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Hamilton/DENVER/NPS  
06/09/2008 11:12 AM MDT

To Sherri Fields/Atlanta/NPS@NPS, Thayer  
Broili/CAHA/NPS@NPS, Mike Murray/CAHA/NPS@NPS  
cc  
bcc  
Subject peer review USGS Protocols

FYI per the question about whether the USGS protocols were peer reviewed.

Attached are a list of peer reviewers lifted from each of the protocols and the USGS Manual section on peer review.



Peer Review USGS Protocols.doc 502\_3 - Fundamental Science Practices Peer Review.mht

Sandy

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**Peer Review USGS Protocols (as stated in the Protocols)**

**PIPL**

David Allen, Ruth Boettcher, Walker Golder, Anne Hecht, David Rabon, and Pea Island National Wildlife Refuge biologists and managers for reviews of these protocols. Administrative review was also provided by the following NPS personnel: Sherri Fields and Steve Harrison, and by Dr. J.B. French, USGS Patuxent Wildlife Research Center.

**AMOY**

comments and technical review of T. R. Simons of the North Carolina Cooperative Wildlife and Fisheries Research Unit (NCCWFRU) and A. L. Wilke of The Nature Conservancy. We also acknowledge the discussions and information from D. Allen (NCWRC), S. Cameron (NCWRC), S. Shulte (NCCWFRU), and D. Rabon (USFWS).

**CWB**

comments and technical review of Dr. P.A. Buckley (retired, formerly NPS and USGS research biologist), D. Allen, NCWRC, S. Cameron, NCWRC, and D. Rabon, USFWS, Raleigh Field Office. Administrative review was also provided by the following NPS personnel: Sherri Fields and Steve Harrison, and by Dr. J.B. French, USGS Patuxent Wildlife Research Center.

**SEA TURTLES**

Ruth Boettcher, Matthew Godfrey, Sandy MacPherson, and David Rabon for reviews of these protocols. Administrative review was also provided by the following NPS personnel: Sherri Fields and Steve Harrison, and by Dr. J.B. French, USGS Patuxent Wildlife Research Center.

**SEABEACH AMARANTH**

scientific and technical reviews received from Dr. Claudia L. Jolls, Associate Professor, Department of Biology, East Carolina University and Dale Suiter, Endangered Species Biologist, U.S. Fish and Wildlife Service. Administrative review was also provided by the following NPS personnel: Sherri Fields and Steve Harrison, and by Dr. J.B. French, USGS Patuxent Wildlife Research Center.



## *U.S. Geological Survey Manual*

### 502.3 - Fundamental Science Practices: Peer Review

05/24/06

OPR: Geospatial Information Office

**Instructions: This is a new Survey Manual (SM) chapter. It is an accompanying chapter to SM 502.1 - Fundamental Science Practices: Foundation Policy.**

**1. Purpose and Scope.** Peer review, as a cornerstone of scientific practice, validates and ensures the quality of published USGS science. This policy establishes the requirements for peer review of USGS information products and applies to all USGS scientific and technical information, whether it is published by the USGS or an outside entity.

**2. Authority.** Office of Management and Budget (OMB) and Department of the Interior (DOI) guidelines address means to safeguard both excellence and objectivity of science through peer review.

A. OMB, Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies (February 22, 2002)

B. OMB, Final Information Quality Bulletin for Peer Review (December 16, 2004)

C. DOI, Information Quality Guidelines Pursuant to Section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (October 2, 2002)

### 3. References.

A. SM 502.1 - Fundamental Science Practices: Foundation Policy

B. SM 502.2 - Fundamental Science Practices: Planning and Conducting Data Collection and Research

C. SM 502.4 - Fundamental Science Practices: Review, Approval, and Release of Information Products

D. SM 205.18 - Authority to Approve Information Products

E. SM 1100.6 - Use of Copyrighted Material in USGS Information Products

F. 432-I.S1 - USGS General Records Disposition Schedule

G. USGS, Guidelines for Ensuring the Quality of Information Disseminated to the Public

### 4. Definitions.

A. *Information Product.* An information product is the compilation of scientific communication or knowledge such as facts, data, or interpretations in any medium (for example, print, digital, or audiovisual) or form (including textual, numerical, graphical, and cartographic) to be disseminated to a defined audience or customer, scientific or nonscientific, internal or external (see SM 1100.1 and SM 1100.3).

B. *Peer Review.* Also referred to as refereeing, technical peer review, or scientific peer review, peer review is scrutiny of work or ideas by one or more others (peers) who are sufficiently well qualified, who are without conflict of interest, and who are not associated with the work being performed. A peer is defined as one who is of equal standing with another; in science, the implication is that education and/or experience qualify one to comment on the work of others in a particular field of expertise. These

persons may be internal or external to the organizational entity in which the review is conducted.

**5. Policy.** Peer review is required for all information products, whether published and disseminated by the USGS or by an outside entity, and regardless of media (print, digital, audiovisual, or Web), if the work was funded, whole or in part, by the USGS or if USGS affiliation is identified with the authorship. In keeping with practices in the broader scientific community, directives from Government authorities, and USGS Fundamental Science Practices, the following is policy:

A. Peer reviews must include at least two qualified scientists who have no stake in the outcome of the review, who are not associated with the work being performed, and who are without conflict of interest.

B. Only peer-reviewed information products may be forwarded to an Approving Official for Bureau Approval for official release (see SM 502.4 and SM 205.18). Information products sent to an Approving Official must include a reconciliation document indicating how review comments were addressed.

C. Articles for publication in a scientific journal must have first gone through the USGS peer review process, as outlined in this policy, and receive Bureau Approval for release prior to being submitted to the journal.

D. Involvement of non-USGS authors does not allow USGS authors to bypass the USGS review and approval process. Conversely, USGS scientists who are authors in publications by outside entities, or where a non-USGS author is the lead, must comply with USGS review and approval processes first or the USGS scientist may not be listed as an author.

E. Office of Management and Budget (OMB) requirements for peer review must be met (Final Information Quality Bulletin for Peer Review).

**6. Responsibilities.** Adherence to and accountability for this policy are the responsibility of employees at various organizational levels. The USGS recognizes the primary responsibility of scientists and their supervisors in developing information products that adhere to this policy. Specific responsibilities are as follows:

A. *Associate Directors.* Associate Directors set policy for USGS peer review practices. They collaborate with Regional Directors regarding the content and application of consistent USGS peer review practices.

B. *Regional Directors.* Regional Directors execute the policies and practices governing peer review and are accountable for compliance by those in their lines of authority. They collaborate with Associate Directors regarding the content and application of consistent USGS peer review practices.

C. *Science Center Managers.* Science Center (Cost Center) Managers or their equivalent ensure that an accepted and consistent peer review process is in place within their unit. They appoint qualified peer reviewers for the work conducted by scientists they supervise. They ensure that only properly peer reviewed products are forwarded to delegated Approving Officials for approval and release (see SM 502.4 and SM 205.18). Managers ensure that archival records related to peer review are maintained in their center.

D. *Approving Officials.* Approving Officials, as delegated (see SM 205.18), ensure that USGS standards for scientific quality are met by confirming that peer review requirements are met in accordance with this policy and its guidelines and by conducting a policy review (see SM 502.4) of information products before approving them for release. They also ensure that authors have adequately addressed review

comments (that is, a reconciliation document is part of the approval package).

**E. *Authors.*** Authors support the peer review process by suggesting or nominating qualified peer reviewers to science center managers for their own work and the work of other USGS scientists and by participating in peer review of the work of others (see "Guidelines" below).

**F. *Geospatial Information Office.*** The Geospatial Information Office maintains the policy documents and procedures that pertain to USGS Fundamental Science Practices.

**7. Guidelines for Peer Review.** The following information provides additional guidance to ensure that peer review requirements are met:

**A. *Reviewer Selection.*** Qualified reviewers must be true peers, must not be associated with the work being performed, and should be selected for their relevant scientific and technical expertise, including those who may apply different methods of study to related scientific questions. Peer reviewers should be sought outside a scientist's own discipline where appropriate. Reviewers should be able to ensure that the science is effectively presented with the intended audience in mind and be cognizant of controversial or high-visibility issues that may be relevant to public policy. Guidance on peer review selection for "highly influential scientific assessments," as defined by the Office of Management and Budget, is found in OMB, Final Information Quality Bulletin for Peer Review.

**B. *Number of Reviewers.*** Two peer reviews by qualified scientists are mandatory for all information products. One reviewer must be from outside the originating office; the other may be from the originating office of the information product. Additional peer review may be necessary, depending on the scientific complexity of the product and the intended audience.

**C. *Reviewer Ethics and Conduct.*** USGS pursues vigorous and open peer review of its science and its information products. Issues related to scientific excellence, objectivity, integrity, and conflict of interest are dealt with in accord with established DOI and USGS codes of scientific conduct.

**D. *Non disclosure prior to publication.*** In agreeing to be a peer reviewer for a USGS information product, reviewers must agree to be bound by the strictest scientific ethics in ensuring confidentiality of the science that is being reviewed and to not disclose or divulge any results or conclusions, or to make any public statements regarding the science before it is published and released.

**E. *Documentation and Records.*** Review and approval records for published USGS information products and for information products and articles published by outside sources include information such as author, title, purpose, publishing media, and signatures for peer review, editorial review, delegated Bureau Approval, and other appropriate USGS and outside source review and approval concurrences. Included as well is the consent or permission of the copyright owner for using copyrighted materials in USGS information products and articles (see SM 1100.6). These records are part of the official record and are archived in accordance with USGS Records Disposition Schedule requirements (see SM 432-1.S1, Chapter 1300) at the originating office.

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*U.S. Department of the Interior, U.S. Geological Survey, Reston, VA, USA*

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**FROM:** Mike Stevens

**ORIGINATOR'S DIRECT EXTENSION:** x238

**PAGES INCLUDING COVER:** 12

**SUBJECT:** Peer review materials from USGS website

**MESSAGE:** In case the e-mail didn't go through. As you can see, there are links to even more material. I leave it to you to decide how best to distribute this; perhaps just providing the link would be enough. Let's hope that this process was followed with the protocols.

**TRANSMISSION NOTICE:** This facsimile transmission is intended only for the addressee shown above. It may contain information that is privileged or otherwise protected from disclosure. Any review, dissemination, or use of this transmission or its content by persons other than the addressee is strictly prohibited. If you have received this transmission in error, please notify the sender by telephone and mail back the original to the address shown at the top of the page.



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## **Guidelines for Ensuring the Quality of Information Disseminated to the Public**

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#### **I. Introduction**



In Section 515(a) of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Public Law 106-554; HR 5658), Congress directed the Office of Management and Budget (OMB) to issue government-wide guidelines that "provide policy and procedural guidance to Federal agencies for ensuring and maximizing the quality, objectivity, utility, and integrity of information (including statistical information) disseminated by Federal agencies." OMB's guidelines were published in the Federal Register on February 22, 2002 (67 FR 8452), directing agencies subject to the Paperwork Reduction Act (44 USC 3502) to:

"Issue guidelines ensuring and maximizing the quality, objectivity, utility, and integrity of information (including statistical information) disseminated by their agency, no later than October 1, 2002.

"Establish administrative mechanisms allowing affected persons to seek and obtain correction of information that does not comply with OMB guidelines.

"Report to the Director of OMB the number and nature of complaints received by the agency regarding the accuracy of information and how such complaints were handled by the agency."

This document constitutes the USGS response to the directive from OMB. The USGS guidelines and complaint process will apply to all information disseminated on or after October 1, 2002. Information disseminated prior to October 1, 2002, but not archived and still being used in a decision-making process is not exempt from these guidelines. Information records disseminated from studies completed and archived before October 1, 2002 are exempt from the Guidelines.

All OMB and the final Department of the Interior (DOI) guidelines and standards are incorporated by reference into these USGS guidelines. The information quality definitions published by OMB and DOI guidelines also are adopted as USGS's definitions for information quality.

## **II. USGS Vision and Mission**

### **1. Vision**

The USGS is a world leader in the natural sciences through its scientific excellence and responsiveness to society's needs.

### **2. Mission**

The mission of the USGS is to serve the Nation by providing reliable scientific information to: 1) describe and understand the Earth; 2) minimize loss of life and property from natural disasters; 3) manage water, biological, energy, and mineral resources; and 4) enhance and protect the quality of life.

### **III. USGS Information Quality Guidelines**

#### **1. Overview of USGS Information Quality Guidelines**

The USGS provides unbiased, objective scientific information upon which other entities may base judgments. Since the bureau's inception in 1879, the USGS has maintained comprehensive internal and external procedures for ensuring the quality, objectivity, utility, and integrity of data, analyses, and scientific conclusions. These Information Quality Guidelines cover all information produced by the USGS in any medium, including data sets, web pages, maps, audiovisual presentations, USGS-published reports, or reports by USGS authors published by others. These USGS guidelines also provide an administrative procedure for persons to seek correction of information maintained and disseminated by the USGS that they believe does not comply with these guidelines. Factors, such as imminent threats to public health or homeland security, statutory or court-ordered, or circumstances beyond our control, may limit or preclude applicability of these guidelines.

#### **2. USGS Review Process**

USGS information is published in many media, and because of the scientific nature of the information, it passes through many quality assurance reviews, including peer review, to ensure the utility, objectivity, and integrity of the information. These quality review standards are published by the USGS at: <http://www.usgs.gov/usgs-manual/500/502-4.html>.

#### **3. USGS Influential Information**

"Influential information" means that the USGS can reasonably determine that dissemination of the information could have a clear and substantial impact on important public policy or management decisions of others. USGS recognizes that the information it disseminates includes scientific data or information that can influence policy decisions. All USGS data meet a very high standard of quality.

USGS scientific information is subject to a high degree of transparency about data and methods to facilitate the reproducibility of such information by other qualified scientists. This information has a high degree of transparency regarding (1) the source of the data used, (2) the various assumptions employed, (3) the methods applied, and (4) the statistical procedures employed. The degree of rigor with which each of these factors is presented and discussed is scaled as appropriate. If access to data and methods cannot occur due to compelling interests such as privacy, trade secrets, intellectual property and other confidentiality protections, USGS will, to the extent practicable, verify information and document that verification steps were taken.

#### **4. Paperwork Reduction Act**

All USGS offices will make use of OMB's Paperwork Reduction Act (PRA) clearance process to help improve the quality of information that the bureau collects and disseminates to the public. All proposed collections of information that are disseminated to the public should demonstrate in their PRA clearances submissions to OMB that the proposed collection of information will result in information that will be collected, maintained and used in a way consistent with the DOI and OMB Quality Information Guidelines.

#### 5. USGS Third-Party Data

The USGS is taking and will continue to take steps to ensure that the quality and transparency of data, metadata, and information provided by external sources are sufficient for the intended use. Reference to and use of third party information is complex and requires extensive collaboration with the scientific and technical community and other external data providers. Third party data may carry inherent accuracy weaknesses in that the data content often cannot be checked or nor their accuracy controlled. Instances where the information relied on is not verifiable, the source must be made transparent to the public, and such information will not be subject to the guidelines.

Metadata (information that characterizes and describes data) are one tool used by the USGS to maximize information quality, utility, objectivity, and transparency of third-party data by playing a key role in describing the specific quality procedures that were followed, as well as documenting methods and techniques used in studies. USGS conforms to key national standards for metadata (OMB Circular A-16, currently under revision. Executive Order 12906 will be incorporated into the revised OMB Circular A-16).

### IV. Information Correction

#### 1. Administrative Process

Information quality inquiries should be made by contacting the Geospatial Information Office, U.S. Geological Survey, National Center, Reston VA 20192, email: [InfoQual@usgs.gov](mailto:InfoQual@usgs.gov). The GIO maintains records on each inquiry and sends a fiscal year report to DOI by November 30, of each year describing the number, nature, and resolution of inquiries. The GIO shall provide the inquiry to the appropriate USGS Discipline. The USGS discipline receiving an inquiry through the GIO, copies all inquiry responses to the GIO office.

#### 2. Requirements

A request for information correction must include the following:

- A written statement that the person is seeking correction of information disseminated by the USGS and the specific reasons for believing the information is in error for failure to meet OMB or DOI standards, along with

supporting documentation, if any.

- Name, mailing address, telephone number, email address (if applicable), and organizational affiliation, if any, of the individual making the complaint. Organizations submitting a complaint should identify one individual to serve as the primary contact.
- A detailed description of the specific material in question, including where the material is located (that is, publication title, date, and publication number, if any, or the website and web page address).
- The complainant should use the subject line, "Complaint About Information Quality," so that it may be clearly recognizable to those managing the process.
- A detailed description of the specific material in question, including where the material is located (that is, publication title, date, and publication number, if any, or the website and web page address).
- A description of how the person submitting the complaint is affected by the information error.
- The specific recommendations for corrective action.

### 3. Evaluation

Within 10 business days, the USGS will notify the complainant of inquiry receipt. Within 60 calendar days of receipt, the appropriate discipline will evaluate the information in question. If the USGS determines that the correction request is without merit, the complainant will be notified. If the USGS determines that the request has merit, the USGS will take reasonable steps to respond to the complainant's request and will notify the complainant of this intent and the corrective steps proposed. The USGS will determine the schedule and procedure for correcting any challenged information that it has deemed as having an error.

A second complaint received before the issuance of a 60 calendar day evaluation notice for an overlapping complaint under review will be treated with simultaneous consideration, and the second complainant will be notified within 10 business days that an analysis is in progress and advised of its status. The first and any subsequent complaints will be combined and a combined 60 calendar day finding will be issued.

If a second identical complaint on the same subject is received any time after a 60 calendar day notice has been issued, then the second complaint will require a new and separate review. Unless substantial new information has been submitted, the 60 calendar day finding for the earlier request shall suffice.

### 4. Appeal Procedure

If complainants are dissatisfied with a decision regarding their inquiry, they may appeal the decision to the Director, U.S. Geological Survey, through the Geospatial Information Office.

Appeals must contain the following:

- An indication that the person is seeking an appeal of a USGS decision on a previously submitted request for a correction of information, including the date of the original submission and date of USGS decision.
- Name, mailing address, telephone number, email address (if applicable), and organizational affiliation, if any, of the individual making the complaint appeal. Organizations submitting an appeal should identify one individual as the primary contact.
- An explanation of why the appealing person or organization disagrees with the USGS decision, and if possible, a recommendation of corrective action.
- A copy of the original request for correction of information and the original response.

## **V. Legal Effect**

These guidelines are intended only to improve the internal management of the U.S. Geological Survey relating to information quality. Nothing in these guidelines is intended to create any right or benefit, substantive or procedural, enforceable by law or equity by a party against the United States, its agencies, its offices, or any other person. These guidelines do not provide any right to judicial review.

## **VI. Information Correction Form**

### **VII. Inquiries and Responses**

**FY 2004** - No inquiries received.

**FY 2005** - No inquiries received.

**FY 2006** - No inquiries received.

**FY 2007** - USGS Activities in Texas

See Open-File Report 2004-1208 and inquiry, response, and press release

**VIII. Predicted Highly Influential Scientific Assessments.** As part of the Information Quality Program, in December, 2005, the Office of Management and budget (OMB) issued a Final Information Quality Bulletin. In the bulletin, "highly influential scientific assessments" are called out for identification and peer review information transparency. These assessments may be viewed at [http://www.usgs.gov/peer\\_review](http://www.usgs.gov/peer_review).

U.S. Department of the Interior | U.S. Geological Survey  
URL: [http://www.usgs.gov/info\\_qual/index.html](http://www.usgs.gov/info_qual/index.html)

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USGS Guidelines: Ensuring Quality of Information Disseminated

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