



January 19, 2024

BY ELECTRONIC SUBMISSION

Dr. Martin Halbert, Program Director  
Office of Integrative Programs, National Science Foundation  
2415 Eisenhower Ave.  
Alexandria, VA 22314

**Response to the National Science Foundation – Request for Information (RFI) on NSF Public Access Plan 2.0: Ensuring Open, Immediate, and Equitable Access to National Science Foundation Funded Research- FR Doc. 2023-26940**

Dear Dr. Halbert,

The Ecological Society of America (ESA) welcomes this opportunity to express our significant concerns about the proposed NSF Public Access Plan 2.0 (NSF-PAP2). We support the objectives set forth in the memo released by the White House Office of Science and Technology Policy of Ensuring Free, Immediate and Equitable Access to Federally Funded Research, and we hope to work with NSF to ensure ecologists have the tools and funding necessary to communicate their research for the advancement of science.

Founded in 1915, ESA is the world's largest community of professional ecologists and a trusted source of ecological knowledge. The 8,000 member Society publishes six peer-reviewed [journals](#) and a membership bulletin. ESA launched our first fully Open Access journal *Ecosphere* in 2010. ESA began offering green open access for our other journals in 2016 and adopted a portfolio-wide open research policy in 2021. This year, we have launched another gold OA journal, *Earth Stewardship*.

ESA journal revenue not only supports the peer review process, but also many other vital education, outreach and membership programs to advance the science of ecology. These programs foster and train members of the ecological community, including editors and reviewers who do the crucial work of peer review for our scholarly publications.

ESAs peer-reviewed journals meet the highest standards for publishing credible research that is widely disseminated among scientists, policy makers and the public. NSF-funded research accounts for the largest source of research funding for nonmedical biological and ecological

research in the U.S. It would be difficult, if not impossible, to fully support immediate public access/Open Access (OA) without levying prohibitive Author Page Charges (APCs) that would prevent ensuring open, immediate and equitable access to NSF-Funded Research. **ESA requests that NSF create dedicated funding streams for APC charges that are separate from research awards, which often end before manuscripts are accepted for publication.**

The process of scholarly peer review bears significant costs. In a fully OA future, those costs will be carried by authors, non-profit institutions or waiver programs for authors lacking resources to cover APCs. This future scenario threatens decades of progress the STEM community has made in improving diversity, equity and inclusion (DEI) in the STEM workforce.

Results from an NSF-funded community survey conducted by ESA (NSF Award # 2209643) identify key issues that underpin DEI concerns:

- Publications are often written or accepted for publication after a grant and its funding ends.
- The survey indicates the average number of papers written in a three-year period is 10.5 (skewed by a small number of authors publishing over 20 articles). At current OA APCs, this translates to approximately \$30K per year. Without separate funding sources for APCs, NSF would need to increase grant funds to accommodate publication costs. While our survey did not address data repositories, many have associated costs as well.
- Multiple survey respondents noted that they already are having to be selective about which of their students can publish their research, with several noting that they can no longer afford to publish undergraduate research.
- Our survey shows that women and people of color in the U.S. publish in OA journals less frequently partly due to lack of financial resources. Public access policies without dedicated funds available for APCs will harm equity.
- Almost half of all content in ESA hybrid journals is from research conducted under a U.S. agency affected by new publishing policies. The portion of U.S.-funded research is large enough that open access mandates would discourage subscriptions, affecting the overall business model of ESAs hybrid journals. Flipping journals will have effects around the world, especially with colleagues and collaborators from countries such as Brazil and Argentina (not in the Research 4 Life program).

Furthermore, without adequate NSF dedicated funding for APCs, the new policy would directly result in a reduction in either the quantity or quality (or more likely, both) of peer-reviewed journal articles produced by hundreds of organizations like ours. As our survey results revealed, a new Public Access mandate may harm marginalized and underrepresented scientists, in particular due to challenges that they encounter in trying to cover publishing fees. This change would also harm both the research enterprise and the practitioners, independent consultants, nonprofit/NGO staff, government regulators/administrators, public policymakers, students and post-docs responsible for the scholarly journals produced by ESA.

In addition to the proposed NSF Public Access Plan 2.0 effects on DEI, ESA is also concerned about the effects of creating entirely new systems and infrastructure for open data polices. ESA and our publication partners, like many scientific societies, have worked to strengthen scholarly communication and promote open science and OA while maintaining the viability of our publications. ESAs Open Research Policy supports our open data goals that allows readers and peer reviewers to easily access replicable data and/or code associated with its publications. Authors are required to provide code and data upon acceptance of their papers. Researchers are encouraged to use disciplinary databases such as Dryad and the Long-Term Ecological Research (LTER) database. Our experience with authors is that some struggle to comply with the ESA data policy. ESA encourages NSF to provide support for training researchers to adhere to existing publisher open data policies rather than create duplicative infrastructure.

In summary, ESA urges NSF to create a dedicated funding mechanism to cover APCs in support of publishing advances in NSF-funded research and support existing data sharing repositories. ESA looks forward to working with NSF to identify solutions that advance the goals of open science and open access without undermining the communication of research findings and analyses through peer-reviewed journals.

Thank you again for the opportunity to submit these comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Shahid Naeem", with a stylized flourish at the end.

Shahid Naeem  
ESA President