



THE SECRETARY OF THE INTERIOR  
WASHINGTON

ORDER NO. 3369 Amendment 1 (*Amended material bold and italicized*)

Subject: Promoting Open Science

**Sec. 1 Purpose.** This Order is intended to ensure that the Department of the Interior (Department) bases its decisions on the best available science and *provides* the American people with enough information to thoughtfully and substantively evaluate the data, methodology, and analysis used by the Department to inform its decisions. Further, it is intended to ensure that the American people have sufficient information about what their Federal Government is doing to assess where it is coming from and correct the Federal Government when we err.

**Sec. 2 Authorities.** This Order is issued under the authority of section 2 of Reorganization Plan No. 3 of 1950 (64 Stat. 1262), as amended, the Administrative Procedure Act (60 Stat. 237) (APA), as amended, and other relevant statutes.

**Sec. 3 Background.** The Department issues regulations on a wide swath of activities that have a tremendous impact on the lives of Americans. Accordingly, the Department has an obligation to the American people to ensure that decisions are based on the best available science. On March 28, 2018, President Donald J. Trump issued Executive Order 13783, “Promoting Energy Independence and Economic Growth,” declaring it “the policy of the United States” that environmental regulations “are developed through transparent processes that employ the best available peer-reviewed science and economics.”

Similarly, Executive Order 13777, “Enforcing the Regulatory Reform Agenda,” directed each Regulatory Reform Task Force to identify regulations that “are inconsistent with the requirements of section 515 of the Treasury and General Government Appropriations Act, 2001 (44 U.S.C. 3516 note), or the guidance issued pursuant to that provision, in particular those regulations that rely in whole or in part on data, information, or methods that are not publicly available or that are insufficiently transparent to meet the standard for reproducibility.”

In addition, the various Federal courts have recognized that the APA places some obligation on Federal Agencies to provide the public with sufficient information about the data and methodology used to support a Federal rulemaking to meaningfully comment. “To allow an agency to play hunt the peanut with technical information, hiding or disguising the information that it employs, is to condone a practice in which the agency treats what should be a genuine interchange as mere bureaucratic sport.” *Connecticut Light & Power Co. v. Nuclear Regulatory Comm’n*, 673 F.2d 525, 530 (D.C. Cir. 1982). Thus, “[i]n order to satisfy the requirement that the public be provided a meaningful opportunity to comment, an agency must ‘identify and make available technical studies and data that it has employed’ in developing a proposed rule.” *Air Transport Association of America, Inc. v. Department of Agriculture*, 303 F. Supp.3d 28, 54

(D.D.C. 2018) (quoting *Connecticut Light & Power Co. v. Nuclear Regulatory Comm'n*, 6783 F. 2d 525, 530 (D.C. Cir. 1982)).

This Order is intended to further implement the policy set forth in Executive Order 13783 and alluded to in Executive Order 13777, ensure the Department is meeting its obligations under the APA, and promote transparency and accountability.

The Department has already taken steps to promote open science. For example, on May 9, 2016, the Deputy Director of the U.S. Fish and Wildlife Service (Service) issued a memorandum detailing an “Information Disclosure Policy” that sought to increase transparency when **implementing** the Endangered Species Act (ESA). Specifically, this memorandum declared that in certain ESA contexts, the Service would:

- “[M]ake publicly available, to the extent allowable by law, the scientific data and analyses relied upon in our rulemakings”; and
- “[P]ost all cited literature that is used in rulemaking decisions under the [ESA], and that is not already publicly available” to Regulations.gov concurrent with publication in the Federal Register.

Likewise, this Order follows executive branch initiatives designed to increase transparency in scientific data, reproducibility in studies, and rigorous peer review of scientific findings, including, but not limited to:

- Executive Order 13563, “Improving Regulation and Regulatory Review,” 76 Fed. Reg. 3821 (Jan. 18, 2011) (Our regulatory system “must be based on the best available science.”).
- Memorandum for the Heads of Executive Departments and Agencies, “Scientific Integrity,” (Mar. 9, 2009) (“If scientific and technological information is developed and used by the Federal Government, it should ordinarily be made available to the public. To the extent permitted by law, there should be transparency in the preparation, identification, and use of scientific and technological information in policymaking.”).
- Office of Management and Budget, “Final Information Quality Bulletin for Peer Review,” 70 Fed. Reg. 2664 (Jan. 14, 2005) (“This Bulletin establishes that important scientific information shall be peer reviewed by qualified specialists before it is disseminated by the Federal Government.”).
- Office of Management and Budget, “Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies,” 67 Fed. Reg. 8452 (Feb. 22, 2002) (“If an agency is responsible for disseminating influential scientific, financial, or statistical information, agency guidelines shall include a high degree of transparency about data and methods to facilitate the reproducibility of such information by qualified third parties.”).

The late Senator Daniel Patrick Moynihan said, “everybody is entitled to their own opinions, but not their own facts.” Differences of opinion are inevitable as people of good will pursue different priorities. Differences of facts are not. Basing decisions on the best available science requires humility to recognize that we in the Federal Government may not always have the right answer at the outset. As the Court of Appeals for the Ninth Circuit has recognized, “[o]pportunity for public comment is particularly crucial when the accuracy of important material in the record is in question.” *Idaho Farm Bureau Federation v. Babbitt*, 58 F.3d 1392, 1403 (1995).

**Sec. 4 Implementation.** Consistent with governing laws and regulations, as well as principles of transparency and accountability, I direct the following actions:

a. All Bureaus and Offices should base decisions on the best available science.

(1) This means that Bureaus and Offices should utilize and prioritize publicly available, reproducible, peer-reviewed science to the extent possible. For purposes of this Order, “peer reviewed” refers to a process that is consistent with the guidance set forth in Office of Management and Budget, “Final Information Quality Bulletin for Peer Review.”

(2) Any decision based on scientific conclusions that are not supported by publicly available raw data, analysis, or methodology; have not been peer reviewed; or are not readily reproducible should include an explanation of why such science is the best available information.

b. To the extent permissible by law, the relevant Secretarial Officer(s) shall:

(1) Make the following publicly available with sufficient specificity to allow meaningful third party evaluation and reproduction:

(i) The scientific data relied upon in a rulemaking;

(ii) The analysis relied upon in a rulemaking; and

(iii) The methodology used to gather and analyze data to support a proposed or final rule.

(2) Post all scientific literature that is cited, relied upon, or otherwise used to inform a rulemaking decision, including reference materials and literature that are not published or readily available to the general public, on Regulations.gov (or any similar successor site) concurrent with publication in the Federal Register.

(3) Ensure that all contracts, grants, cooperative agreements, or other similar agreements between any Bureau, Office, or other organization of the Department and any third party for scientific research, analysis, or other evaluation permit the Department to publicly release associated data, analysis, methodology, reports, conclusions, or other resulting analysis.

c. The Deputy Secretary shall be responsible for the following:


(1) Incorporating the principles of open science into the Departmental Manual (305 DM 3 - Integrity of Scientific and Scholarly Activities).

(2) Initiating a rulemaking process by seeking public comment on the directives herein and taking additional steps that the Department can implement to ensure decisions are based on scientific data, analysis, and conclusions that *are* reproducible and transparent.

**Sec. 5 Waivers.** The requirements of this Order may be waived, in whole or in part, by the Deputy Secretary upon a written determination that a waiver is necessary and the least restrictive means of protecting privacy; confidentiality, including confidential business information and trade secrets; national security; and homeland security. With appropriate redactions, all waivers shall be posted on Regulations.gov (or any similar successor site) concurrent with publication of the related rule in the Federal Register.

**Sec. 6 Effect of the Order.** This Order is intended to improve the internal management of the Department. This Order and any resulting reports or recommendations are not intended to, and do not create any right or benefit, substantive or procedural, enforceable at law or equity by a party against the United States, its Departments, Agencies, instrumentalities or entities, its officers or employees, or any other person. To the extent there is any inconsistency between the provisions of this Order and any Federal laws or regulations, the laws or regulations will control.

**Sec. 7 Expiration Date.** This Order is effective immediately. It will remain in effect until the appropriate provisions are converted to the Departmental Manual and/or the requirements of the Order are implemented and completed, amended, superseded, or revoked.



Deputy Secretary

Date: OCT 18 2018