Summary of Changes to the USGS Public Access Plan

February 7, 2023

OSTP Requirement	Updates to the USGS Public Access Plan (page numbers reference updated Plan)	Category
Federal agencies should update or develop new public access plans for ensuring, as appropriate and consistent with applicable law, that all peer-reviewed scholarly publications authored or co-authored by	- Removed all references to previous 12-month embargo period for public access to USGS-authored and -funded scholarly publications previously mandated in the 2013 Holdren memo.	Publications
individuals or institutions resulting from federally funded research are made freely available and publicly	- Removed section about petitioning for a shorter embargo period as it no longer applies	
accessible by default in agency- designated repositories without any embargo or delay after publication.	- Removed references to using CHORUS data to determine public access dates after 12-month embargo period as it no longer applies	
	- Added that scholarly publications would be made publicly accessible in a timely manner upon publication (see page 9)	
	- Updated definition of "scholarly publications" to specifically include USGS-authored and - funded journal articles and USGS series publications (see page 4)	
Agency public access plans should describe how peer-reviewed scholarly publications should be made publicly accessible	- Retained language indicating that the existing USGS Publications Warehouse is the online citation index for all USGS-authored and funded publications and the mechanism in which publications will be made publicly accessible (see pages 4, 5, 9, 10 & 11)	Publications
	- Indicated links to the public access accepted manuscript or the open access version of record from the publisher will be available in Publications Warehouse citation records (see page 9 & 10)	
Agency public access plans should describe how to maximize equitable reach of public access to peer-reviewed scholarly publications, including by providing free online access to peer-reviewed scholarly publications in formats that allow for machine-readability and enabling	- Included information about Section 508 compliance of USGS publications, API available for publication metadata, and how other websites and databases use the API to make publications more discoverable (see pages 11 & 12)	Publications

broad accessibility through assistive		
devices		
Agency public access plans should describe the circumstances or prerequisites needed to make the publications freely and publicly available by default, including any use and re-use rights, and which restrictions, including attribution, may apply	- Retained the existing language in the original USGS Public Access Plan: "The mandate to publish data and findings from USGS science activities dates to the Bureau's creation by the signing of the Sundry Civil Bill (U.S. Statutes at Large, v. 20, p. 394-395) on March 3, 1879, establishing the USGS. This bill also defined the requirement to report the results of investigations by the USGS to the public.	Both
	In addition, 2 CFR § 200.315 Intangible Property provides the Federal awarding agency the right to reserve a royalty-free, nonexclusive and irrevocable right to reproduce, publish, or otherwise use any work that is subject to copyright and was developed, or for which ownership was acquired, under a Federal award for Federal purposes, and to authorize others to do so; and pursuant to 2 CFR 215.36 Intangible Property, the Federal government has the right to: (1) Obtain, reproduce, publish, or otherwise use the data produced under a Federal award; and (2) Authorize others to receive, reproduce, publish, or otherwise use such data for Federal purposes." (see page 5)	
	- Added language provided by DOI Solicitors Office:	
	"Any non-USGS entity may not assert or attempt to assert copyright or any other intangible or intellectual property right in the final accepted manuscript or in the scholarly publication and in the respective data that would otherwise prevent, encumber, or frustrate release thereof without an embargo on their free and public release." (see page 6)	
Scientific data ⁶ underlying peer- reviewed scholarly publications resulting from federally funded research should be made freely available and publicly accessible by	- Retained existing language in the plan requiring data associated with scholarly publications to be publicly released, free-of-charge, with no embargo period. (see page 9)	Data
default at the time of publication, unless subject to limitations as	- Retained existing language in the plan requiring data management plans as part of all	

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described in Section 3(c)(i) and should be subject to federal agency guidelines for researcher	research conducted of funded by the USGS. (see page 14)	
responsibilities regarding data management and sharing plans, consistent with Section 3(c) of this	- Updated definition of 'data' to include 'scientifically relevant' and 'of sufficient quality to validate and replicate research	
memorandum.	findings' and included to additionally exclude laboratory notebooks and case report forms.	
	These updates reflect the updated definition of	
	'scientific data' provided by OSTP. (see page 4)	
Federal agencies should develop approaches and timelines for sharing	- Included 'all data, including data not associated with scholarly publications' in the	Data
other federally funded scientific data that are not associated with peer-	scope of the public access plan. (see page 3)	
reviewed scholarly publications.	- Noted that data 'must be released upon the	
	conclusion of a project or in a timely manner, as documented in the data management plan'	
	(see page 3)	
Federal agencies should also provide guidance to researchers that ensures	- Added brief overview of USGS Trusted Digital	Data
the digital repositories used align, to	Repository certification process (see page 15)	
the extent practicable, with the National Science and Technology	- Added that USGS will ensure that USGS TDRs align with NSTC document. (see page 15)	
Council document entitled "Desirable Characteristics of Data Repositories	aligh with NSTC document. (see page 15)	
for Federally Funded Research."8		
Agency public access plans and	- Added "The purpose of the DMP is to ensure	Data
policies should clarify that federal researchers must follow federal laws	researchers using USGS funding meet USGS and Federal policies related to data and	
and OMB policies that govern federal agencies' information management	information management." (see page 14)	
practices and protect certain types of		
data, ⁹ to the extent that the scientific data created by, collected by, under		
the control or direction of, or maintained by the federal researchers		
is subject to those laws and policies.		
Public access plans should outline policies used to establish researcher	- "Both intramural and extramural data management plans describe how to maximize	Data
responsibilities for describing any potential legal, privacy, ethical,	access while protecting privacy, confidentiality, sensitivity, and proprietary and intellectual	
technical, intellectual property, or	property rights, and balance the value of long-	
security limitations, ¹⁰ and/or any other potential restrictions or	term preservation and access with the associated cost and administrative burden."	
limitations on data access, use, and	(see page 13)	

disclosure, including those defined in terms and conditions of funding agreement or award or that convey from a data use agreement or stipulations of an Institutional Review Board. Public access plans should outline policies used to establish researcher responsibilities for plans to maximize appropriate ¹¹ sharing of the federally	- Enumerating elements included in metadata for data such as 'restrictions or limitations on data access and use' (see pages 12 & 13) - "Both intramural and extramural data management plans describe how to maximize access while protecting privacy, confidentiality, sensitivity, and proprietary and intellectual	Data
funded scientific data identified in Section 3(a) of this memorandum, such as providing risk-mitigated opportunities for limited data access. ¹²	property rights, and balance the value of long- term preservation and access with the associated cost and administrative burden." (see page 13)	
Public access plans should outline policies used to establish researcher responsibilities for determining where they expect to deposit their relevant data.	- Retained existing language in plan: "The DMPs must also address making data available in appropriate long-term repositories and stress the importance of non-proprietary, open formats for improved accessibility." (see page 13)	Data
In consultation with OMB, federal agencies should allow researchers to include reasonable publication costs and costs associated with submission, curation, management of data, and special handling instructions as allowable expenses in all research budgets.	- Added to Data management plans section and scholarly publication implementation section: "Researchers are allowed to include reasonable costs associated with submission, curation, management of data/publications, and special handling instructions in research budgets." (see pages 8 & 13)	Both
Federal agencies should report to OSTP, when requested, on the status of their public access plans and policy implementation, including the number of all scholarly publications funded by the federal agencies and any other relevant statistics collected by the agency.	- Added "Upon request, USGS will report to OSTP on the status of this plan and policy implementation, including the number of all scholarly publications and data funded by the USGS." (see page 17)	Both

Additional Updates Not in Response to New OSTP Requirements

- Named SPN as the USGS publishing entity instead of using the phrase "published internally"
- Updated metrics for Publications Warehouse and Science Data Catalog
- Removed reference to the Department of the Interior's annual Research and Development budget since all agencies now need a public access plan regardless of R&D budget

- Added references to Evidence Act and OPEN Government Data Act since they were passed after the original Public Access Plan was drafted
- Added definition for the following terms: "Extramural Research," "Final Accepted Manuscript,"
 "Intramural Research," and "USGS-funded"
- Updated definitions for SDC and Publications Warehouse to align with changes that have been made in the applications since the release of the original Public Access Plan
- Removed references to Instructional Memoranda
- Updated Section 6 to clarify roles and responsibilities of USGS entities and to add the Fundamental Science Practices Advisory Council
- Updated language from future tense to present tense in cases where elements have already been implemented
- Removed references to specific file formats of publications as they continue to evolve with machine-readability requirements
- Added statements about giving prominent access to Publications Warehouse and the Science Data Catalog on the USGS website
- Reorganized sections 8 & 9 to fully separate information about publications from information about data. In the original plan, despite the sections being labeled as one for publications and one for data, there was a lot of mixing of information and duplication of content. These two sections now better mirror one another in their structure
- In the original Public Access Plan, we stated that detailed guidance for evaluating DMPs is available on the Data Management Website. This guidance does not exist so we changed this to future tense to indicate that we will have this by the effective date of the updated plan
- Removed reference to BISON since it has been sunset
- Added reference to new data-related training that has been made available since the original plan was released (e.g., CDI Carpentries Workshops, SBDR quarterly training, FSP training)

Updates to USGS Public Access Plan - Phase II

(Updates due by December 31st, 2024 and to be implemented by December 31st, 2026 or no later than one year after the publication of the plan)

OSTP Requirement	Updates to the USGS Public Access Plan
Metadata should include all author and co-	Added to the publications section: "Metadata for
author names, affiliations, and sources of	publications include all author and co-author names,
funding, referencing digital persistent	author affiliations, and digital persistent identifiers
identifiers, as appropriate.	that meet common/core standards for USGS authors.
	The metadata also include the date of publication
	and the unique, persistent digital object identifier
	assigned to the publication when applicable. By the
	effective date of this plan, USGS will also include
	sources of funding in metadata for publications."
	(see page 11)

	Added to the data section: "[] and improving practices for creating robust metadata associated with digital object identifiers for data. Metadata for data include [] all author and co-author names and identifiers, author affiliations, [] and references to other digital persistent identifiers, as appropriate. By the effective date of this plan, USGS will also include sources of funding in metadata for data." (see page 14)
Metadata should include the date of publication	Added to the publications section: "[] The metadata also include the date of publication []" (see page 11) Added to the data section: "Metadata for data
	include the date of publication, []" (see page 14)
Metadata should include a unique digital persistent identifier of the research output	Added to the publications section: "[] The metadata also include [] the unique, persistent digital object identifier assigned to the publication when applicable. []" (see page 11)
	Added to the data section: "Metadata for data include [] the digital object identifier assigned to the data product." (see page 14)
Instruct federally funded researchers to obtain a digital persistent identifier that meets common/core standards defined by NSPM-33 Implementation Guidance.	Added to the implementation section: "USGS researchers are also instructed to obtain a digital persistent identifier that meets common/core standards defined by NSPM-33 Implementation Guidance []" (see page 10)
Instruct federally funded researchers to include their digital persistent identifier in published research outputs when available.	Added to the implementation section: "USGS researchers are also instructed to obtain a digital persistent identifier that meets common/core standards defined by NSPM-33 Implementation Guidance, and to include their digital persistent identifier in published research outputs." (see page 10)
Instruct federally funded researchers to provide federal agencies with the metadata associated with all published research outputs they produce, consistent with the law, privacy and security considerations. Assign unique digital persistent identifiers to	Added to the implementation section: "Researchers are required to provide USGS with the metadata associated with all published research outputs they produce, including these identifiers, as applicable." (see page 10) Added to the implementation section: "In
all scientific research and development awards and intramural research protocols that have appropriate metadata linking the funding agency and their awardees through their digital persistent identifiers.	coordination with other Federal agencies, USGS will develop a process for assigning digital persistent identifiers to scientific research and development awards and intramural research protocols to enable proper reference of funding source from metadata associated with publications and data." (see page 10)

Necessary Updates to USGS Policy and Resources

- USGS will develop criteria to assist repositories in assessing the continued value, usability, and relevance of data to scientific investigations to inform long-term preservation and accessibility.
- Provide detailed guidance on the <u>USGS Data Management</u> Website in the form of explanatory text and checklists to ensure appropriate evaluation of the merits of submitted data management plans by research proposal reviewers.
- Provide guidance to researchers on how to maximize access to data while protecting privacy, confidentiality, sensitivity, and proprietary and intellectual property rights, and balance the value of long-term preservation and access with the associated cost and administrative burden
- Update data management plan templates to ensure that researchers are planning to meet all applicable USGS and Federal information management requirements.
- Ensure that USGS TDR certification process is in alignment with NSTC Desirable Characteristics of Data Repositories for Federally Funded Research.
- Ensure that policies define what is meant by 'all data' and that all policies and FAQs related to data release include 'all data'.
- USGS will need to determine if policies need to be updated to formally state that publication and data curation costs can be added into research budgets.
- The IPDS workflow may require some modification to ensure that IP records are disseminated are in a timely manner to comply with the Public Access Plan.
- USGS will need to develop a new workflow to make USGS authored/funded journal articles / accepted manuscripts publicly available immediately upon publication. Potential solutions may require modification of the Publications Warehouse and/or Natweb, additional SPN staffing and updates to SPN's software and tools, or pursuit of outside resources.
- Update USGS policy chapters including SM 502.4 and SM 1100.4.
- Potentially modify the publishing agreement workflow to ensure that all legal requirements are met.
- Grants language ensure appropriate language remains concerning release of USGS funded data