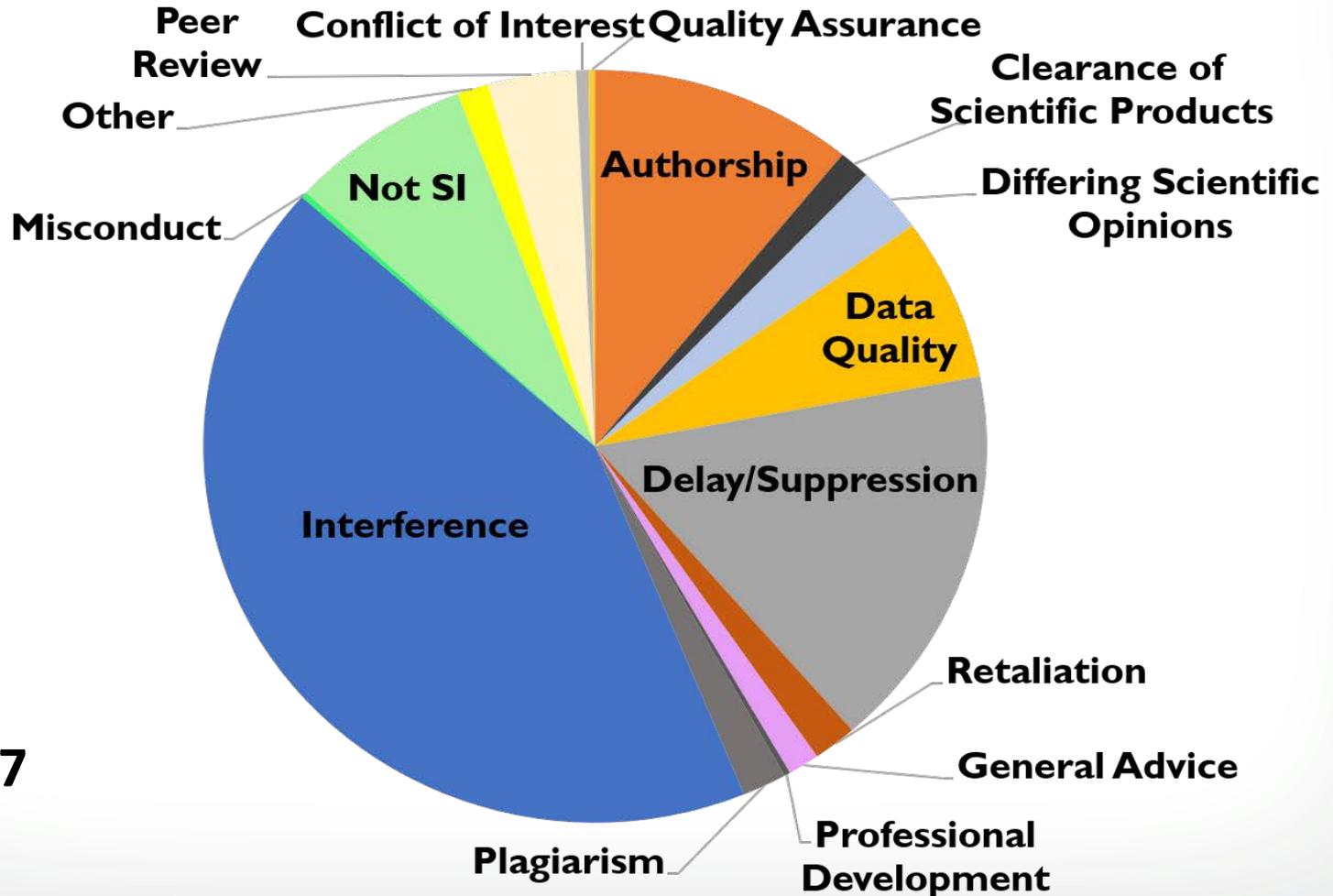


Allegations and Advice by Subject's Office Fiscal Year 2012 thru 3/31/2021





Allegations and Advice by Topic Fiscal Year 2012 thru 3/31/2021



N = 387



Issues Reported as Allegations and Requests for Advice

- **Interference/manipulation of scientific evidence**
- **Alteration of scientific products**
- **Flawed review**
- **Authorship and plagiarism**
- **Retaliation and intimidation**

- **Our Scientific Integrity Policy was violated**
- **Experienced interference not covered by our Scientific Integrity Policy**
- **Longstanding norms were abandoned**

- **New leadership that is embracing science and scientific integrity**
- **Executive Order 13990**
- **Presidential Memorandum**
- **Scientific Integrity Team initiatives**



Executive Order 13990 - Protecting Public Health and Restoring Science to Tackle the Climate Crisis

“...Federal Government must be guided by the best science and be protected by processes that ensure the integrity of Federal decision making...”

“To that end, this order directs all executive departments and agencies to immediately review and, as appropriate and consistent with applicable law, take action to address the promulgation of Federal Regulations and other actions during the last 4 years that conflict with these important national objectives...”



Executive Memorandum

Restoring Trust in Government Through Scientific Integrity and Evidence-Based Policymaking

Creates White House task force of agency representatives to:

- **Gather best practices**
- **Analyze instances when scientific integrity policies have not been followed or enforced**
- **Draft a report and create a framework for regular assessment for iterative improvement of agency SI policies and practices**



Executive Memorandum— Three Short Term Milestones

Starting from January 27, 2021

- ✓ 60 days – Heads of agencies shall review and update their websites**
- ✓ 90 days - Heads of agencies shall review their current and future needs for independent scientific and technological advice from Federal advisory committees, commissions, and boards.**
- ✓ 120 days – Heads of agencies shall designate Chief Scientist/Science Advisor and Scientific Integrity Official**



Executive Memorandum— One Longer Term Milestone

Starting from January 27, 2021

300 days - agencies must review and as needed update any agency reports, data, and other agency materials issued or published since January 20, 2017, that are inconsistent with the principles set forth in this memorandum and that remain in use by the agency or its stakeholders



Memo: New Considerations

- **Groups historically underrepresented in science, technology and related fields**
- **Equitable delivery of the Federal Government's Programs**
- **Evidence-based and iterative development of policies and programs**
- **Engagement of scientists with the news media and social media**
- **Emerging technologies (e.g., artificial intelligence and machine learning)**
- **Evolving scientific practices (e.g., citizen science, community-engaged research)**



Our Ongoing Work

- **Strengthen our Scientific Integrity Policy**
- **Learning prevention from each allegation**
- **Enhance the norms that ensure scientific integrity**
- **Honesty and rigor**
- **Transparency**
- **Firm commitment to evidence**
- **Peer, Advisory Committee & Technical Review**
- **Independent science that is not driven by policy or politics**
- **Respect for career staff knowledge and experience**
- **Increase awareness of the Scientific Integrity Policy**



New Initiatives

- **Scientific Integrity Survey**
- **Examine employee's awareness and experiences of scientific integrity**
- **Learn ways to improve implementation of the Scientific Integrity Policy**
- **New onboarding and biennial scientific integrity training**
- **Looking at innovative ways to enhance our scientific integrity culture**
- **Is awareness enough?**
- **Incentives and Barriers?**
- **Re-writing our allegation procedures to reflect what we have learned**
- **Looking for more ways to prevent violations in the future**
- **Listening to YOU**



Our SUPERPOWER— People of EPA

- **Value independent rigorous science**
- **Consider all pertinent evidence and explore various plausible explanations of that evidence**
- **Engage in vigorous internal discussion of different points of view to improve ideas**
- **Understand that scientific decisions are distinct from policy decisions**
- **Are skilled at maintaining and strengthening our culture of scientific integrity**



Concluding Thoughts: Scientific Integrity Team Ensures

- **EPA science is high quality and independent**
- **We convey what the science says and perform our work in a manner that is in keeping with the Scientific Integrity Policy regardless of internal and or external pressures**
- **Scientific conclusions are distinct from their policy implications**