

## Appendix 2. Information in the Fourth National Climate Assessment

The Fourth National Climate Assessment (NCA4) synthesizes information about the impacts of climate change in the United States. As a *highly influential scientific assessment* (HISA), information cited within NCA4 must meet the standards of the Information Quality Act (IQA).

### Identification of Literature Sources

This report assessed information from several sources, including 1) technical input reports and scientific resources collected for the Third National Climate Assessment;<sup>1</sup> 2) the *Climate Science Special Report*<sup>2</sup> and other U.S. Global Change Research Program (USGCRP) science assessments; 3) a literature database comprising over 1,000 original reports meeting IQA requirements, compiled by USGCRP staff and shared with authors; 4) a public request for information released by the U.S. Department of Commerce in 2016;<sup>3</sup> 5) expert awareness of the literature from authors; 6) information provided during Regional Engagement Workshops and other engagement events;<sup>4</sup> and 7) chapter-specific submissions of technical resources and relevant literature to author teams.

The vast majority of sources used in this report are from peer-reviewed scientific literature. A library of relevant and significant peer-reviewed scientific literature was developed through a survey of scientific journals and through submissions collected via a Federal Register Notice (FRN). The FRN, published by the U.S. Department of Commerce on behalf of USGCRP on August 31, 2016, called for the public to submit “recent, relevant scientific and/or technical research studies including observed, modeled

and/or projected climate science information that have been peer-reviewed and published or accepted for publication in scientific journals and/or government reports.”<sup>3</sup> In addition, the FRN called for submission of information outside the scientific peer-reviewed literature, such as reports produced by nonprofit communities, but it noted that all information used in the report would need to comply with the IQA.

In addition, USGCRP hosted Regional Engagement Workshops in each of the 10 NCA4 regions, and several author teams hosted chapter-specific webinars or events (see App. 1: Process for additional details).<sup>4</sup> Each of these events enabled the public to provide author teams with additional resources and information. As follow-up to these events, the public had access to chapter-specific email addresses to submit further resources to chapter author teams.<sup>4</sup>

### Compliance with the Information Quality Act

During the chapter development process, author teams assessed the available literature (see individual chapter Traceable Accounts for additional details). Guidance on information quality was provided to the author teams to assist in this process, directing the author teams to rely primarily on peer-reviewed scientific literature.

In limited situations where information was available only outside peer-reviewed scientific literature or U.S. Government reports, author teams were provided with a decision tree to aid them in evaluating potential sources by addressing the following considerations:

- **Utility:** Is the particular source important to the topic of your chapter?
- **Transparency and traceability:** Is the source material identifiable and publicly available?
- **Objectivity:** Why and how was the source material created? Is it accurate and unbiased?
- **Information integrity and security:** Will the source material remain reasonably protected and intact over time?

As the administrative agency responsible for producing this report, the National Oceanic and Atmospheric Administration ensured that all referenced information adhered to its Information Quality Guidelines.<sup>5</sup>

## Acknowledgments

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### Recommended Citation for Chapter

**Lewis**, K.L.M., D.R. Reidmiller, and C.W. Avery, 2018: Information in the Fourth National Climate Assessment. In Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II [Reidmiller, D.R., C.W. Avery, D.R. Easterling, K.E. Kunkel, K.L.M. Lewis, T.K. Maycock, and B.C. Stewart (eds.)]. U.S. Global Change Research Program, Washington, DC, USA, pp. 1410–1412. doi: [10.7930/NCA4.2018.AP2](https://doi.org/10.7930/NCA4.2018.AP2)

On the Web: <https://nca2018.globalchange.gov/chapter/appendix-2>

## References

1. USGCRP, 2014: Technical Inputs of the Third National Climate Assessment. <http://www.globalchange.gov/engage/process-products/NCA3/technical-inputs>
2. USGCRP, 2017: Climate Science Special Report: Fourth National Climate Assessment, Volume I. Wuebbles, D.J., D.W. Fahey, K.A. Hibbard, D.J. Dokken, B.C. Stewart, and T.K. Maycock, Eds. U.S. Global Change Research Program, Washington, DC, USA, 470 pp. <http://dx.doi.org/10.7930/J0J964J6>
3. Federal Register Notice, 2016: United States Global Change Research Program (USGCRP). 81 FR 59983. National Oceanic and Atmospheric Administration, 3 pp. <https://www.federalregister.gov/documents/2016/08/31/2016-20982/united-states-global-change-research-program-usgcrp>
4. USGCRP, 2017: Reports from the NCA4 Regional Engagement Workshops. <http://www.globalchange.gov/content/nca4-engagement-activities>
5. NOAA, 2014: National Oceanic and Atmospheric Administration Information Quality Guidelines, last modified October 30, 2017, accessed October 24, 2017. [http://www.cio.noaa.gov/services\\_programs/IQ\\_Guidelines\\_103014.html](http://www.cio.noaa.gov/services_programs/IQ_Guidelines_103014.html)