

PARR 2.0: Federal Policy Updates for Data Sharing, Publication, and Reuse *Perspective from NOAA*

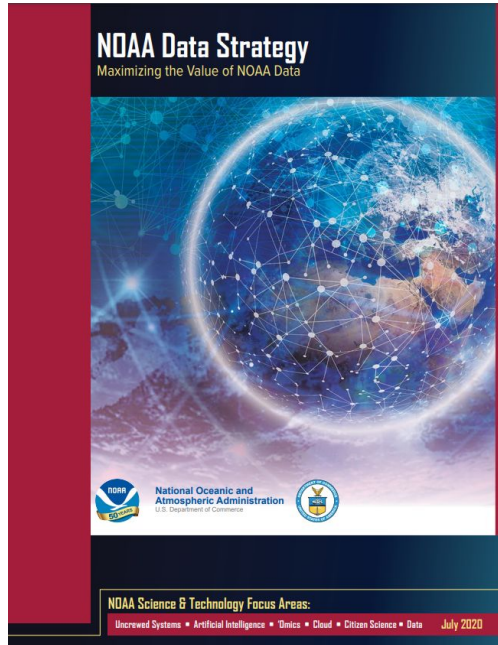
Workshop on Open Data and Reuse in Social Science Weather Research

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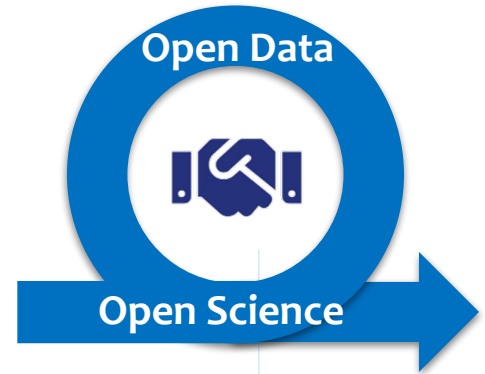
PARR 2.0 Context: NOAA Data Governance



- **Scope** = All NOAA data, not just environmental
- **Docs** = NOAA Data Strategy and Action Plan
- **Body** = NOAA Data Governance Committee
- **Leads** = Mission-Area Assistant Chief Data Officers (ACDOs)
- **Authority** = NOAA Administrative Order
- **Policy** = NOAA Data Management Handbook (*in progress*)
- **Community** = Growing and diversifying

PARR 2.0 Context: Open Data / Open Science

- **Open Data Policies** = Evidence-Based Policy Making Act, Geospatial Data Act, FOIA, Paperwork Reduction Act, Privacy Act
- **Executive Orders** = Scientific Integrity, Equity, and Climate EOs all speak to importance of open data and open science
- **FAIR Principles** = Findable, Accessible, Interoperable, and Reusable
- **National Science and Technology Council (NSTC) Subcommittee on Equitable Data**
- **Office of Science and Technology Policy (OSTP)** = 2023 Year of Open Science
- **NOAA Science Advisory Board** = Open Data / Open Science Recommendation Report

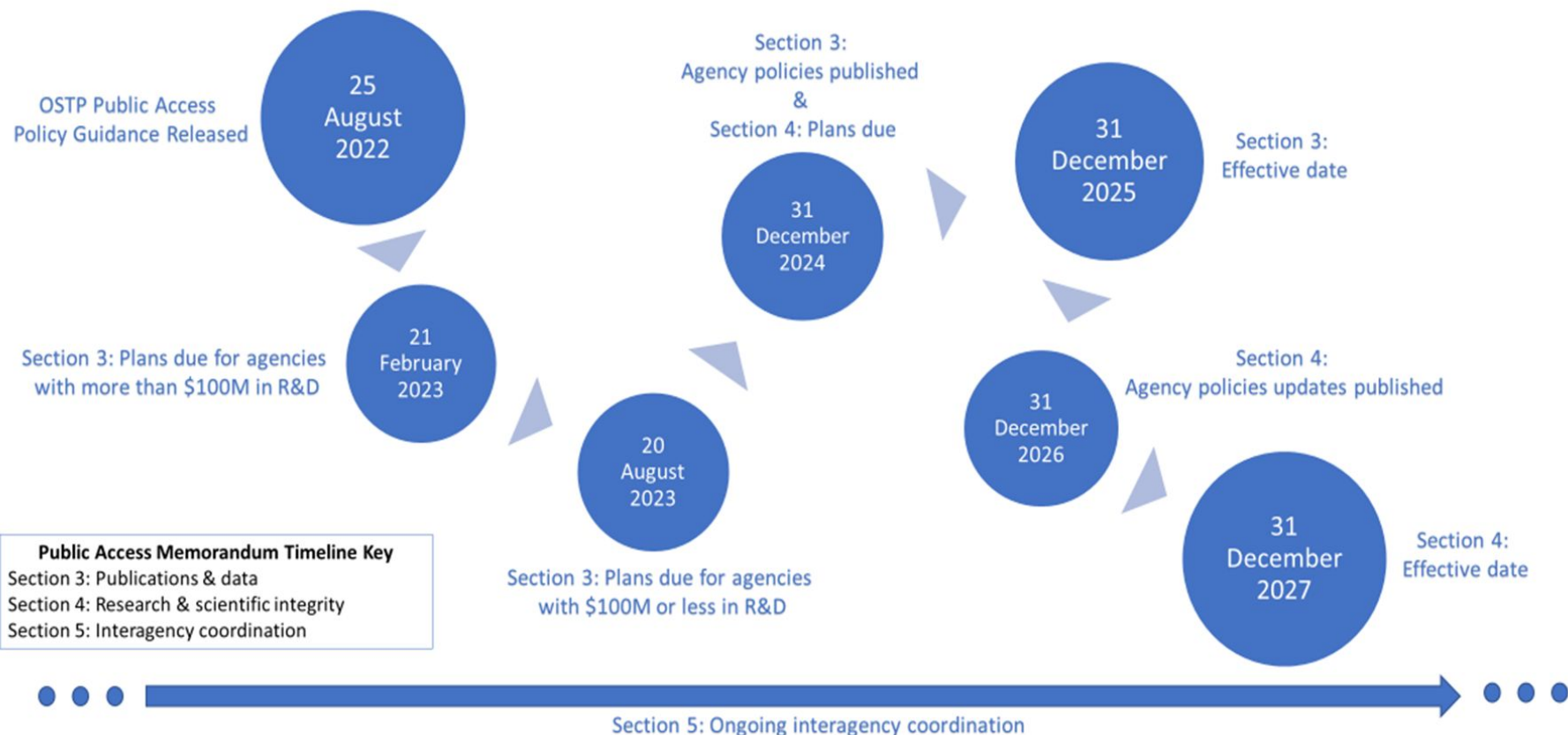


Background: why a new OSTP PARR memo?

- Covid-19 pandemic demonstrated value in adopting immediate public access to research outputs
- Technological opportunities since 2013, esp in AI/ML
- Increased focus on equitable delivery of federally funded research to all – not just those with special access through institutions
- Desire to increase transparency re: conflicts of interest, sources of funding, researcher identification
- Memo was developed “iteratively” by the OSTP’s Subgroup on Open Science, with feedback from the agencies



Timeline for 2022 OSTP Public Access Policy Guidance



NOAA Approach to OSTP Memo

- Guiding Principle - *build on what is working, improve where necessary*
- Comprehensive **plan & policy revision** in FY2025, followed by **implementation** through FY2028, with **regular reporting** starting in FY2029
- Applicable current NOAA policies remain in place until revisions are adopted
- New NOAA policy will address all OSTP requirements, including:
 - Simultaneous access to publications and data at time of publication (no embargo)
 - Access to data with no associated publications
 - Digital persistent identifiers for authors, publications, datasets, and grants
 - Machine-readable publication formats
 - Specific use and reuse rights for publications and data
 - Consistent requirements for grantees, cooperative institutes, and NOAA scientists



NOAA PARR Working Group

- Executive Sponsorship from NOAA Chief Scientist and Chief Data Officer
- Reporting to Science Council, Observing Systems Council, and Program Management Council
- Membership from mission, staff, and corporate offices reflecting broad reach of PARR impacts to NOAA policies and practices
- Deliverables
 - February 2023: Memo outlining NOAA's approach to addressing the 2022 PARR Memo requirements
 - December 2024: Updated NOAA PARR Plan and Policies
- Outreach and Education - started + recognize much more is needed both internally and externally



NOAA PARR 2.0 Timeline

FY	Phase	Actions	Milestones	Deliverables
FY23	Guidance Phase	Drafting <i>Memo to OSTP</i> Scoping Sections 3 & 4 requirements		<i>Memo to OSTP</i> (02/21/23)
FY24		Conducting user engagement Drafting Section 3 guidance		
FY25		Planning Section 3 implementation Drafting Section 4 guidance		<i>Revised NOAA PARR Plan</i> (12/31/24)
FY26	Implementation Phase	Planning Section 4 implementation Tracking Section 3	Section 3 effective 12/31/25	
FY27		Planning enterprise implementation		<i>Partial Report</i> (12/31/26)
FY28		Tracking Sections 3 & 4 Enterprise implementation	Section 4 effective 12/31/27	<i>Partial Report</i> (12/31/27)
FY29	Reporting Phase	Tracking enterprise implementation		<i>Full Enterprise Report</i> (12/31/28)



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PARR 2.0: Key Changes and Requirements

- Applies to all agencies with R&D expenditures
- Removes 12-month embargo on publications; data associated with publication “needed to reproduce results” must be available at time of publication
- Requirement that agencies ensure that PIDs (persistent identifiers) track all stages of research lifecycle: from awards, to researchers, to outputs
- Any provision of 2013 memo not affected remains in place
- **Agencies must update their PARR plans**
 - Final effective date of December 2025, although agencies have until 2026 to deliver their final plan to OSTP



PARR 2.0 New Requirements: Publications

- No embargo on publications – they must be available freely available “by default in agency-designated repositories”
- Publications must be available in machine-readable formats
- New agency PARR plan must spell out how the agency intends to license any re-use rights on publications, including restrictions, e.g. CC BY-ND, CC BY-NC
- Agencies shall report to OSTP “when requested,” the number of federally funded scholarly publications available in their agency repository



PARR 2.0 New Requirements: Data

- Data associated with a scholarly publication must be made available at the time of publication (covers intramural and extramural data)
- Federal agencies should develop approaches and timelines for sharing other federally funded scientific data (e.g., not associated with a pub)
- Agencies should outline policies to establish researcher responsibilities on managing and sharing federally funded data, including:
 - Describing any security, legal, etc. use limitations
 - Guidelines regarding digital repositories
 - Data licensing



PARR 2.0 New Requirements: Scientific Integrity

- “Federal agencies should take steps to ensure that public access policies support scientific and research integrity by transparently communicating to the public critical information...”
- Now required:
 - Collect and make publicly available appropriate metadata associated with scholarly publications and data
 - Including a unique digital persistent identifier for the research output (i.e. a DOI)
 - All federally funded researchers must obtain a PID that meets the requirement of NSPM-33 Implementation Guidance (i.e., ORCID)
 - Assign PIDs to all awards

