



March 1, 2023

Framework for Federal Scientific Integrity Policy and Practice

Craig Robinson
Director, USGS Office of Science Quality and Integrity

Francesca Grifo
Scientific Integrity Official, EPA

Co-chairs, National Science and Technology Council (NSTC)
Subcommittee on Scientific Integrity

U.S. Department of the Interior
U.S. Geological Survey

Timeline



A Report by the
SCIENTIFIC INTEGRITY FAST-TRACK ACTION COMMITTEE
of the
NATIONAL SCIENCE AND TECHNOLOGY COUNCIL

January 2022

January 2022



A Framework for Federal Scientific Integrity
Policy and Practice

Guidance by the
SCIENTIFIC INTEGRITY FRAMEWORK INTERAGENCY WORKING GROUP
of the
NATIONAL SCIENCE AND TECHNOLOGY COUNCIL

January 2023

January 2023



September 2022
and Continuing

National Science and Technology Council (NSTC) Subcommittee on Scientific Integrity

Federal Agency Scientific Integrity Policies

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

JANUARY 27, 2021 • PRESIDENTIAL ACTIONS



May 2021

SCIENTIFIC INTEGRITY TASK FORCE

OSTP NATIONAL SCIENCE AND TECHNOLOGY COUNCIL (NSTC)

NSTC Subcommittee on Scientific Integrity Charter

- **Need for deliberative body identified in the January SI Report**

The scope of the SOSI is to assess and communicate on matters of Federal scientific integrity for the purposes of (1) fostering and strengthening a culture and practice of scientific integrity government-wide and (2) providing coordination, information-sharing, and support across agencies and components of the Executive Office of the President (EOP).

- **“Primary vehicle for cross-agency coordination, assessment and improvement of agency policies and practices”**
- **“Maintaining a role as an independent voice on matters of Federal scientific integrity”**
- **“OSTP and agency co-chairs shall act as an executive council”**



Membership

The Membership of the SOSI shall be constituted by the SIOs of Executive Branch departments and agencies.

Representative agencies include, but shall not be limited to:

Department of Agriculture
Department of Commerce
Department of Defense
Department of Education
Department of Energy
Department of Health and Human Services
Department of Homeland Security
Department of Housing and Urban Development
Department of Justice
Department of Labor
Department of State
Department of the Interior
Department of Transportation
Department of Treasury
Department of Veterans Affairs
National Aeronautics and Space Administration
National Science Foundation

Smithsonian Institution
The Office of Personnel Management
United States Agency for International Development
United States Consumer Financial Protection Bureau
United States Consumer Product Safety Commission
United States Environmental Protection Agency
United States Nuclear Regulatory Commission
Federal Communications Commission

The following components in the Executive Office of the President are represented on the SOSI:

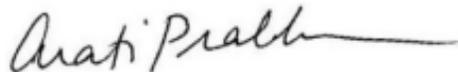
Office of Management and Budget; and
Office of Science and Technology Policy (permanent co-chair)





EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF SCIENCE AND TECHNOLOGY POLICY
WASHINGTON, D.C. 20502

MEMORANDUM TO THE HEADS OF AGENCIES AND DEPARTMENTS, CHIEF
SCIENCE OFFICERS, AND SCIENTIFIC INTEGRITY OFFICIALS

FROM: Arati Prabhakar 
Assistant to the President
Director
White House Office of Science and Technology Policy

SUBJECT: Delivery of the Framework for Federal Scientific Integrity Policy and Practice

DATE: January 12, 2023

The White House Office of Science and Technology Policy (OSTP) is pleased to deliver the attached [Framework for Federal Scientific Integrity Policy and Practice](#) (the Framework) to support agencies in advancing and sustaining the critical work of protecting Federal science and enabling Federal scientists. Developed alongside our agency partners and the American public, this Framework will have an immediate impact and will sustain these scientific integrity practices well into the future.

The Framework for Federal Scientific Integrity Policy and Practice

Scientific integrity is the adherence to professional practices, ethical behavior, and the principles of honesty and objectivity when conducting, managing, using the results of, and communicating about science and scientific activities. Inclusivity, transparency, and protection from inappropriate influence are hallmarks of scientific integrity.

Federal Definition of Scientific Integrity

1. Federal Definition of Scientific Integrity

The Framework for Federal Scientific Integrity Policy and Practice

Scientific integrity is the adherence to professional practices, ethical behavior, and the principles of honesty and objectivity when conducting, managing, using the results of, and communicating about science and scientific activities. Inclusivity, transparency, and protection from inappropriate influence are hallmarks of scientific integrity.



Implementation of the Scientific Integrity Framework: Roadmap of Activities and Outcomes



Links what agencies need to do (activities), what outcomes are expected from the activities (short-term and intermediate term), and end goals.



Roadmap (Table 1): Activities and Outcomes for Four Broad Areas or Objectives



- **Establish and Implement Scientific Integrity Policies and Practices**
- **Demonstrate Engaged and Supportive Leadership**
- **Promote Transparency and Free Flow of Scientific Information**
- **Ensure Accountability**



Federal Scientific Integrity: A Visual Roadmap of Activities and Outcomes

Activities

Establish & Implement SI Policies & Practices

- Develop/update and implement SI policies and procedures
- Educate workforce and maintain visibility of SI policies, practices, and culture
- Conduct robust evaluation to improve policies and practices

Short-Term Outcomes

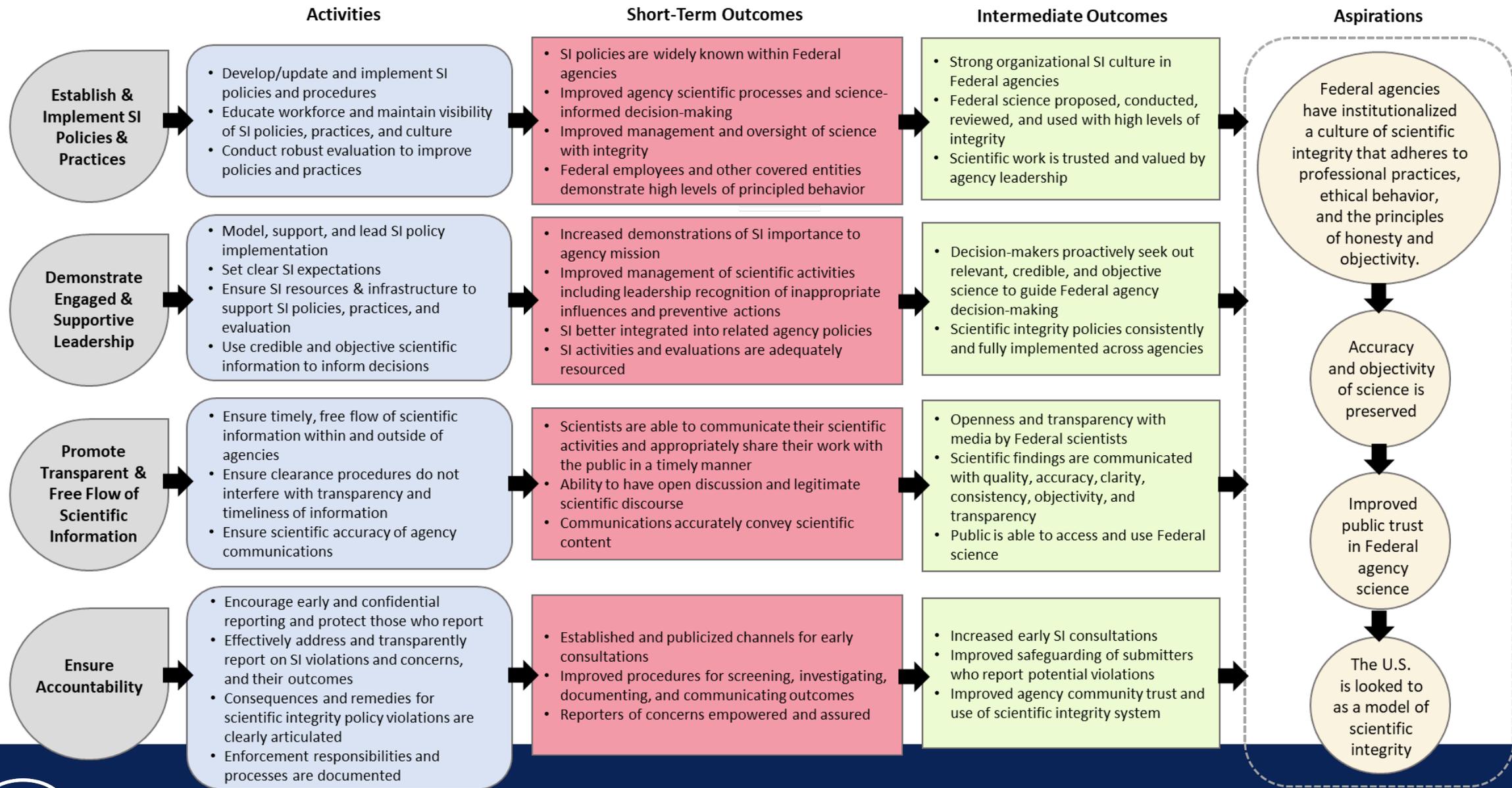
- SI policies are widely known within Federal agencies
- Improved agency scientific processes and science-informed decision-making
- Improved management and oversight of science with integrity
- Federal employees and other covered entities demonstrate high levels of principled behavior

Intermediate Outcomes

- Strong organizational SI culture in Federal agencies
- Federal science proposed, conducted, reviewed, and used with high levels of integrity
- Scientific work is trusted and valued by agency leadership

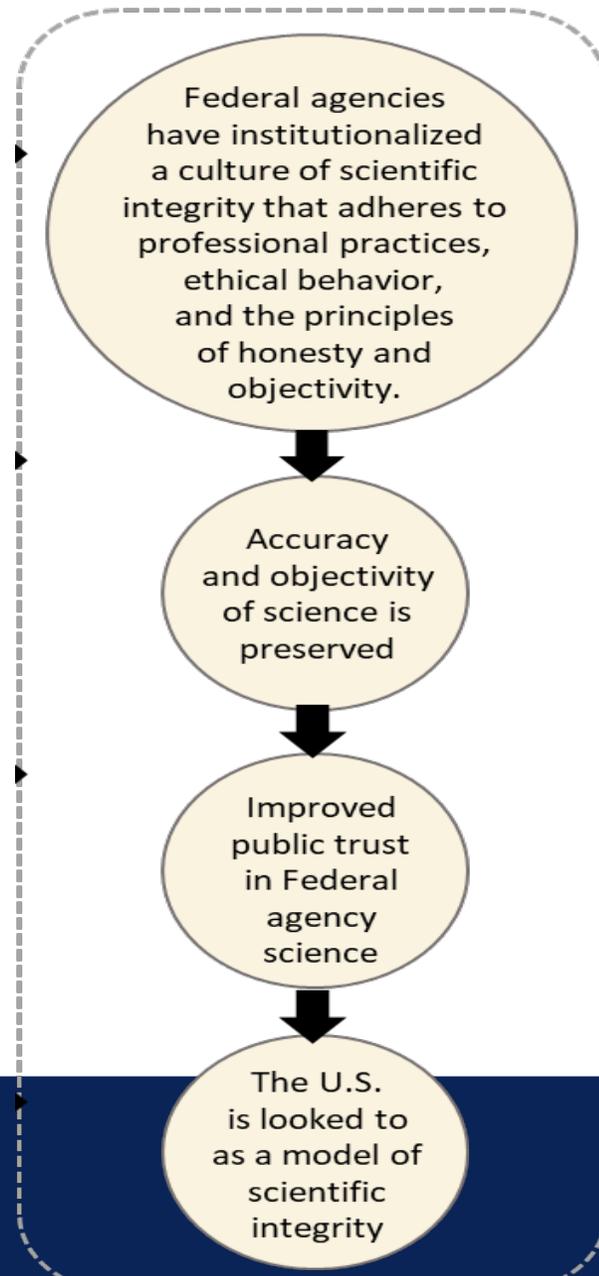


Federal Scientific Integrity: A Visual Roadmap of Activities and Outcomes



Federal Scientific Integrity: A Visual Roadmap of Activities and Outcomes

Long-Term Aspirations



Chapter 4. Model Scientific Integrity Policy, Table of Contents

Policy Requirements: Promoting a Culture of Scientific Integrity

- I. Protecting Scientific Processes**
- II. Ensuring the Free Flow of Scientific Information**
- III. Supporting Decision Making Processes**
- IV. Ensuring Accountability**
- V. Protections for Scientists**
- VI. Professional Development for Government Scientists**
- VII. Federal Advisory Committees**



Chapter 5. Critical Policy Features for Assessment of Scientific Integrity Policy with Model Scientific Policy Components

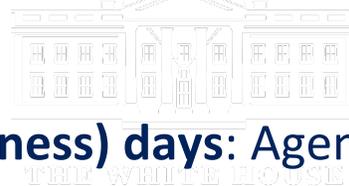


- **Critical Policy Features are expected to be addressed in all agency policies**
- **Model Policy Component refers to the section of the model policy where exemplary text can be found**
- **National Science and Technology Council (NSTC) Subcommittee on Scientific Integrity (SOSI) together with OSTP will provide agencies with feedback based on the consistency of their scientific integrity policies with these critical policy features**



FEBRUARY 17, 2023

Framework Release Memo Follow-up Dates



Monday April 10, 2023

Within 60 (business) days: Agencies submit new/updated scientific integrity policies for review by OSTP and the National Science and Technology Council (NSTC) Subcommittee on Scientific Integrity.

Friday July 7, 2023

Within 120 days: OSTP and the Subcommittee complete reviews of the policies against the Framework.

Friday Sept 29, 2023

Within 180 days: Agencies provide an opportunity for public comment against the draft scientific integrity policies.

Mon Feb 12, 2024

Within 270 days: All agencies submit final scientific integrity policies to OSTP for public release.

Thurs June 20, 2024

Within 360 days: and every two years: OSTP and the Subcommittee assess policies, practices, and culture of scientific integrity.



Potential Lessons for Research Universities and Institutions from the Federal Effort

1. Upholding scientific integrity means protecting science during all stages of its development and application.
2. Violations involving high-level officials are the most problematic and difficult for organizations to address. Consider appropriate steps, policies and processes before such a situation occurs.
3. Fostering an organizational culture of scientific integrity starts from the top.

Potential Lessons for Research Universities and Institutions from the Federal Effort

4. Communicating science with integrity entails effective and transparent communication of scientific information to decision-makers, the media, and the American people.
5. Safeguarding scientific integrity requires clear, visible procedures for reporting concerns, robust assessment and adjudication, and consistent enforcement of consequences when violations are found.

Potential Lessons for Research Universities and Institutions from the Federal Effort

6. Emerging themes include:

- A. Diversity, equity, inclusion, and accessibility, which is essential to improving the representativeness and eminence of the scientific workforce, innovation in the conduct and use of science, and equitable participation in science by diverse communities across the Nation.
- B. New technologies, including artificial intelligence, present new challenges.
- C. Emerging modes of publishing and public engagement present opportunities and challenges as well.