Department of Commerce • National Oceanic & Atmospheric Administration • National Weather Service

# NATIONAL WEATHER SERVICE INSTRUCTION 100-101 FEBRUARY 7, 2018

Office of Science and Technology Integration

Clearances for NWS-Authored Papers, NWSPD 100-1 REVIEW AND APPROVAL OF NWS PAPERS INTENDED FOR THE PEER-REVIEWED LITERATURE AND OTHER FUNDAMENTAL RESEARCH COMMUNICATIONS

**NOTICE:** This publication is available at: http://www.nws.noaa.gov/directives/.

**OPR:** W/OSTI (P. Davidson) Certified by: W/OSTI (Ming Ji)

**Type of Issuance:** Routine

**SUMMARY OF REVISIONS**: This directive supersedes NWSI 100-101, "*Peer Review and Tracking/Reporting of NWS Papers Intended for the Peer-Reviewed Literature*" dated August 8, 2016 to conform to the update on NOAA's policies on Review of and Approval of Fundamental Research Communications, published November 8, 2016 as Handbook to NAO 202-735D, which expands coverage to include all Fundamental Research Communications:

- Papers intended for the peer-reviewed literature: There are no changes to procedures for NWS-authored papers intended for the peer-reviewed literature. These procedures are also applicable to internal peer-reviewed literature, including Technical memos, and have been so indicated.
- Conference presentations and slide presentations: Procedures for general review of oral and conference presentations are included.
- Also, new guidance is added to specify the approved format for citing institutional affililations.

-Signed- 1/24/2018

Ming Ji Date

Director, Office of Science and

Technology Integration

#### 1 Introduction

This instruction documents procedures for implementing the directive <u>NWSPD 100-1</u> to conform to recently issued NOAA policies and procedures:

- NAO 216-115A: Research and Development in NOAA, with handbook
- <u>NAO 202-735D</u>: Scientific Integrity with <u>new handbook</u>, the NOAA Framework for Internal Review and Approval of Fundamental Research Communications, 11/8/2016; "NOAA Framework")
- Department of Commerce Administrative Order (219-1), Public Communications

Free and open scientific communication is a fundamental element of the NOAA Scientific Integrity Policy (NAO 202-735D: Scientific Integrity). At the same time, clearly communicating our science is an important responsibility of NOAA and its scientists. To achieve both open scientific communication and the high quality of that communication, NOAA issued the "NOAA Framework" to the Line and Staff Offices (L/SOs) for developing procedures appropriate to their L/SO for internal review and approval of fundamental research communications but consistent with the "NOAA Framework." A fundamental research communications, as defined, in the Framework, per the DAO, Section 6.03 is "any communications, regardless of avenue of dissemination or method of presentation that is intended for, or should reasonably be expected to have, broad distribution outside the U.S. Government,...relates to the Department's programs, policies, or operations and takes place or is prepared officially ... and deals with the products of basic or applied research in science or engineering, the results of which ordinarily are published and shared broadly within the scientific community, so long as the communication does not contain information that is proprietary, classified, or restricted by federal statute. If a communication also includes matters of policy, budget, or management, then it is not a Fundamental Research Communication."

Consistent with the "NOAA Framework", NWS's Directive NWSPD 100-1 and Instruction NWSI 100-101 aims to ensure that NWS manuscripts intended for the peer-reviewed literature meet these basic standards of clarity and scientific integrity. NWS procedures are not intended, however, to inhibit publication by NWS scientists, nor to prohibit NWS scientists from freely expressing their opinions, scientific or otherwise. Decisions to approve or not approve a work for submission to peer-reviewed publications will be based solely on the scientific merit of the work. This Directive and Instruction are to ensure the rights of NWS authors will be protected both through specific procedures and in accordance with the NOAA Administrative Order (NAO) on Scientific Integrity and NOAA Framework.

For FRCs that are not intended for the peer-reviewed literature, including slide presentations or other conference presentations, general content review and approval by employees' federal supervisor must be obtained. NWS employees who conduct scientific research and development as part of their assigned duties, and are expected to communicate this work without further technical review in meetings and conferences, have general approval to present their ongoing scientific work and results in these venues. NWS affiliates (contractors, visitors, grantees) must also follow the terms and policies in their contract and agreements regarding such FRCs.

#### 2 Peer Review Process

NWS authors, as defined in section 4 below, are required to receive approval from their supervisors to author, or co-author a scientific paper to be submitted for publication. The NOAA Framework document (see section 1, above) requires papers submitted by NOAA authors to peer-reviewed literature to undergo an internal peer review process. The internal review is designed to improve the quality of the work prior to submission to the peer-reviewed scientific literature and ensures that NOAA manuscripts intended for external peer-reviewed literature

meet basic standards of clarity and scientific integrity (see NAO 202-735D: Scientific Integrity). Internal review will, per the NOAA Framework, "highlight any inconsistencies or weaknesses in data, methodology, findings or structure of the manuscript". Internal review will also ensure that any disclaimers are included in the publication, as appropriate (see 2.3, below).

# 2.1 Author's Responsibilities

The lead NOAA author will submit the paper to the Office Director/Regional Director, or their designee (often the first-line supervisor) for review prior to submission for publication in the peer-reviewed literature. If there are authors from multiple NOAA Line Office/Staff Offices (LO/SO), the review conducted by one author's LO/SO (normally the lead author's) is sufficient, so long as all designated LO/SO approving officials are notified. NOAA co-authors will keep their respective supervisors and approving officials updated on the status.

In the case of a non-NOAA lead author, the manuscript may be submitted by the lead author for external peer review simultaneously with the NOAA internal peer review. In this case, NOAA/NWS review comments should be addressed by the NOAA author, and considered along with other external peer reviews in submitting the revised paper manuscript to the peer-reviewed publication's editor.

To facilitate speedy review, authors should notify the approving official in advance of submitting for internal peer review so that approving officials can prepare by reserving the necessary time and/or reviewer(s). Authors may recommend subject matter expert reviewers. Authors are required to include a disclaimer in appropriate situations, and as directed by the internal peer review (see section 2.3 below). The author is also required to respond to the internal peer review comments, incorporating changes to the manuscript as needed to address them appropriately or using the process defined in section 2.4 to address disagreements.

When the paper is accepted for publication, NWS authors will report the required documentation through their Office Director/Regional Director, as described in section 3 below.

# 2.2 Approving Official's Responsibilities

The approving official will direct the internal peer review, which should be completed within 30 days or less whenever possible. Exceptions (e.g., complex or lengthy documents) requiring more than 30 days require and explanation to the author in writing within 10 days of the manuscript entering the review cycle, such explanation to include an estimate of the time needed to complete the review. The approving official will approve or disapprove manuscripts for release based on the recommendations of the reviewer(s). The approving official will notify the author at the end of the 30 day period, or the agreed upon period, concerning the status of the review. If the reviews have not yet been provided to the author, the approving official informs the author that (s)he may submit the paper, provided that the disclaimer is added and that they respond to any internal review comments sent before the publication's peer reviews are received.

The approving official may review the manuscript personally, or select other experts to do so; ensuring reviewers are knowledgeable in the science area(s) being addressed in the work. Reviewers may include both federal and non-federal employees. However, only federal employee reviewers may make recommendation regarding policy or budget matters, so that a disclaimer may be added if necessary.

The approving official is responsible for ensuring that the author(s) have appropriately responded to internal peer review comments. The approving official will not alter a manuscript without the consent of the author(s).

The approving official will track all manuscripts submitted to him/her for review and approval, and when a manuscript is accepted for publication, ensure that the author provides information as described in section 3 for the Office Director/Regional Director's weekly report.

### 2.3 Disclaimers

A review should also note any instances requiring the use of a disclaimer, either for cases where

- Scientific conclusions presented in a manuscript could reasonably be construed as representing the view of NWS, NOAA, or the Department when they do not; or
- Viewpoints are included, for example about policy or management matters that extend beyond the scientific findings, to incorporate the author's expert or personal opinions.

In these cases, authors should use the following disclaimer in their manuscripts:

The scientific results and conclusions, as well as any view or opinions expressed herein, are those of the author(s) and do not necessarily reflect the views of NWS, NOAA, or the Department of Commerce.

#### 2.4 Redress

The internal peer review process is designed to ensure scientific clarity and rigor in employee publications but cannot be used as a tool to prohibit an author from publishing.

### 2.4.1 Disagreement During Review/Approval

In the course of receiving scientific comments and/or criticism during internal peer review, the author is required to satisfy the approving official that due consideration, and appropriate incorporation of changes to the manuscript, has been made of the scientific review comments. In cases of scientific disagreement, the approving official considers deferring to external peer review wherever possible, in order to promote additional science dialogue that improves rigor and clarity, and to encourage free and open publication in the peer-reviewed literature by NWS employees/contractors.

In cases where there is disagreement during the internal review/approval process, the author will report the matter in writing to the approving official's immediate supervisor. This identified supervisor will review the complaint, and determine whether he/she can resolve the matter to the satisfaction of both parties, or if not, will appoint a knowledgeable expert to preside over the adjudication process. The adjudicating expert either directly resolves, or initiates adjudication with expert reviewer(s) acceptable to both parties within 5 business days. Adjudication should be completed as expeditiously as possible, but normally within 10 business days of initiation. Exceptions to this schedule should be explained to all parties in writing.

The adjudication expert provides a written review of the issue, and finding, to the identified supervisor, who will make a final ruling on the issue and communicate it to the parties. If the identified supervisor does not receive the adjudication expert's review and finding by the specified date, the supervisor informs the author that (s)he may submit the paper, provided that the disclaimer is added.

### 2.4.2 Scientific Integrity

In cases where there is a suspected violation of the NOAA Scientific Integrity Policy, the author will follow guidelines established in the accompanying Procedural Handbook.

# 3 Central Tracking and Reporting of NWS-Authored Papers

NWS authors, or co-authors, are required to report their peer-reviewed papers to their approving officials and to their Office/Regional Director's point of contact as soon as possible after they have been accepted for publication. The Offices and Regions will report on new peer-reviewed publications as part of their weekly status report and enter them into the centrally managed electronic list, and include the following information:

1. All authors and affiliations;, using the format as specified in the NOAA Framework:

For FTE (NOAA) employees:

[Division] (e.g., Meteorological Development Laboratory]

[Center, Office or Laboratory] (e.g., Office of Science and Technology]

National Weather Service

National Oceanic and Atmospheric Administration [street address, city, ZIP] USA

Contractors should not use NOAA as primary affiliation. An example:

[Author(s)]

[Contracting Firm]

Under contract to [Center, Office or Laboratory] [Line/Staff Office]

National Oceanic and Atmospheric Administration [street address, city, ZIP] USA

Cooperative Institute and other grantees should not use NOAA as primary affiliation. An example:

[Author(s)]

[University or home institution]

[Cooperative Institute or other granting organization] (e.g.,

Collaborative Science, Technology, and Applied Research)]

Award number

Visiting scientists should not use NOAA as primary affiliation. An example:

[Author(s)]

[Home institution]

Visiting Scientist at [Center, Office or Laboratory] [Line/Staff Office]

National Oceanic and Atmospheric Administration

[Street address, city, ZIP] USA

- 2. Manuscript title
- 3. Journal title, date to appear, and pages
- 4. Manuscript digital object identifier (DOI) citation (which is hyper-linked to the journal abstract) OR if the journal does not include DOI citation numbers, the abstract
- 5. Approving official, with their NWS or NOAA organizational affiliation, who approved internal peer review; and date that internal peer review was completed

NWS authors will also send a copy of their accepted manuscripts, as a pdf, to the NOAA repository, at noaa.repository@noaa.gov

NWS Office of the Assistant Administrator (OAA) will keep a central list of the above information, and update these data weekly from all the Offices/Regions' weekly status updates. NWS OAA will use this central list for reporting on NWS peer-reviewed publications, for example at the NOAA level. NWS OAA will refer questions on the work reported to the lead NOAA author, along with all NWS authors.

# 4 Scope

- These procedures apply only to NWS-authored FRCs, including papers intended for publication in the peer-reviewed scientific literature
- These procedures apply to all NWS units and all NWS (Federal employee) authors and co-authors, as well as NWS contractors who use the NWS affiliation in their publications intended for the scientific peer-reviewed literature, and to whom NAO 202-735D applies, regardless of order of authorship.

# 5 Authorities and Responsibilities

- NOAA Framework for Internal Review and Approval of Fundamental Research Communications, and authorities cited therein:
  - NAO 202-735D: Scientific Integrity, and accompanying guidance on peerreviewed publications
  - o DAO 219-1: Public Communications, sections 7.01 and 7.03