

National Oceanic and Atmospheric Administration

U.S. Department of Commerce



NOAA Library Network

Strategic Plan

FY 2022 - 2024

NOAA Science Council

NOAA Library Network, FY 2022



OAR

Boulder Labs Library (CO)
Miami Regional Library (FL)
NOAA Central Library (MD)
Great Lakes Environmental Research Lab Library (MI)
Geophysical Fluid Dynamics Lab Library (NJ)
National Weather Center Library (OK)
Seattle Regional Library (WA)

NOS

Oxford Marine Library (MD) NOAA/NOS CCEHBR Center (SC)

NMFS

La Jolla Lab Library (CA)
SWFSC Santa Cruz Library (CA)
SEFSC Library (FL)
NMFS Panama City (FL)
PIFSC Library (HI)
Pascagoula Lab Library (MS)
National Marine Mammal Lab Library (WA)

NESDIS

Betty Petersen Memorial Library (also funded by NWS and OAR) (MD) National Climatic Data Center Library (NC)

Contents

EXECUTIVE SUMMARY	4
MISSION	5
Introduction	6
BACKGROUND	7
STRATEGIC GOALS	10
GOAL 1	11
Ensuring awareness of library services so NOAA staff are served fully	11
Objectives	12
GOAL 2	14
Building digital collections and processes to preserve the past and inform the future	14
Objectives	16
GOAL 3	17
Optimizing electronic subscriptions while addressing collection gaps and challenges	17
Objectives	19
GOAL 4	21
Creating a trusted infrastructure for NOAA authors in support of Open Science	21
Objectives	23
Appendix I: Strategic Plan Tasks	25

Strategic Goals 2 |



Executive Sumary

The FY2022-2024 Strategic Plan for the NOAA library network was created by the NOAA Librarians Committee, under the oversight of the NOAA Libraries Advisory Committee (NLAC). The Plan introduction provides background on the library network and NLAC, and describes the process for creating the Plan. The Plan includes four goals and accompanying objectives which have been identified to ensure that NOAA libraries are strategically positioned to meet NOAA's future needs for library services.

Strategic Goals 4

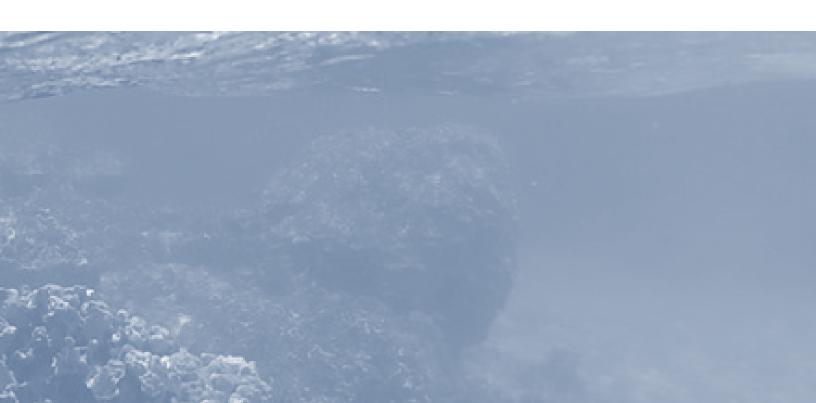
Mission

The NOAA library network supports NOAA science and research missions by delivering innovative information resources and technologies, and enhances the productivity and impact of our users by providing exemplary research services and subject matter expertise, along with seamless access to library collections.



Introduction

NOAA's diversity of scientific mission is reflected by the diversity and uniqueness of its libraries. The NOAA library network is comprised of 18 libraries across four line offices that share a common mission to support the local research or regulatory activity. The NOAA Central Library serves all NOAA staff and contractors in Silver Spring, as well as all personnel not colocated with a library that can serve them.



Background

The NOAA Libraries Advisory Committee (NLAC) is a standing committee of the NOAA Science Council. NLAC's broad purpose states:

It works towards a vision of a NOAA library system that is sustainable and meets the most critical needs for researchers to continue accomplishing the NOAA mission¹.

NLAC has been tasked by the NOAA Science Council to:

- Develop and submit to the Council an implementation plan for accomplishing the long term organization of a sustainable NOAA Library system that provides equitable access to information resources for all employees that need them.
- Assist the Council in coordinating the execution of an approved plan.
- Identify efficiencies in the provision of library services that can be achieved. These efficiencies could include, among other things, budgets, use of space, coordinated purchases and shared services².

¹ NOAA. NOAA Science Council. (March, 2021). NOAA Libraries Advisory Committee (NLAC) Terms of Reference. https://sciencecouncil.noaa.gov/Portals/0/NLAC_ToR_2021_approved_NSC.pdf?ver=2021-04-30-094842-640

² Ibid.

In 2016, NLAC presented a comprehensive report³ on NOAA library issues to the NOAA Science Council. The report included a number of significant recommendations focused on sustaining library services to serve NOAA. Over the subsequent years, many of the 2016 report's recommendations have been accomplished, including: forming a committee of librarians to share best practices, establishing a guidance on library closures, and conducting comprehensive user surveys to discover how NOAA staff view their library services.

As of FY2020, one of the recommendations, formulating a strategic plan, had not yet been achieved. In FY2021 the committee of librarians began work on the plan, kicking off with a NLAC-sponsored NOAA-wide survey including a wide range of questions on library collections and services. The survey was answered by almost 1,500 NOAA staff from all line offices and from duty stations all over the country.

This Strategic Plan was developed using the data from the all-NOAA survey, as well as careful consideration of current trends affecting all libraries including: changes in the scientific publishing environment, Open Science initiatives in the federal government, the on-going need to carefully steward NOAA's financial investment in libraries, and the changed realities for physical libraries due to the ongoing hybrid work environment at NOAA. The Strategic Plan was presented to the NOAA Science Council on June 14, 2022.

| Strategic Goals 8 |

³ NOAA Libraries Advisory Committee (2016). Advancing NOAA Library Services.



Strategic Goals



Goal 1

Ensuring awareness of library services so NOAA staff are served fully



Goal 2

Building digital collections and processes to preserve the past and inform the future



Goal 3

Optimizing electronic subscriptions while addressing collection gaps and challenges



Goal 4

Creating a trusted infrastructure for NOAA authors in support of Open Science

Strategic Goals 10 |

Ensuring awareness of library services so NOAA staff are served fully

As a result of robust outreach efforts, NOAA-wide survey data will show that 70% of NOAA staff and affiliates with needs for library services will attest familiarity with library network-wide subscriptions and most widely available library services (e.g., interlibrary loan, basic reference services).

Why this goal?

In response to the January 2021 all-NOAA survey on library services sponsored by NLAC ("NLAC survey"), 40% of respondents stated that they did not use library services because they were unaware of them. 71% of respondents to the NLAC survey stated that they would like to "learn more" about library services and 48% stated that offering more training about library resources would be among the most important actions the libraries could take to serve the respondent better.

How does this support NOAA policy or mission?

NAO 205-17A Section 6.B.4-5⁴ mandates the Central Library to provide access to scientific literature. If NOAA staff are unaware of these resources, including the resources and subscriptions of all libraries in the library network, this mandate will not achieve its goals.

⁴ (2013). NAO 205-17A: Information Access & Dissemination. https://www.noaa.gov/organization/administration/nao-205-17a-information-access-dissemination

Objectives

Branding

NOAA libraries will create branding templates for network-wide subscriptions and generally available services that can be customized and used by any network library to make it clear when NOAA staff are accessing a library resource.

Orientation

NOAA libraries will investigate including the library network in Office of Human Capital Services outreach email templates, orientation templates to ensure that new employees get an overview of services.

Marketing

Develop marketing plans and strategies that identify how library networkprocured resources are unique and serve staff better than open web, etc.

Training

NOAA libraries will investigate developing a Commerce Learning Center course on library network resources.

Strategic Goals





Building digital collections and processes to preserve the past and inform the future

To facilitate text mining for machine learning and AI applications, as well as to improve their discoverability, NOAA library print and media collections, especially those containing NOAA or predecessor agency documents, will be thoroughly analyzed by prioritizing, cataloging, and digitization. This will include consideration and highlighting of rare collections of NOAA-centric materials to ensure that historic information is on an equal footing with current research.

Why this goal?

In response to the NLAC Survey, 47% of NOAA staff stated they found obtaining print materials from the library collections important and were likely to rely on access to these materials in the future. However, 71% of respondents also said they prefer to access library materials electronically. This, and the fact that Covid-19 required remote work means it is no longer possible to consistently access print library collections, dictate an increased need to digitize remaining important print collections found in NOAA libraries. Last, machine learning and AI applications (such as autosummarization and topic modeling) are becoming increasingly important library services as researchers seek to find relevant information and data from massive literature corpuses faster and with greater meaning.

How does this support NOAA policy or mission?

Strategic Goals 14 |

First, the libraries' efforts to digitize and preserve NOAA's documentary legacy are in line with NOAA's commitment to preserve its heritage, as evidenced by the establishment of the NOAA Heritage Program. Second, converting collections to machine-readable formats conforms to the mandates of Title II of the Evidence Act⁵, which requires that federal agencies make all data assets machine-readable. The Act defines data very broadly, which would include unstructured data such as government documents.

⁵ Foundations for Evidence-Based Policymaking Act of 2018, 44 U.S.C. §3502 (16) (2019). https://www.congress.gov/bill/115th-congress/house-bill/4174



Physical library holdings

A cross-library group will be established to identify print and media library items needing cataloging, digitization and preservation. The group will also investigate whether print materials should be retained and how they should be maintained.

Identifying digital collections for discovery

NOAA libraries will identify rare NOAA/predecessor collections and ensure their discoverability through improved metadata, linkages, and possible web page placement so that researchers can find and use the items.

Text as data

Starting with the Institutional Repository contents, and extending to digitized collections, NOAA libraries will investigate how digital collections can support text analysis and machine learning.

Strategic Goals 16 |

Optimizing electronic subscriptions while addressing collection gaps and challenges

To support a hybrid-work community, the library network will establish a cross-library collection development group which will leverage cross-line office coordination of budgets and increase efficiencies by expanding centralized and consolidated purchasing of electronic subscriptions as well as identify electronic collection gaps experienced by researchers, including access issues.

Why this goal?

In response to the question, "what is the most important thing NOAA libraries could do to serve you better?" respondents to 2021 NLAC survey answered: purchase more electronic subscriptions (64%) and more ebooks (36%). In addition, 72% of NOAA staff stated they believed electronic collections helped them do their jobs. Problematically, 28% report having problems accessing electronic library resources and 25% of NOAA staff stated that there were subject areas they had difficulty finding information about from the libraries.

How does this support NOAA policy or mission?

NOAA's Next Generation Strategic Plan states that NOAA's diverse functions require an equally diverse set of skills and constantly evolving abilities in its workforce⁶. The library network must respond to that requirement by seeking to offer a diverse and appropriate electronic collection that will meet the needs of most NOAA staff. These efforts will also conform to the Federal Acquisition Regulation's mandate "...to exercise ...sound business judgment in providing the best value product or service to meet the customer's needs.⁷" In solving electronic access challenges, the libraries must work to move away from IP authentication in compliance with OMB M-19-17⁸, requiring agencies to shift to PIV credentials for authentication purposes and access to government resources.

-

Strategic Goals 18 |

⁶ NOAA Office of the Chief Financial Officer. Performance, Risk and Social Science Office. (2010). Next Generation Strategic Plan. https://www.performance.noaa.gov/ngsp/.

⁷ Federal Acquisition Regulation, (2022). Sect. 1.102, Statement of guiding principles for the Federal Acquisition System.

https://www.acquisition.gov/far/1.102?searchTerms=%22sound%20business%20judgment%20in%20providing%20the%20best%20value%20product%22

⁸ Executive Office of the President. Office of Management and Budget (May 21, 2019). M-19-17, Memorandum for Heads of Executives and Departments. Enabling Mission Delivery through Improved Identity, Credential, and Access Management. https://www.whitehouse.gov/wp-content/uploads/2019/05/M-19-17.pdf

Objectives

Collection Development

A cross-library group will be established to develop an electronic subscription collection policy, while identifying overlap in libraries' current subscriptions as well as considering constituent researchers' needs. The group will keep in mind that the network is made up of unique libraries dedicated to fulfilling particular research needs of NOAA groups, so consolidation should not be achieved at the loss of unique, local requirements.

Addressing Collection gaps

The library network will identify and address electronic collection gaps experienced by staff hired to conduct new types of research (e.g., economics, uncrewed systems, interdisciplinary research) or any other staff who are not currently well-served by the NOAA library system, including those who currently lack resources due to duty station location and library closures. The libraries will use surveys, ILL borrowing statistics, library annual reports, bibliometrics or other gap analysis techniques to identify needs.

Resolving authentication and access issues

To support NOAA's virtual workforce, the NOAA library network will identify and evaluate possible solutions to resolve access issues on a network level, while providing persistent access to electronic resources.

Continuous Monitoring

The NOAA library network will establish workflows to routinely gather information about new areas of NOAA research in order to provide needed resources to staff. Survey, bibliometrics, and portfolio analysis techniques will be used on a continuous basis to determine needs.



Strategic Goals 20 |

Creating a trusted infrastructure for NOAA authors in support of Open Science

The NOAA library network will serve as a trusted resource for internal and external NOAA authors in support of Open Science objectives and will lead the way in seeking alternatives to traditional subscription models in order to provide equitable access to published science.

Why this goal?

NOAA's research enterprise produces 3,500 – 4,000 journal articles annually. This effort lacks a centralized source of assistance or guidance for NOAA authors. NOAA libraries already provide significant value in this space by managing manuscript approvals for some labs and programs, providing research impact analysis, supplying citation management software and training, and identifying potential journals for publication. The Central Library provides permanent identifiers (PIDs) for NOAA documents and training for a variety of publication-related tasks, as well as manages NOAA's Institutional Repository (IR), in support of NOAA's PARR policy. Finally, librarians already serve as experts regarding trends in scientific publishing and its relation to Open Science. In response to the NLAC survey, respondents stated that they would be likely to turn to the libraries in the future for help with the following tasks: Endnote/citation management (33%); and help with IR submissions and Sect 508 compliance (35%).

Several policies support NOAA's scientific research publishing program, most notably its Scientific Integrity Policy⁹ and the publications-specific Fundamental Communications Policy¹⁰. NOAA publications that are produced solely on government platforms (e.g., NOAA technical memoranda and reports) are also governed by the Information Quality Act¹¹. Open Science mandates that govern all USG publishers include the 2013 White House Memo on Expanding Public Access to the Results of Federally Funded Research¹², and Title II of the Evidence Act¹³. NOAA's subsequent policies include its PARR plan¹⁴ and the NOAA Data Strategy¹⁵.

-

Strategic Goals 22 |

⁹ NOAA. NOAA Administrative Order 202-735D.2. (January 19, 2021). Scientific Integrity. https://www.noaa.gov/organization/administration/nao-202-735d-2-scientific-integrity.

¹⁰ NOAA Research Council. (November 8, 2016). NOAA Framework for Internal Review and Approval of Fundamental Research Communications to accompany NOAA Administrative Order 202-735D. https://library.oarcloud.noaa.gov/noaa_documents.lib/NOAA_Science_Council/FRC_Guidance_Nov_8_2016.pdf

¹¹ Information Quality Act (section 515 of Public Law 106-554; H.R. 5658) and the NOAA IQA Guidelines, https://www.noaa.gov/organization/information-technology/policy-oversight/information-quality/information-quality-

guidelines#:~:text=Information%20quality%20is%20an%20integral,collects%20and%20disseminates%20to%20the

¹² Executive Office of the President. Office of Science and Technology Policy. (Feb 22, 2013). Memorandum for the Heads of Executive Departments and Agencies. Increasing Access to the Results of Federally Funded Scientific Research.

https://obamawhitehouse.archives.gov/sites/default/files/microsites/ostp/ostp_public_access_memo_201 3.pdf

¹³ Foundations for Evidence-Based Policymaking Act of 2018, 44 U.S.C. §3502 (16) (2019). https://www.congress.gov/bill/115th-congress/house-bill/4174

¹⁴ NOAA Research Council (February, 2015). NOAA Plan for Increasing Public Access to Research Results. https://repository.library.noaa.gov/view/noaa/10169

¹⁵ NOAA. (July, 2020). NOAA's Data Strategy: Maximizing the Value of NOAA Data. https://sciencecouncil.noaa.gov/Portals/0/2020%20Data%20Strategy.pdf?ver=2020-09-17-150024-997

Objectives

Scholarly Communications and Open Science

The NOAA library network will systematically and robustly provide information and resources on scholarly communications topics such as: author rights/permissions, Open Access issues, copyright, and data management related to publications. In addition, the library network will advocate for the broader adoption through NOAA of persistent identifiers such as DOI, ORCID and others in order to promote more robust linkages within the Open Science ecosystem.

NOAA PARR Policy Support

NOAA library network will act as advocates and educators, instructing their clients on their responsibilities as NOAA authors and funders, ultimately leading to increased PARR compliance rates across the agency and ensuring NOAA's published science is available world-wide.

Internal NOAA Publishing practices

The NOAA library network will work with publication managers, and others to

establish best practices for NOAA publications utilizing existing DOC, NOAA, and LO style guides, while seeking standardization across all LOs on topics such as citation, author affiliation, publication DOIs, author permanent identifiers as well as formatting, style and Sect. 508 compliance.

External publishing issues, APC costs and Transformative agreements

NOAA library network will investigate the possibility of entering into transformative agreements with publishers, which transfer the cost of journal access from subscription payments to payment of article processing charges (APC) costs. The goals of these investigations will be to ensure NOAA does not "double pay" for subscriptions and APCs, Open Science goals are supported, and equitable access is provided to published science.



Strategic Goals 24

Appendix I: Strategic Plan Tasks

	First task	Second task	Third task	Fourth task	Fifth task	Sixth task	Additional tasks
Ensuring awareness of library services so NOAA staff are served fully Task Leads: Network Outreach Team	Establish network outreach team	Develop marketing plans and strategies to distinguish benefits of library provided resources in contrast with open web	Create branding templates for network-wide subscriptions/ generally available services	Investigate OHCS outreach email templates, orientation templates so new employees get an overview of library services	Investigate developing a CLC course on library network resources		
Building digital collections and processes to preserve the past and inform the future Task Leads: Network Print Collections Group, NOAA IR team	Establish a cross- library group to identify print collections that need cataloging, digitization, preservation	Identify print collections that need cataloging, digitization, preservation	Identify rare NOAA/ predecessor collections, ensure discoverability through metadata, web page placement	Investigate how digital collections, including the IR, can support text analysis and machine learning, beginning with gathering use cases and identifying appropriate file formats.			
Optimizing electronic subscriptions while addressing collection gaps and challenges Task Leads: Network Electronic Subscription Group	Establish a cross- library group to work on electronic subscription issues	Identify overlap in library current subscriptions	Consider constituent researchers' needs	Identify and address electronic collection gaps experienced by staff conducting new types of research	Identify researchers who lack resources due to duty station location/library closures	Establish workflows to routinely gather information about new areas of NOAA research. Use survey, bibliometrics, portfolio analysis techniques on a continuous basis	Develop an electronic subscription collection policy Identify & evaluate solutions to resolve access issues on a network level, while providing persistent access to electronic resources
Creating a trusted infrastructure for NOAA authors in support of Open Science Task Leads: NOAA IR Team, Network Outreach Team, Network Electronic Subscription Group, NCL-led Publications Group	Work with publication managers to establish best practices for NOAA pubs utilizing existing style manuals, seeking standardization regarding citations, author affiliation, formatting, style, Section 508	Act as advocates and educators regarding PARR, work to ensure NOAA published science is available world-wide	Systematically and robustly provide information and resources on scholarly communications topics such as: author rights, permissions; open access; copyright; data management related to pubs	Advocate for broader adoption of PIDS through NOAA to promote Open Science	Investigate transformative agreements with publishers so NOAA financial resources are used to support Open Science goals; equitable access is provided to NOAA science		