Summary of listening sessions and written comments for USDA's 2023 Implementation Plan to Increase Public Access to USDA-Funded Research Results

Introduction

On August 25, 2022, the White House Office of Science and Technology Policy (OSTP) issued a memorandum titled "Ensuring Free, Immediate and Equitable Access to Federally Funded Research" prompting the USDA to enhance its policies, infrastructure, and outreach efforts. The goal is to make scientific data and publications easily accessible and available to the public. These plans and policies apply to research results that are funded either partially or entirely by any agency, within the USDA.

The USDA National Agricultural Library (NAL) held two listening sessions on September 27 and October 12 of 2023 to solicit comments, recommendations, and suggestions from public stakeholders on how they should respond to the new guidance from the OSTP related to the Implementation Plan to Increase Public Access to USDA-Funded Research Results (2023). There were 69 unique, non-USDA registrants for the public listening sessions. Additionally, USDA accepted written comments via Regulations.gov through November 15, 2023.

Comments were asked to address the following five questions:
1. How can USDA best implement its plans to improve public access to USDA-funded research results?
2. How can USDA update or refine its policies to improve public access to USDA-funded research results?
3. How can USDA ensure equity in publication opportunities?
4. How can USDA use partnerships to improve public access and accessibility to results of USDA-funded research?
5. How can USDA monitor impacts on communities impacted by its public access policies?

Twenty-four total comments were received with 19 in the form of written submissions (available at: (Regulations.gov) and five spoken comments during the two listening sessions (Available at YouTube.com: Sept 27; Oct 12). Of the five persons that gave spoken comment, four also submitted written comments though both forms of comments were considered for content individually. The written comments composed 68 pages in total. Each comment, including transcripts of listening session comments, was read by at least two persons associated with the National Agricultural Library.

Stakeholder Representation

The USDA sought input from stakeholders throughout the United States including members of the public, principal investigators, research institutions, libraries, scholarly publishers, scientific societies, agricultural organizations and associations, data scientists, data repositories, and other stakeholder groups. Of commenters, 60% were from the publishing industry including publishing associations (Table 1). Not specifically represented among commenters were principal investigators, data scientists, and data repositories.

Table 1. Organizations represented by commenters.

Commenter Category	Number
For-profit academic publishers	5
Non-profit society publishers	5
Publishing industry group	2
Anonymous	2
Private individuals	2
Non-profit other	1
Library association	1
University	1
Agricultural tech companies	1
Total	20

Comment Analysis

Almost all commenters expressed general support for public access though there were differing perspectives on how public access could be achieved. Disruptions to existing business models were a major concern for publishers who generally advocated for recommending or requiring that researchers pay article processing chargers (APCs) to journals to have the version of the article published by the journal, the Version of Record (VOR or VoR), made openly available. This practice is commonly referred to as Gold Open Access (OA). Current USDA policy requires either the final, peer-reviewed version of an article, also called the accepted manuscript (AM), or the VOR if published open access, be made publicly accessible via the USDA publication repository PubAg. The AM does not have the journal's proprietary typesetting and formatting and is not copyrighted by the journal so can be made publicly accessible via a repository. This practice commonly referred to as Green OA.

Publishers mentioned the value added by the publishing process. Publishers recruit and coordinate peer reviewers, detect fraud, make articles discoverable, update articles with corrections and addenda, etc. This value accrues more to Gold OA rather than Green OA according to publishers. Some commenters described inequity in the publishing process where well-funded researchers could publish Gold OA while less well-funded researchers could not. Commenters suggested USDA create specific funding mechanisms to cover APCs and to provide training to researchers about setting aside research funding to pay for these charges. Also mentioned were disconnects between grant periods and publishing which often occurs after a grant closeout. This potentially leads to grant funds not being able to be used for publishing costs. Several commenters urged USDA to allow authors flexibility in where to publish.

Commenters mentioned the importance of making it easier for researchers to comply with public access requirements. Commenters requested user-centered USDA submission portals, clear policy guidelines that are communicated consistently, and leveraging digital persistent identifiers, e.g., DOI, ORCID, ROR, etc., to automate compliance processes. Digital persistent identifiers were further identified as preexisting tools that could be used for monitoring the impacts of research. Commenters suggested improved communication and training for researchers, particularly on data management and sharing best practices. They noted that researchers are often not trained or incentivized to use best practice data principles such as FAIR (Findability, Accessibility, Interoperability, and Reuse). Training was also recommended on navigating publishing including what costs might be associated with publishing and what USDA funds could be used for such costs. Several commenters mentioned that the USDA should provide more information for USDA-supported researchers on USDA websites related to compliance.

Regarding accessibility, commenters suggested allocating staff resources to ensure articles and data are accessible and compliant with Section 508, including text descriptions that accompany visuals (i.e., charts, figures, tables, and etc.) found within scholarly outputs. Also suggested was that creating plain language summaries or plain language versions of scholarly publications would make USDA-funded scholarly publications more accessible to the public.

A few commenters addressed the broader impacts of public access. One comment, from a technology start-up, mentioned that making research and data available would help companies save time and money. Another commenter mentioned that public access to research results would benefit transparency and accountability of taxpayer funded projects. One comment mentioned the importance of data from USDA-funded school meal programs and had specific data requests related to this. This comment was forwarded to the USDA Food and Nutrition Service. Finally, commenters supported continued USDA engagement with external communities including to solicit feedback for evaluation of the effectiveness of existing public access policies.

The following six themes emerged from the 43 distinct comments:

Cooperation - Calls for the USDA to work more closely with other government agencies, libraries, organizations, professional and scholarly associations, and with the publishing industry.

Using existing best practices and infrastructures - Using digital persistent identifiers, using principles like FAIR, and relying on the publishing industry's infrastructures.

Training and communication - Clarity around funding for publications, how to use best FAIR data principles, and making public access-related information available on the USDA website.

Funding mechanisms - Allocating USDA funds for article processing charges and making sure funds are available for publication costs post-grant closeout.

Accessibility - Allocating resources to make sure USDA-funded scientific publications meet existing accessibility laws and using plain language summaries.

Monitoring and evaluation - Reviewing publication trends, citation rates of different publication methods and formats, cost monitoring, using feedback from expert panels, listening sessions, and roundtables.

Commenter Recommendations

The USDA asked the public five questions. Below are the five questions asked along with recommendations from the public related to each of those questions.

Question 1: How can USDA best implement its plans to improve public access to USDA-funded research results?
1. Provide integrated links, drop-down lists, and APIs to other websites to support the capture of relevant research and researcher metadata in grant workflows.
2. Develop flexible, clear frameworks in close coordination with other agencies to reduce confusion.

3. Provide incentives and develop training resources, particularly on data management and sharing.
4. Leverage existing infrastructures to avoid diverting resources from critical research activities.
5. Engage continually with the research community.
6. Minimize the administrative and financial burden on researchers and institutions for compliance.
7. Specify allowable and unallowable costs for data management and sharing activities.
8. Develop a mechanism to ensure that funds are available post-closeout for publication and research data storage and/or sharing expenses.
9. Collaborate with scholarly societies, researchers, and libraries to define a public-access deposit package that is inclusive of policy requirements.
10. Adopt the Implementing Effective Data Practices report recommendations from higher education associations.
11. Require Digital Object Identifiers (DOIs) for each publication and research output (data, code, software)
12. Use Open Researcher and Contributor identifiers (ORCiD IDs) to uniquely identify authors.
13. Use Research Organization Registry (ROR) IDs to link authors with known organizations, including Funder IDs
14. Share up to date and revised timeline online (NAL website) for Public Access.
15. Require that the Version of Record (VoR) be used in repositories.
16. Make sure data/publications are machine readable.
17. Create a fund for article processing charges (fund Gold OA).

Question 2: How can USDA update or refine its policies to improve public access to USDA-funded research results?
18. Keep research summaries in plain, easy-to-read language. Research summaries should translate scholarly research findings and implications for a wide audience.
19. Ensure PubAg and other websites that support USDA-funded research results (such as PubMed) and data are compliant with federal accessibility laws and standards.
20. Publish USDA data in a timely and standardized way that includes clarity around the level of aggregation of the data.
21. Provide more researcher training and database support for ensuring FAIR principles.
22. Create a "Publication Costs" table outlining different publication approaches.
23. Leverage Transformative Agreements (TAs) between institutions and publishers.
24. Create guides encouraging the use of alternative text for visual or print-impaired individuals.
25. Appoint staff resources to support USDA Accessibility requirements.

Question 3: How can USDA ensure equity in publication opportunities?
26. Work with research institutions, their libraries, and their professional and scholarly associations on coordinated education to investigators on their options for no-fee manuscript deposit.
27. Explore preprint services to accelerate the sharing of research findings and consider the potential of recognizing peer-reviewed preprints as substantially similar to AMs for compliance with the policy.
28. Ensure final publisher PDF versions are accessible. This is critical to enable equitable delivery of federally funded research results.
29. Provide rights-retention language (for investigators to use upon submission of manuscripts to journals) that encourages authors to retain their copyrights and assign a Creative Commons Attribution (CC BY) or similar license to their work to enable full reuse rights.
30. Adopt an evolving ethical framework.

Question 4: How can USDA use partnerships to improve public access and accessibility to results of USDA-funded research?

31. Develop an organized network or community of practice from across the research ecosystem to gain a better understanding of the impact of policies and share research results more widely.
32. Partner with organizations that are utilizing plain language summaries for accessibility.
33. Collaborate with publishers to develop more tailored research use-focused findings and output – to maximize the potential for research to reach its target audience/s.
34. Explore ways to support funded investigators and their institutions in maximizing the uptake of open access and the impact of their research, e.g., partner with institutions and libraries when possible so that article processing charges (APCs) are covered under TAs or open access accounts with publishers.

Question 5: How can USDA monitor impacts on communities impacted by its public access policies?

35. Maintain a consistent dialogue with researchers and the public to monitor impact.
36. Provide training materials for authors and grant managers to collaborate on finding the best route to publish.
37. Work with research institutions to monitor costs and expenses for public-access policies by tracking not just expenses included in the grant, but across the institution (from campus IT, research library, and research office) through a grant close-out report or commissioned study.
38. Monitor publication trends across publication formats, including journal articles, book chapters, and other peer-reviewed publications.
39. Review the publication costs of journal titles that USDA-supported researchers most commonly publish.
40. Track data citations for USDA-funded datasets over time to best understand dataset use and reuse, and the impact of data reuse on advancing science.
41. Compare impact factor of Gold OA to Green OA.
42. Use advisory panels, listening sessions, and roundtables.
43. Use existing reporting infrastructure.