
**DRAFT Action Plan for NOAA's Libraries for the 21st Century:
Phase II Report to the NOAA Research Council**

Presented by

NOAA Research Council's Ad Hoc Committee on Libraries

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“The library is a valuable resource to researchers. Our work both begins and ends there. It houses the articles and books we need to do our job, and it houses our finished product, research papers.”

--NOAA Researcher, 2012--

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Executive Summary

The NOAA Research Council charged the Ad Hoc Committee on Libraries to accomplish the task below.

“For Phase II, the Committee will develop an Action Plan including descriptions of the following:

- The current situation with respect to total library costs, FTEs, and space;
- At least one recommended situation in terms of total library costs, FTEs, and space, and the milestones and dates by which a transition from the current to the recommended state would be achieved (the recommendation should include cost savings while maintaining sufficient library services); and,
- Alternatives to the recommended situation.”

The Committee will provide a draft Phase II Action Plan to the Research Council and the Council will present the Plan to NOAA Leadership and recommend implementation by NOAA.

The Current Situation

The NOAA libraries and librarians serve a vital role in supporting NOAA's research mission, coordinating, maintaining, and providing access to NOAA library assets in all formats. The results of the survey of NOAA employees conducted by the Committee show that employees co-located with libraries are satisfied with the services provided. However, the survey also shows there is a desire for increased desktop access to library resources and that many NOAA employees have very limited access to the resources needed to conduct their research. At the same time, funding for these resources continues to be reduced. NOAA-wide online access to a collection of core library resources will address both these findings, providing equitable access to basic library resources regardless of location or line office. Providing consistent, centralized funding for NOAA-wide access to these resources would improve efficiency by reducing duplicate subscriptions and simplifying the acquisition process.

The NOAA libraries provide the best resources and services they can with the funding available and given their current organizational structure. However, NOAA researchers have inequitable and inadequate access to needed information resources. This creates information haves and have-nots. Employees of a science-based organization deserve better.

According to a survey conducted by the Committee earlier this year, the vast majority of NOAA library users are generally pleased with the service they receive from NOAA librarians but noted a clear lack of the consistent availability across line offices of electronic journals and other online services. NOAA researchers want to see more, not less.

The free Web only provides a very small fraction of the needed scientific information and databases needed to conduct NOAA's science, policy, and management operations. Much of what is needed is proprietary and must be purchased.

Recommendations from the Committee reflect a core set of services and resources and the means to make sure that all NOAA staff have equal access to collections and services.

Committee Recommendations

A more effective NOAA library system will feature **consistent and reliable funding at the corporate level to make the following happen:**

1. **A set of core resources available to all NOAA staff**
 - electronic journals, databases, e-books, and related software that all of NOAA can access
 - distributed set of printed resources within the NOAA library network available to all NOAA staff
2. **A NOAA Institutional Repository (IR) for digital material available to NOAA staff and the public**
 - collection, preservation, and access to all NOAA digital intellectual output
 - collection, preservation, and access to pertinent non-NOAA non-copyrighted material
 - a digitization program to convert print NOAA legacy publications into a digitized form for inclusion to the IR
3. **A strategic communications and continuing education plan**
 - plan to inform and educate all NOAA staff in the services available through the NOAA library system
 - a continuing educational program for librarians and library staff which permits them to stay current with required skills and knowledge to continually provide high quality services to NOAA's staff and the public where possible
4. **An improved NOAA library organizational structure**
 - central coordination of the acquisition and distribution of core NOAA-wide information resources
 - coordinates the provision of services via phone, email, chat, social media, or any other means, regardless of location,
 - addition or re-assignment of librarians to cover added functions of electronic resource management, coordination of services, and training and outreach to NOAA librarians and staff
 - coordination of any closing or downsizing of libraries to ensure that NOAA intellectual heritage is not lost

1. Introduction

The Charge to the Ad Hoc Committee on Libraries:

“For Phase II, the Committee will develop an Action Plan including descriptions of the following:

- The current situation with respect to total library costs, FTEs, and space;
- At least one recommended situation in terms of total library costs, FTEs, and space, and the milestones and dates by which a transition from the current to the recommended state would be achieved (the recommendation should include cost savings while maintaining sufficient library services); and,
- Alternatives to the recommended situation.”

The Committee will provide a draft Phase II Action Plan to the Research Council and the Council will present the Plan to NOAA Leadership and recommend implementation by NOAA.

This report presents the findings of Committee surveys of the current situation in regards to libraries and lays out a plan to create sufficient library services within the NOAA system.

2. The Current Situation: NOAA Libraries

To help determine the current situation at NOAA, the Committee conducted two surveys. The first survey, the *Librarians Survey of Staffing, Costs, and Collections*, sought responses from librarians and other information specialists at NOAA libraries to determine current levels of staffing, funding, IT support, space, and collection size. The second survey, the *Survey of Current Use of NOAA Libraries*, sought opinions of NOAA employees regarding a range of services that they either used or wanted to see from NOAA libraries. This survey also asked several open ended questions which provided additional comments from the respondents.

Key Findings from the *Librarians Survey of Staffing, Costs, and Collections*

NOAA provides neither central funding nor central management of libraries. Many NOAA libraries do collaborate within the NOAA Library and Information Network (NLIN) which allows them to share resources, provide training, collaborate on projects, and maintain a shared catalog of library books, journals and other resources. However, not all libraries participate in this online catalog, the NOAA Library and Information Network Catalog (NOAALINC).

The Committee identified 28 locations which provide library services and for which someone was willing to participate and respond to our survey. Responses were collected over an 8-week period ending January 2012. NOAA also has a number of reading rooms and book collections sometimes referred to as libraries. Due to the limited time frame allowed for this project, the Committee did not attempt to survey these locations.

These libraries are distributed unevenly throughout NOAA as follows:

- The **National Environmental Satellite and Data Service (NESDIS)** operates 6 libraries, including the NOAA Central Library. The NOAA Central Library and its regional libraries serve all NOAA line and staff offices. These libraries coordinate and provide services to other libraries in NOAA and serve as the central repository for NOAA publications.

- The **National Marine Fisheries Service (NMFS)** has the largest number of libraries—15 in all located at the regional science centers and individual laboratories.
- The **NOAA Office of the Chief Information Officer (NOAA CIO)** has one library—the Boulder Laboratories Library which provides service to all of the U.S. Department of Commerce research agencies in Boulder, Colorado -- NIST, NOAA & NTIA. Within NOAA it serves the NESDIS, NWS, NOS, and OAR labs located in Boulder.
- The **National Ocean Service (NOS)** operates two libraries and provides funding for library services in a third location. At present, one lacks funding and the other lacks a librarian.
- The **Office of Oceanic and Atmospheric Research (OAR)** has three libraries of varying sizes and staffing levels.
- The **National Weather Service (NWS)** supplies approximately 50% of the funding for two libraries-- one of the libraries under NESDIS and another at the National Weather Center in Norman, OK.

Appendix A gives further details on NOAA libraries with a more detailed breakdown of staffing, costs, and collections. *Appendix B* contains a directory of NOAA libraries arranged by geographical location. The directory gives details about each library, including address, phone and fax numbers, staff members, and a description of each library's collections.

Staffing

- Responses show that 65 persons work in NOAA libraries—about 2/3 federal and 1/3 contract. The professional staff are all well-qualified for their positions; all have a Master's degree in Library and Information Science or its equivalent, and some also have subject specialty degrees.
- Most of the NOAA libraries have a staff consisting of only one or two persons, and many of those are part-time. Some staff have collateral duties that leave them little time for library work. Others have non-librarians who are charged with maintaining the library but who do not have the training to do so. Several libraries currently face an uncertain future due to lack of staff and/or funding.
- Currently, the NOAA Central Library has a staff of 16, the Boulder Laboratories Library has a staff of 10, and all the rest of the libraries have a staff of three or less.

Costs

Many costs in NOAA libraries were difficult to determine. For example, labor costs and centrally-coordinated subscription costs were fairly easy, but rent and utilities were hard to determine given the many different ways NOAA pays for them. Libraries reported \$9.865M in costs in response to the questionnaire the Committee sent out. This includes labor, journals and books, supplies, equipment, both personal and service contracts, and other costs. It includes only a small portion of rent and utilities since that number was difficult to determine.

NOAA spends \$3.85M for labor among the libraries surveyed, excluding contract labor. Well over half that cost can be attributed to the two libraries with the largest staffs—the NOAA Central Library and the Boulder Laboratories Library. The remaining NOAA libraries spend about \$57K each per year for labor.

NOAA libraries as a whole spend a little over \$3M for journal subscriptions, both print and electronic. Again, the NOAA Central Library and the Boulder Laboratories Library account for a sizeable portion of that total-- \$1.38M. NOAA libraries spend very little on books and e-books, and Boulder Laboratory Library accounts for

half of that total. And NOAA libraries spend an insignificant amount--\$63K--on other traditional library costs such as preservation, binding, supplies, and storage.

NOAA libraries spend about \$2M on contracts. The NOAA Central Library spends about \$1.5M of this total. About half of the NOAA Central Library's \$1.5M pays for contract labor which is not included in the labor costs mentioned above.

As noted above, to determine just what NOAA spends on rent and utilities for libraries is difficult. Only a very few libraries even reported an amount. Some reported nothing because the facility included it as part of its overhead. To determine this cost would require further investigation and the Committee did not have the time or resources to easily determine this.

IT Support

Generally speaking, most NOAA libraries rely on someone other than library staff to perform IT support and determining these costs is very difficult. The survey reported a total cost for this service of \$52K which probably does not reflect the true cost. Further investigation would be required to determine the actual costs.

Space/Collection Size

Libraries in NOAA occupy nearly 90,000 square feet of space. The NOAA Central Library and the Boulder Laboratory Libraries account for nearly half of this total. Most libraries are relatively small with some occupying no more than a few hundred square feet.

Collection sizes range from a few hundred items for the smallest libraries, to tens of thousands of items for the larger libraries, to well over half a million items for the NOAA Central Library. The Committee again could not easily determine this number since not all of every library's collection has been cataloged in a machine-readable form. The NOAA Central Library has probably well over half of the total number of volumes residing in libraries at NOAA.

Almost every library has a special collection that is unique and not found anywhere else. Libraries reported over 46,000 items of special/unique collections. Many libraries also hold special format materials such as reprints, microforms, maps and charts, and oversized items. Very few libraries hold items in offsite storage.

NOAA has made great investments over time in building collections and training librarians. These investments maintain the corporate memory and heritage of NOAA. Losses have already occurred in NOAA libraries from lack of funding, the loss of positions, and the downsizing and disposal of resources and collections.

A number of NOAA libraries have closed over the past 20 years. Collections in these locations were either discarded or distributed to other libraries within NOAA or in other agencies.

3. The Current Situation: NOAA Library Users

The second survey, the *Survey of Current Use of NOAA Libraries*, revealed the attitudes of NOAA library users towards NOAA libraries and elicited many comments.

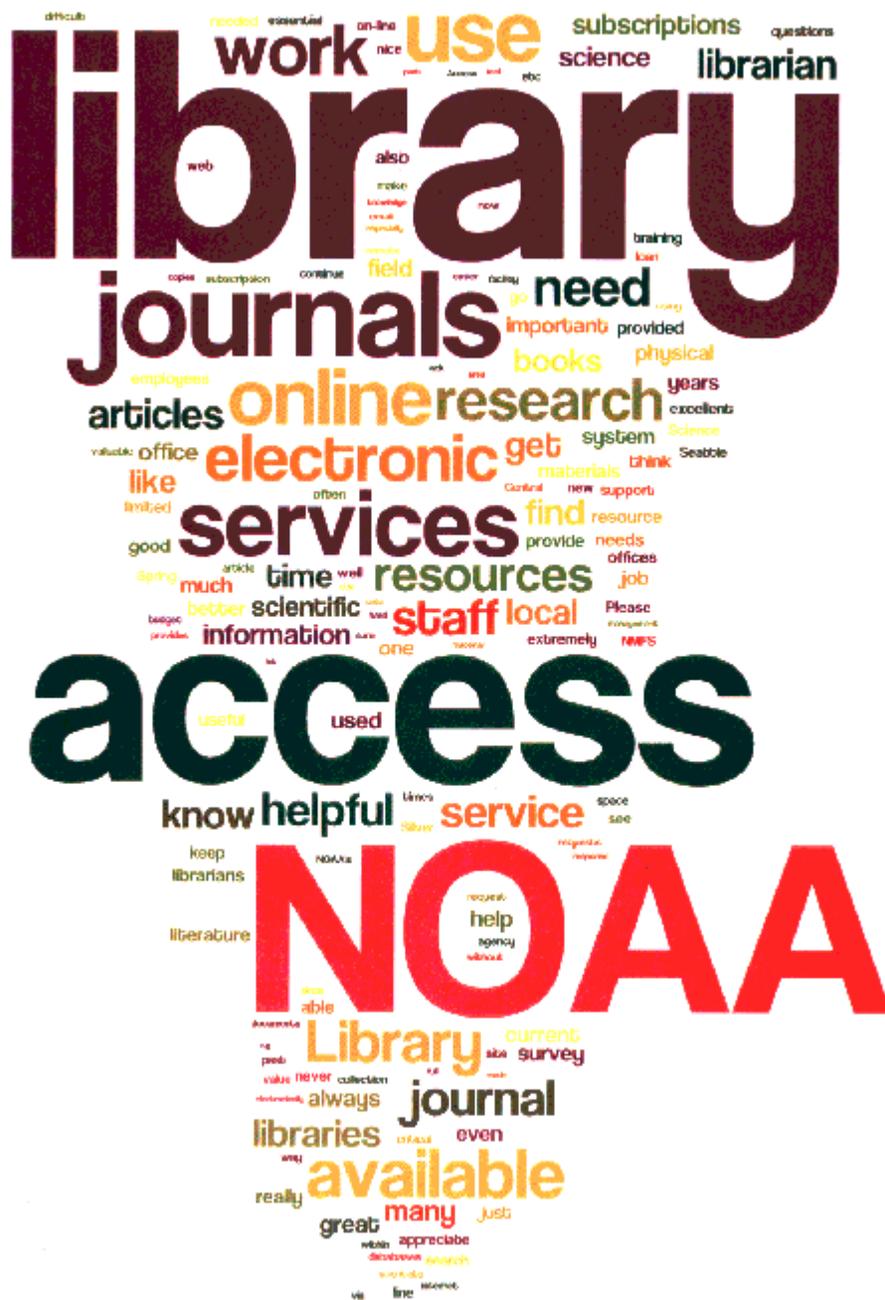
Key Findings from the Survey of Current Use of NOAA Libraries and the Ratings by NOAA Staff Regarding the Value and Effectiveness of NOAA Libraries

The Committee prepared an online questionnaire to find out the current usage and attitudes of NOAA staff towards NOAA libraries. The Committee used SurveyMonkey to collect the responses and sent out the link to the questionnaire in mid-January 2012.

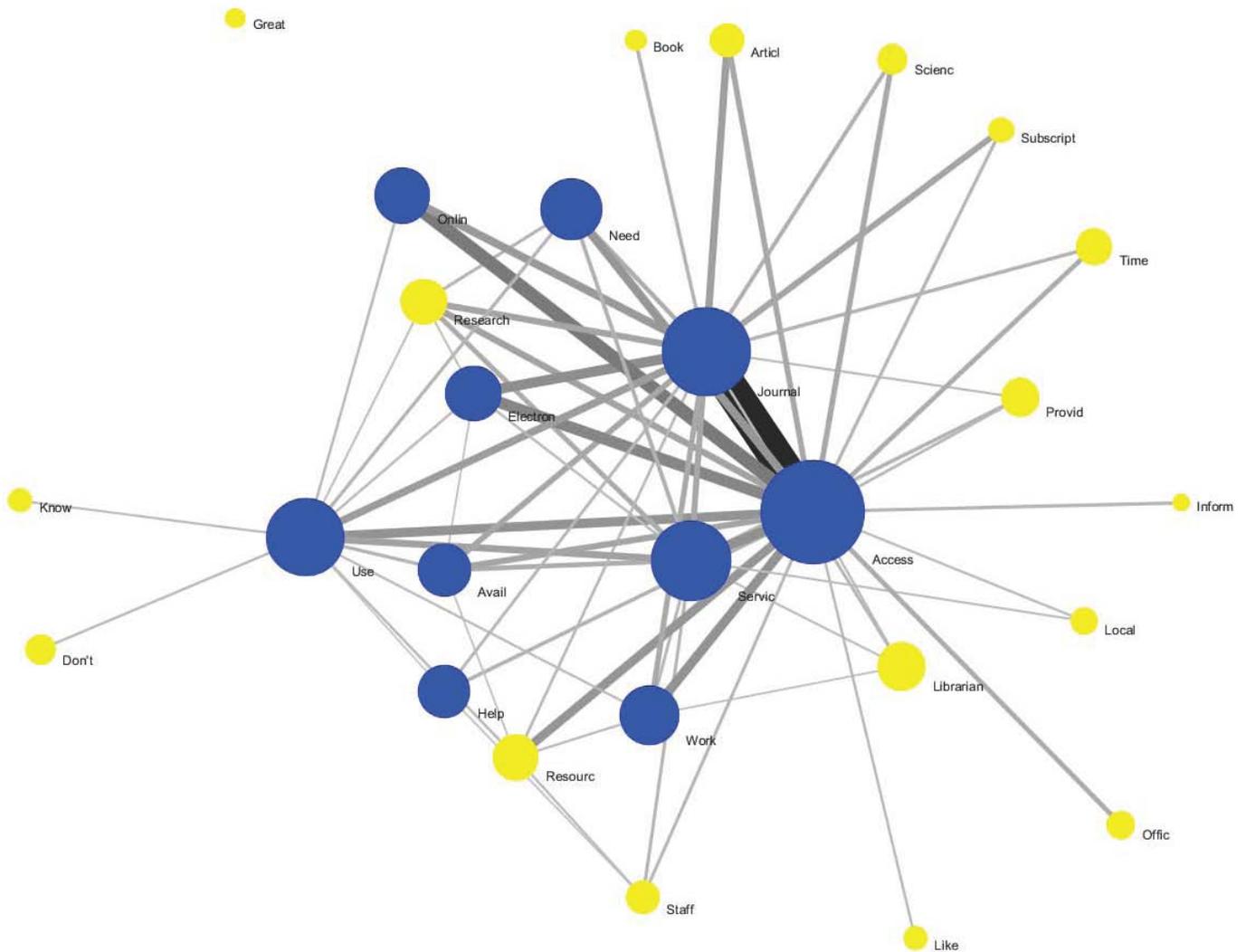
The response was very good. A total of 3,444 NOAA federal and contract employees completed the questionnaire. Of those responding 2,674 were federal employees, 742 were contract employees, and 39 chose to skip the question. Work Force Management reports 12,882 federal workers at NOAA (12,516 full-time, 246 part-time, and 120 other), so 20.75% of the NOAA federal workforce responded. The number of contract workers is unknown but is believed to be smaller than the federal workforce.

The vast majority of those replying were supportive of library collections and services but noted a clear lack of the availability of electronic journals and other online services. A few individuals suggested the closing of NOAA libraries because all needed information is free and online which is clearly an uninformed statement. The free Web only provides a very small fraction of the needed scientific information and databases needed to conduct NOAA's science, policy, and management operations. Much of what is needed is proprietary and must be purchased.

Question 13 on the questionnaire asked for "*Any questions or comments you would like to provide regarding NOAA library services and/or collections or the lack of services and/or collections*"? The short answer is a great deal – 1,300 individuals recorded remarks to this question. That is 37.7 % of those starting the questionnaire (1,300/3,444). We have not yet had time to perform a complete content analysis of these statements but to help get some idea of the content we have placed all the words from the comments into two programs, a word cloud and a networking program. The results are shown in Figures 1 and 2 below.



The Word Cloud of Comments (Figure 1), was generated using Wordle (see <http://www.wordle.net>) and provides a visual demonstration of the top 50 words used by the NOAA staff to describe the NOAA libraries, information resources and available services. The font size reports the relative frequency of the words used and the placement and color are random. It is clear from this word cloud that the most frequently used words to describe the NOAA Libraries were **access, journals, services, online, electronic, need, and research.**

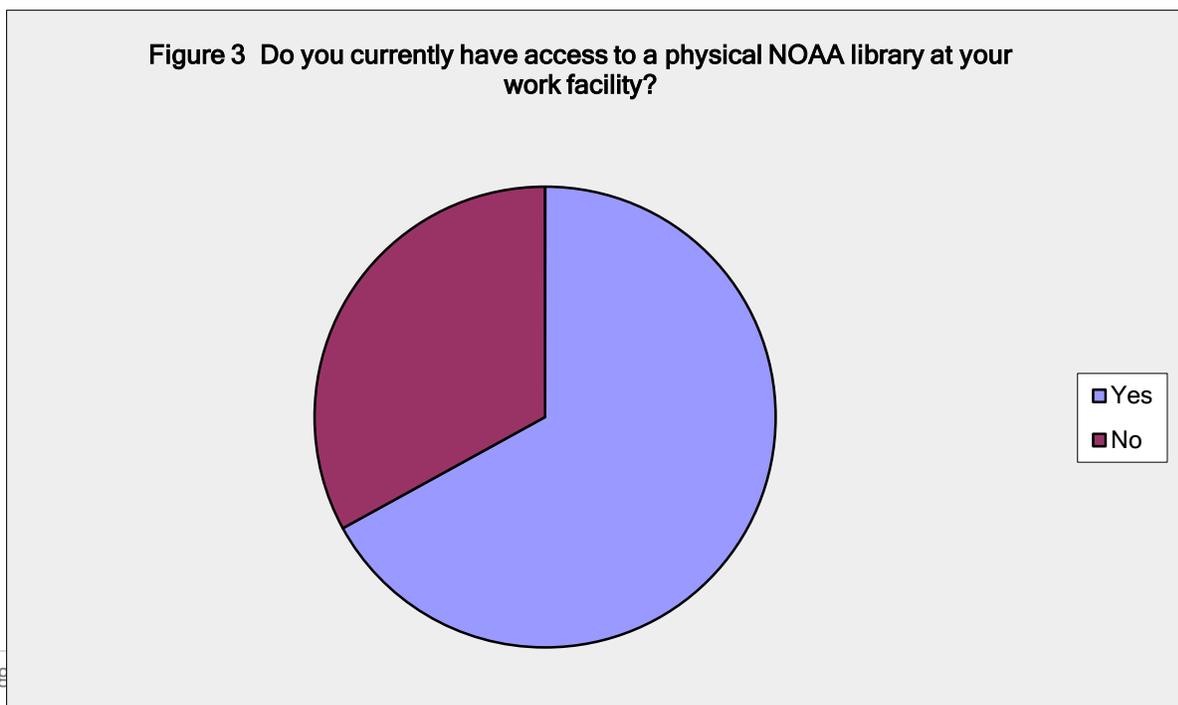


The Word Network of Comments (Figure 2), was generated by using Sci2 (see <https://sci2.cns.iu.edu/user/index.php>). The words “Library” and “NOAA” were used as “stop words” and thus do not appear in this network. The network shows the relationship between 28 words that are used 100 or more times. The nodes (circles) being the words (note: some words are truncated) and the thickness of the lines between the words (edges) represents the two words appearing together in more than 100 comments. From this network one can see there is a clear relationship between **access, journal, service, online, electronic need, use, and research**. Therefore, the message is clear from these two analysis techniques - **online journal access is needed for research**.

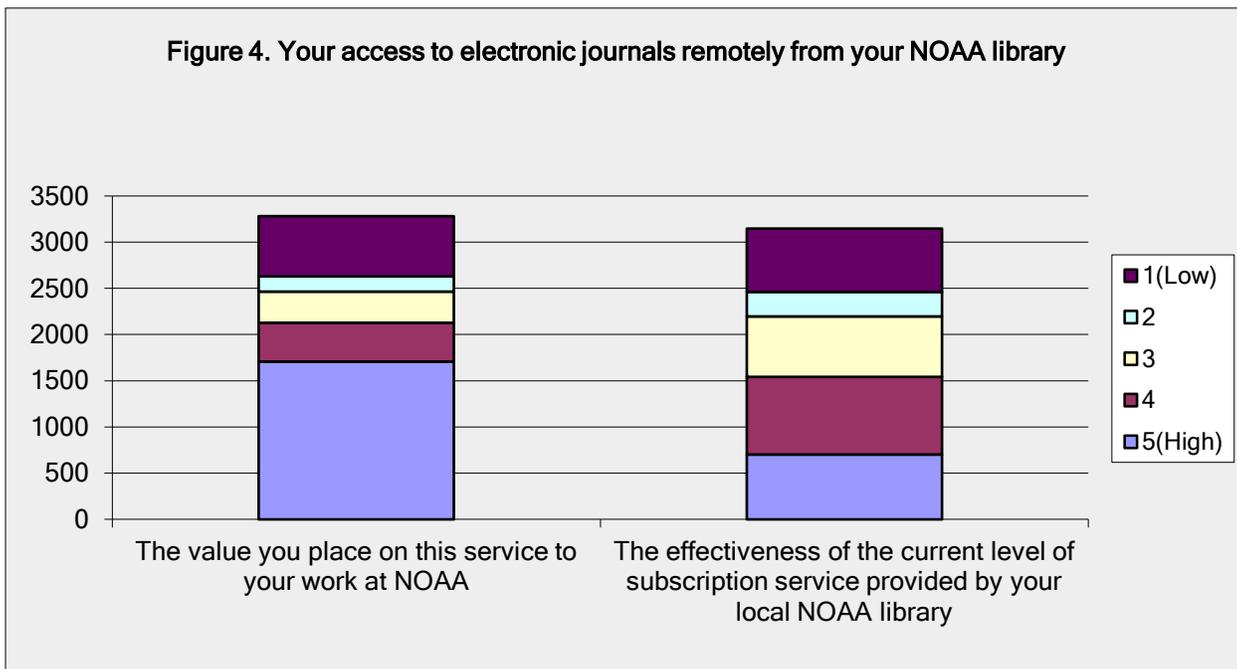
The following is an analysis of each question posed in the questionnaire. The responses were not representative of the percentages in NOAA’s line offices. However, the provision of library collections and services should be for all of NOAA. The percentage per line offices is displayed below in Table 1.

Table 1. Line or staff office in which you work?					
Answer Options	Response Percent	Response Count	WFM Count	WFM %	
NESDIS	8.6%	296	853	6.6%	
NMFS	37.8%	1302	3396	26.4%	
NOS	14.1%	484	1271	9.9%	
NWS	19.1%	657	4854	37.7%	
OAR	12.0%	414	784	6.1%	
PPI	0.3%	11	w/Other	w/Other	
Other	8.1%	291	1724	13.4%	
		<i>answered question</i>	3444	12882	100.0%

The percent of NOAA staff having access to a physical NOAA library at their workplace is 67% as shown in Figure 3 below. It is worth noting, a number of staff responded that they did not know NOAA had libraries. This means more outreach and marketing of library collections and services are needed. The committee do not see the lack of a physical NOAA library at all NOAA locations a problem. Given the desire to make as many resources as possible available online and to provide an online library chat service for NOAA staff helps the problem of no physical library at all locations should be helped. There is a clear need to move as many resources and services online as soon as possible and to work toward providing mobile access as will.



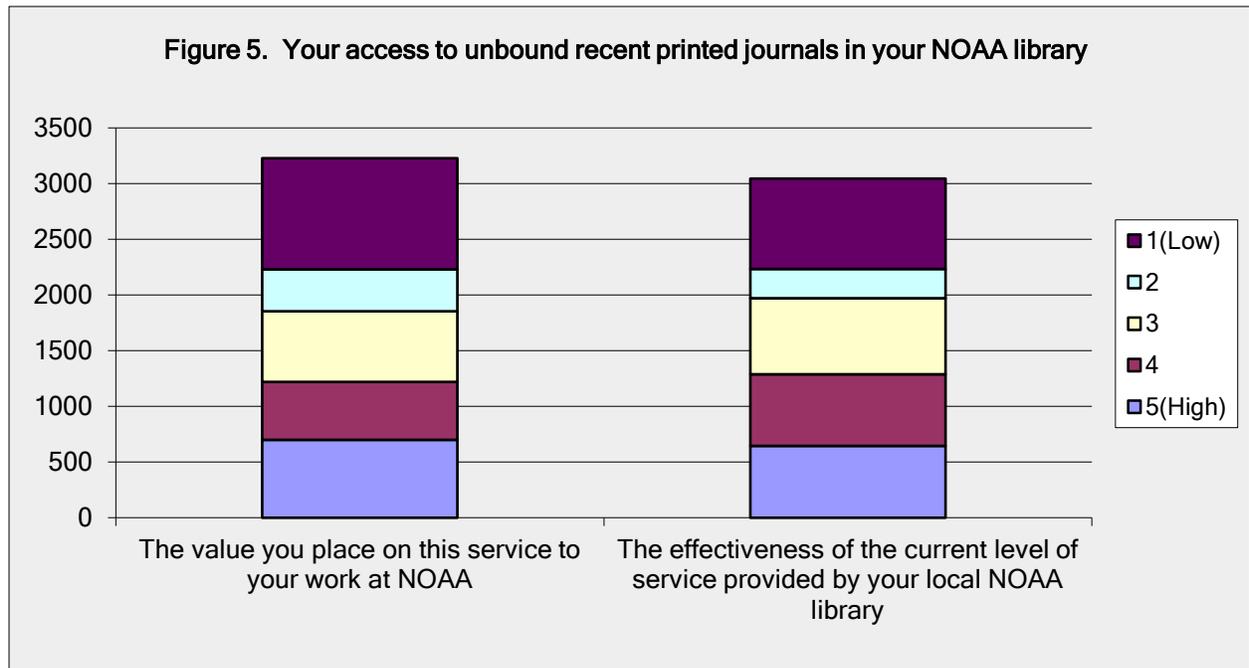
The majority of questions requested the ranking of responses between 1 (low) and 5 (high) as to the value they placed in a library collection or service and the current effectiveness of that service being provided by its local NOAA library. The Ad Hoc Committee is mainly interested in the gap between value and current effectiveness. There is clearly a gap between the value placed upon the access of electronic journals and the ability of NOAA libraries to deliver this service presently as shown in Figure 4 below. This lack of access results in having to obtain items through interlibrary loan which is increasingly more difficult and costs up to \$75 or more per item if not located in another NOAA library.



The questionnaire also notes a goodly number of NOAA staff use other libraries to meet their work related information needs. Table 2 below displays that 32% of those responding (1,063) do need to use of their non-NOAA libraries to meet the work related information need.

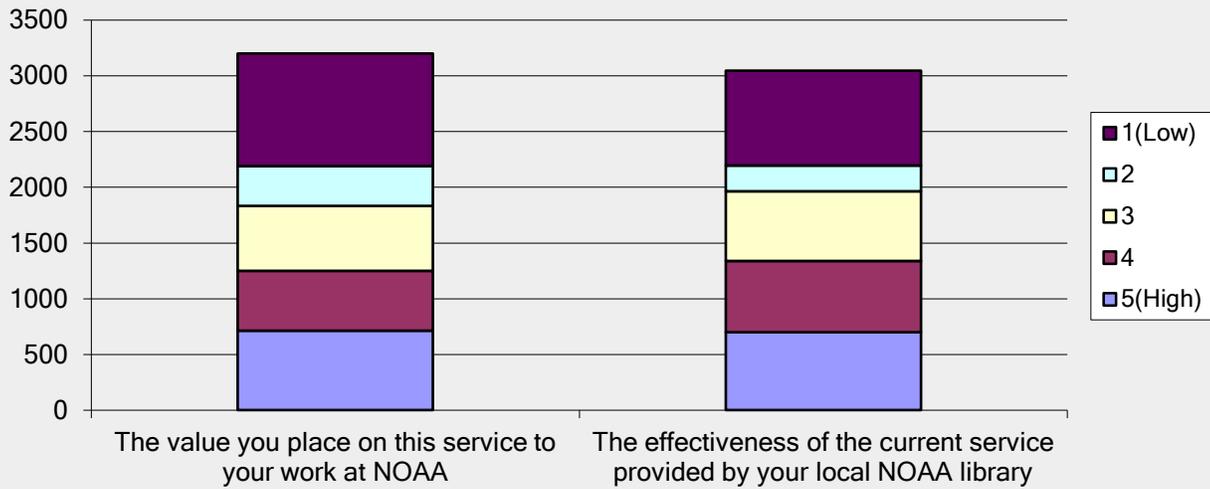
Table 2. Do you use other libraries (non-NOAA) to fill your work-related information needs?		
Answer Options	Response Percent	Response Count
Yes	32.4%	1063
No (If no, skip question #12.)	67.6%	2213
<i>answered question</i>		3276
<i>skipped question</i>		179

Access to current scientific journals is clearly seen as a problem which was expressed in the written comments. There is not a significant difference between the number of researchers that value having access to unbound, recent printed journals and the effectiveness of the libraries to deliver this service as is shown in Figure 5. A significant number of researchers want access to current printed journals.



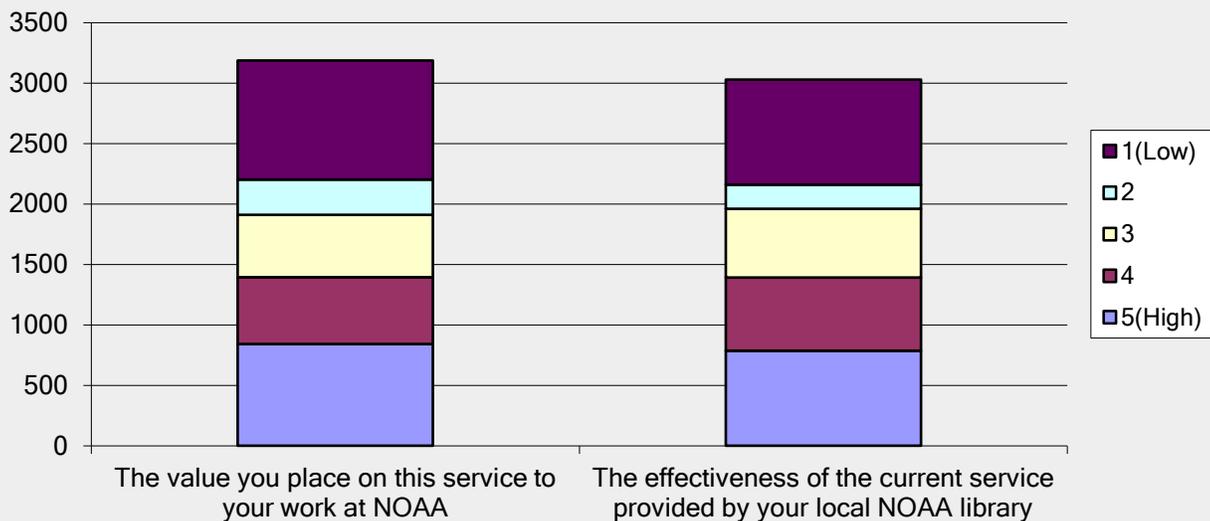
There is also not a great difference between the use of bound journals and the effectiveness of the libraries to deliver this service, see Figure 6 below. The Ad Hoc Committee notes that while there is some value in having NOAA libraries maintain duplicates of bound journals in more than one location, having as complete a run as possible in one location is sufficient for most journals.

Figure 6. Your use of bound, archived printed journals in your NOAA library or by checking them out where possible

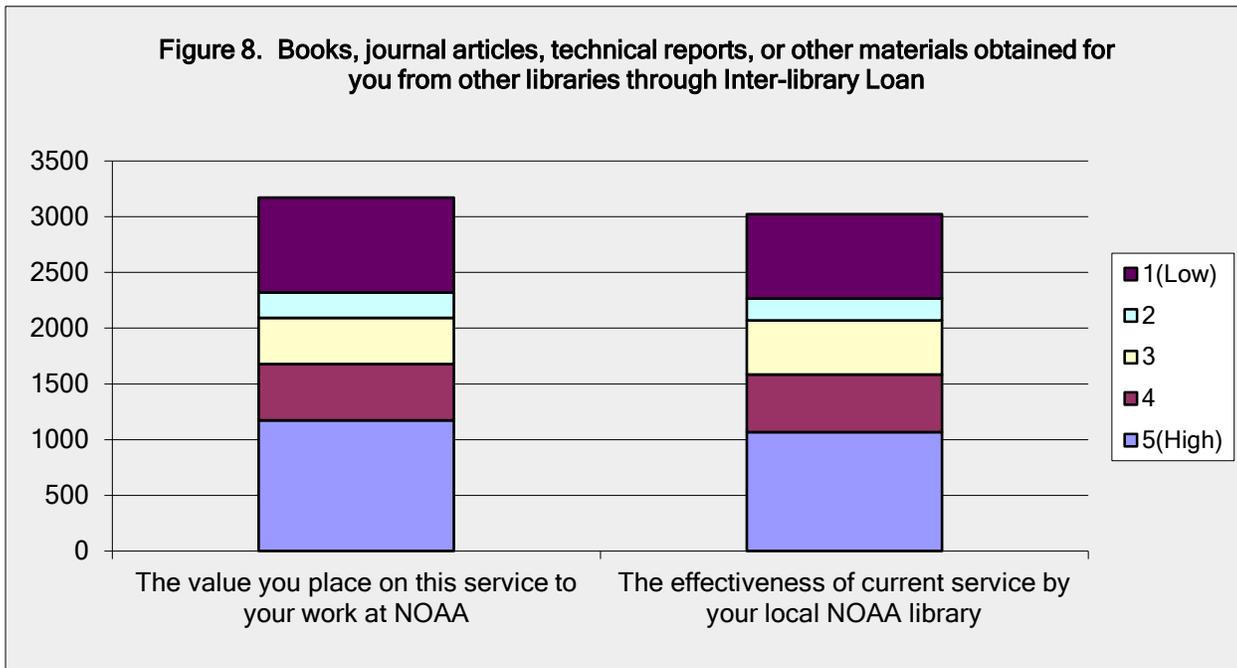


The difference between the value researchers place on being able to check out books from the NOAA libraries and the effectiveness of this service is not large, and there is a high value placed on books as noted in Figure 7. There were a number of comments reporting the need for access to electronic books. The NOAA librarians clearly see this as a need and Boulder Libraries offer a service. This service needs to be expanded.

Figure 7. Books you checked out from your local NOAA library

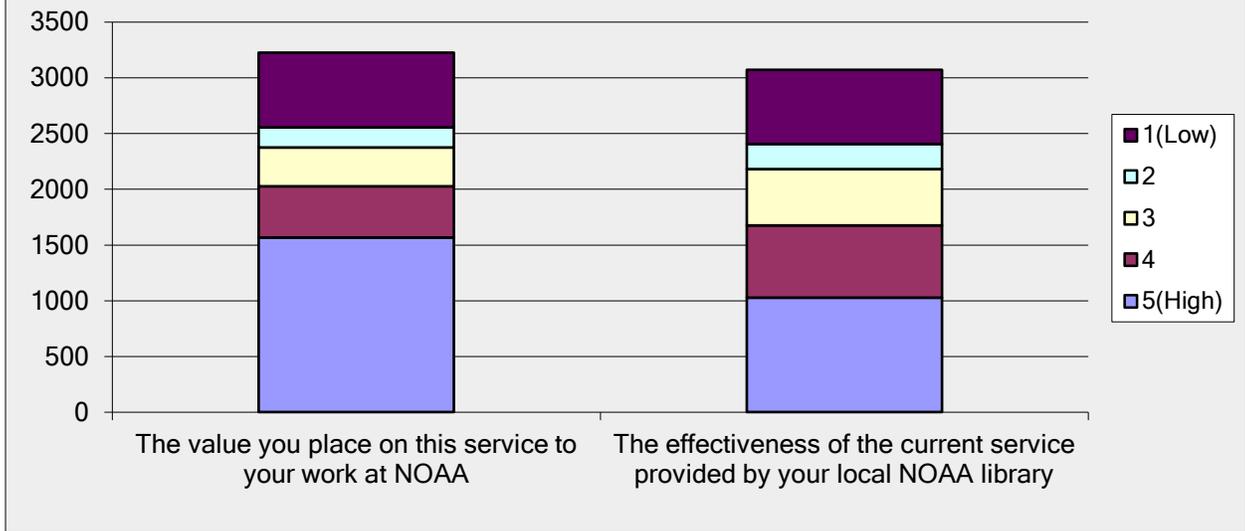


There is little difference between the value and effectiveness on the interlibrary loan services offered as shown in Figure 8 below. There were comments calling for better communication throughout the whole interlibrary loan process. Some of the libraries will be changing their notification process as a result of these comments.



A clear gap between the value placed upon access to databases and the library effectiveness in deliver this service. Figure 9 displaces this gap. The NOAA librarians are aware of the need for additional databases and for more equable access to the current licensed databases provided by some of the NOAA libraries. There are only a few proprietary databases currently licensed for use by all of NOAA. Most of these are currently funded through the NOAA Central Library. The NOAA Central Library has negotiated prices for some NOAA-wide database licenses. However, proposed budgets for FY 2013 will result in these needs going unmet.

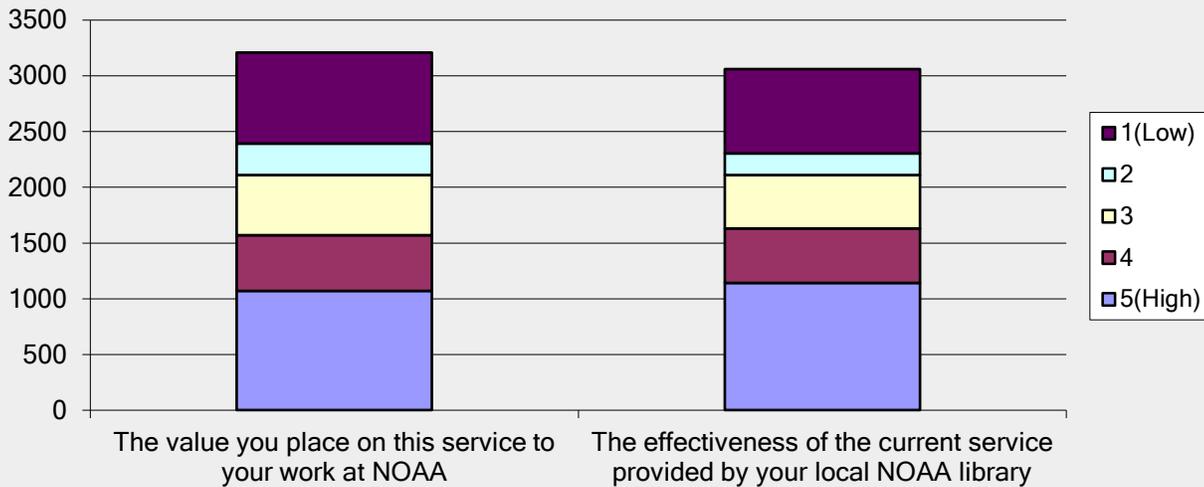
Figure 9. Your access to electronic databases (e.g. Web of Science, Science Citation Index, ASFA, etc.)



There was a small gap between the value and the effectiveness of the NOAA librarians as shown in Figure 10 below. There were, however, many comments from researchers requesting additional assistance from librarians and bemoaning the fact they do not have librarians available onsite to help. Having a chat service staffed by NOAA librarians will help address this need.

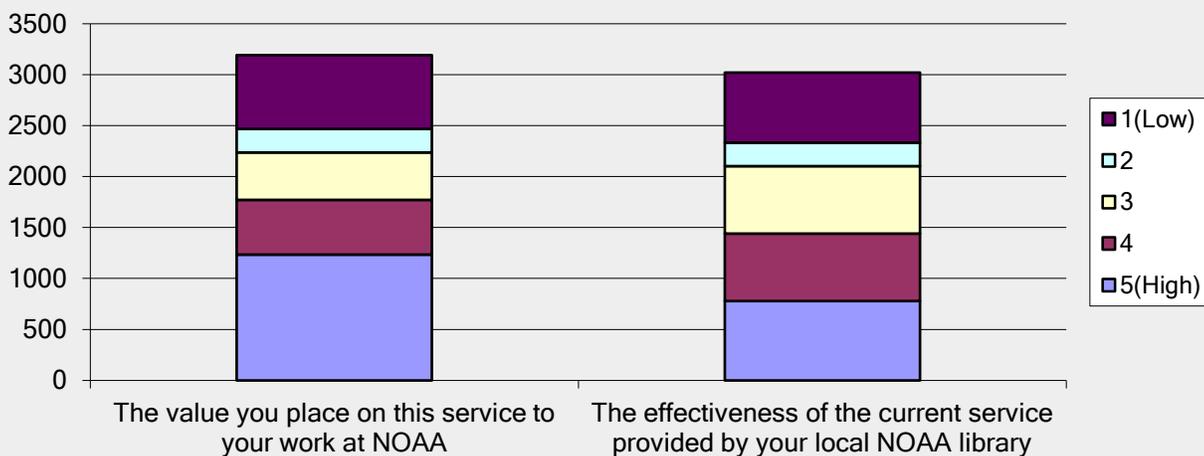
There were 1,039 responses to the question asking NOAA staff to relate other library services they would use. Many of them asked for services currently not offered in all locations, such as document translation and manuscript review. This clearly demonstrates a need for librarians within NOAA who can provide these services. This assistance comes from the skill and knowledge of librarian about the management of knowledge, metadata and database development, not to mention their ability to locate information.

Figure 10. Your consultation with librarians, such as help with literature searches, database selection, online training, etc.



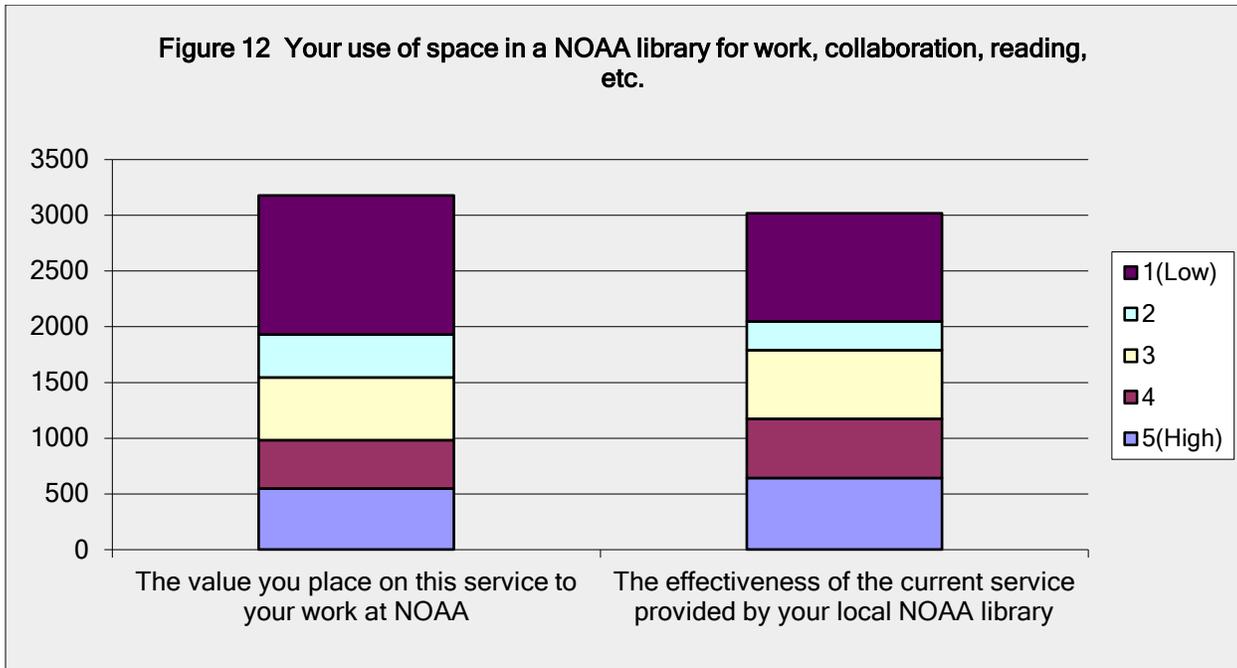
There is a clear gap between NOAA’s access to electronic library services such as online back files to journal collections, citation management software, and subject guides and the libraries effectiveness in providing these. The libraries are falling short on meeting needs which is displayed in Figure 11 below.

Figure 11. Your access to other electronic library services, such as JSTOR, E-books, electronic library catalog, citation management software (e.g. EndNote), subject guides, etc.



There is little difference between the value placed upon using the NOAA library’s space for work, collaboration, and reading and the effectiveness of meeting this need as we see in Figure 12 below. Some expressed a greater need for this service given the decreasing size of work cubicles and the number of cubicles placed in a given area. The expectation is NOAA will have many more staff teleworking or hoteling in the near

future. This will create a clear need for online access to library collections and services. Given that the vast majority of library online services are based upon NOAA IP address, NOAA will need to make wider use of VPN to provide access remotely. Some NOAA IT units believe that VPNs pose computer security problems, but some places in NOAA do make use of them.



The difference between visits to NOAA physical libraries and visits to the libraries’ online collections is large. 28% of those who responded to these questions visited their physical libraries 10 or more times a year while 39% visited online 10 or more times a year. This is shown in Figures 13 and 14 below. Figure 13 also shows that over a quarter of the respondents did not have access to NOAA library. Figure 14 shows a small group that do not have internet access. This is a real problem as the libraries move to put more and more collections and services online.

Figure 13. Please estimate the number of times you have visited your local NOAA library in person over the last calendar year (2011)

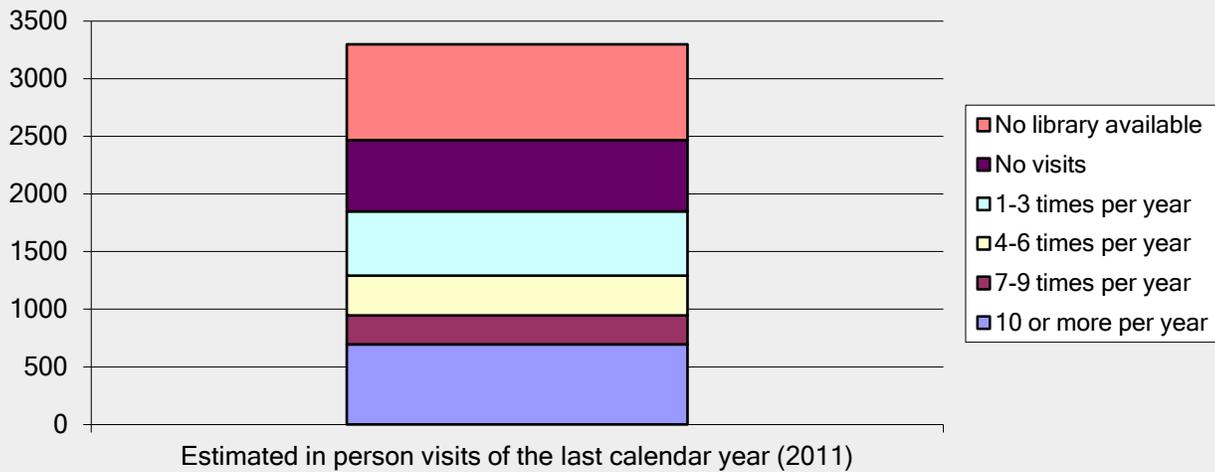
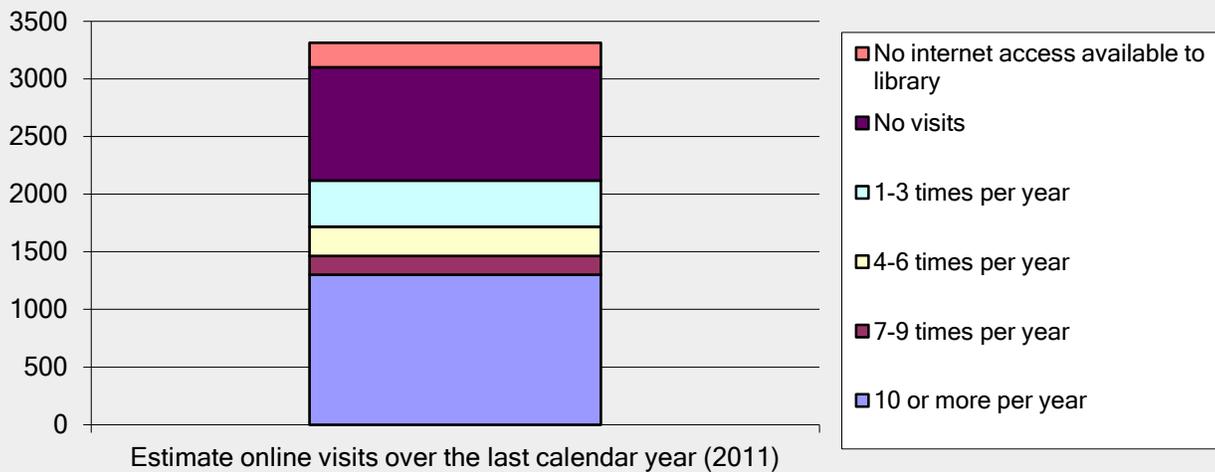
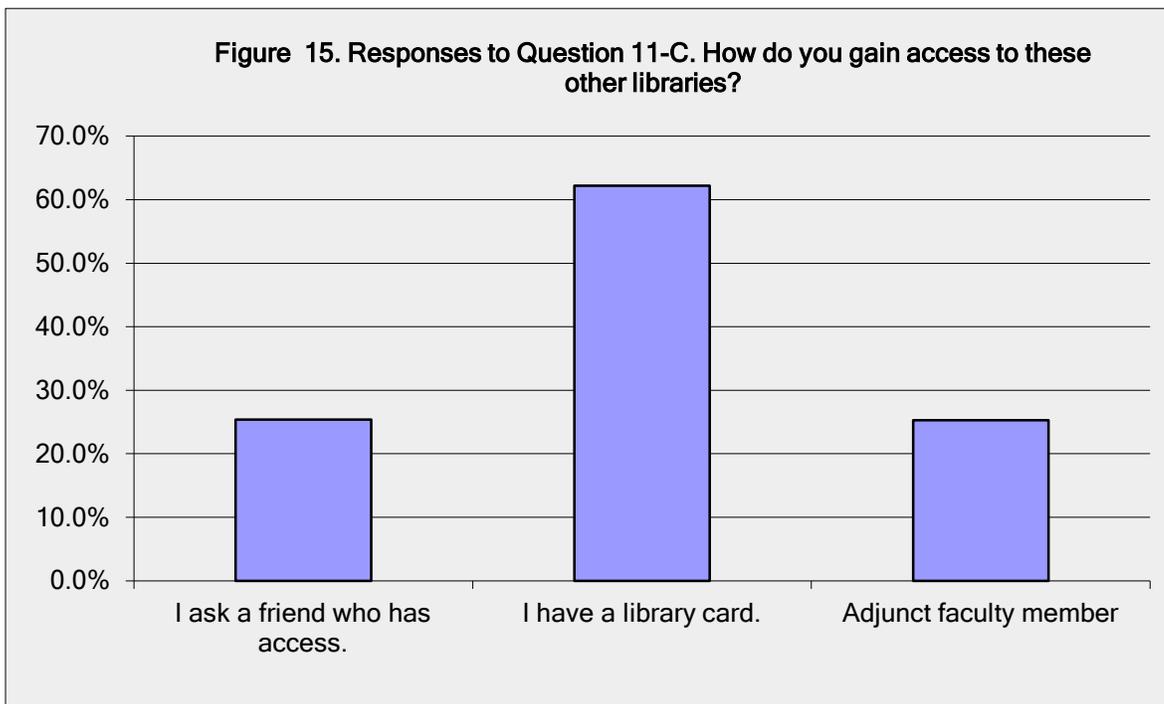


Figure 14. Please estimate the number of times you have visited your local NOAA library online over the last calendar year (2011)



It was reported that 1,063 NOAA staff members use other libraries to meet their information needs related to their work at NOAA. The breakdown on how they get access to these other libraries is show in Figure 15 below. Those asking a friend may not be aware that the site license that their friends’ institution has signed prohibits staff from giving material to individuals not associated directly with their institution. The same hold true for NOAA’s online license agreements. The same does not hold true for printed books because they are owned where the online services are only licensed. It is also worth noting that a very few NOAA staff are adjunct faculty which gives them access but that access is for their teaching not NOAA-related work.



In response to the question “What types of work-related information do you obtained from non-NOAA libraries?” the vast majority of the 1,089 responding reported journal articles. These responses again showed the need for additional journals being accessible online.

As noted in the introductory section of this report 1,300 individuals took time to leave comments. Appendix C: Selected Comments from Questionnaire Question #13 provides a number of these comments relating to research at NOAA.

4. Action Plan and Recommendations

The following section provides an action plan and recommendations:

1. **A set of core resources available to all NOAA staff.** NOAA librarians would develop and maintain a NOAA collection management plan that defines these core resources. This set of resources would include electronic journals, databases, e-books, and library related-software that all of NOAA can access equally, and a distributed set of printed journals, books, reports, maps, and other tangible items within the NOAA library network which librarians can make available through email or interlibrary loan to any user within NOAA. Since some users may have specific information needs, the effective system will also feature support for digital and print resources at the local level. *Total cost: \$2,872K annually, with expected increases of 5-8% annually.*
2. **A NOAA Institutional Repository** in which all NOAA intellectual output is digitally preserved and made available to NOAA staff and the public. This would include a digitization program that would put NOAA legacy publications into a digitized form and a plan to collect all current NOAA output in digital form to build the Repository. *Total cost: \$595K initially; \$320K annually thereafter.*
3. **A strategic communications plan** that will inform and educate all NOAA staff in the resources and services available through the NOAA library system, and provide a continuing educational program for librarians and library staff which permits them to stay current with required skills and knowledge to continually provide high quality services to NOAA's staff and the public where possible. *Total cost: \$35K annually.*
4. **A NOAA library organizational structure** that coordinates the acquisition and distribution of core NOAA-wide information resources and locally-required resources. The NOAA library structure also ensures the provision of information services to NOAA and the public whenever and wherever possible, and the training of library staff and NOAA staff in the use of these services. The structure would feature a virtual network of NOAA librarians that provides services via phone, email, chat, social media, or any other means, regardless of location, and the addition or re-assignment of librarians to cover added functions of electronic resource management, coordination of services, and training and outreach to NOAA librarians and staff. *Total cost: \$617.1K annually.*

The following pages give tables that show the milestones that the Committee recommends with FTE changes, space changes, costs, savings, and start and end dates. In some cases, the milestones are broken down into intermediate steps. The tables also show alternatives to the recommendations. In some cases the recommendations and alternatives have no costs or other changes associated with them and the table reflects that.

1. A set of core resources available to all NOAA staff

Milestones and Intermediate Steps	FTE Changes	Space Changes	Costs	Savings	Start Date	End Date
<u>Milestone 1: Identify and maintain a core electronic collection for all of NOAA</u>						
Step 1. Identify core databases	None	None	\$0	TBD	5/1/2012	07/1/2012
Step 2. Identify core journal collections	None	None	\$0	TBD	5/1/2012	07/1/2012
Step 3. Identify core e-book collections	None	None	\$0	TBD	5/1/2012	07/1/2012
Step 4. Purchase electronic resource management software to manage e-journals, e-books, and databases (Serials Solutions--\$35K)	None	None	\$35K	\$0	5/1/2012	Ongoing
Step 5. Purchase journals for all of NOAA in electronic-only form (increases 8% per year). NOTE: Assumes restoration of the anticipated and actual shortfalls for coming FY <ul style="list-style-type: none"> For CY2013, the Library and Information Services Division will need to restore \$300K in FY2013 funding to meet the \$820K amount needed. Assuming a budget cut of 31% in LISD FY2013 budget, LISD will also need restoration of \$161.2K 	None	None	\$2.823K	TBD	5/1/2012	10/15/2012
<i>Alternative 1 (status quo)</i>	<i>None</i>	<i>None</i>	<i>\$0</i>	<i>TBD</i>		
<i>Alternative 2 (restore to FY11 levels)</i>	<i>None</i>	<i>None</i>	<i>\$1.430K</i>	<i>TBD</i>		
<i>Alternative 3 (fully fund proposal)</i>	<i>None</i>	<i>None</i>	<i>\$2.857K</i>	<i>TBD</i>		
<u>Milestone 2: Develop a core set of virtual services for all of NOAA</u>						

Step 1. Provide a central NOAA library services Web page to link to collections and services	½ FTE	None	\$5K	\$0	10/1/2012	Ongoing
Step 2. Setup and train staff of all NOAA libraries to participate in the ILLiad interlibrary loan service to facilitate delivery of journal articles from all NOAA libraries to customers' desktops	None	None	\$10K	\$0	10/1/2012	9/30/2015
Total	None	None	\$15K	\$0		
<i>Alternative 1 (status quo)</i>	<i>None</i>	<i>None</i>	<i>\$0</i>			
<i>Alternative 2 (restore to FY11 levels)</i>	<i>None</i>	<i>None</i>	<i>\$0</i>			
<i>Alternative 3 (fully fund proposal)</i>	<i>None</i>	<i>None</i>	<i>\$15K</i>			
<u>Milestone 3: Identify and maintain a core printed collection for all of NOAA</u>						
Step 1. Create a list of printed journals held by NOAA libraries and maintain it online	None	None	\$0	\$0	10/1/2012	Ongoing
Step 2. Identify print materials held by multiple NOAA libraries	None	TBD	\$0	TBD	7/01/2012	Ongoing
Total	None	None	\$0	\$0		
<i>Alternatives</i>	<i>None</i>	<i>None</i>	<i>None</i>	<i>None</i>		
Totals for 1.						
<i>Alternative 1 (status quo)</i>	<i>None</i>	<i>TBD</i>	<i>\$0</i>	<i>TBD</i>		
<i>Alternative 2 (restore to FY12 levels)</i>	<i>None</i>	<i>TBD</i>	<i>\$1430K</i>	<i>TBD</i>		
<i>Alternative 3 (fully fund proposal)</i>	<i>None</i>	<i>TBD</i>	<i>\$2872K</i>	<i>TBD</i>		

2. A NOAA Institutional Repository

Milestones and Intermediate Steps	FTE Changes	Space Changes	Costs	Savings	Start Date	End Date
Milestone 1: Continue development of the NOAA Institutional Repository						
Step 1. Maintain electronic storage of the existing Institutional Repository at DOC/NTIS (\$20K annually)	None	None	\$20K	\$0	10/1/2012	Ongoing
Step 2. Develop additional basic functionality for the Repository, a onetime cost	None	None	\$275K	\$0	10/1/2012	9/30/2013
Step 3. Develop further functionality on an ongoing basis (\$50K annually)	None	None	\$50K	\$0	10/1/2013	Ongoing
<i>Alternative 1 (status quo)</i>	<i>None</i>	<i>None</i>	<i>\$0</i>	<i>\$0</i>		
<i>Alternative 2 (restore to FY12 levels)</i>	<i>None</i>	<i>None</i>	<i>\$0</i>	<i>\$0</i>		
<i>Alternative 3 (fully fund proposal)</i>	<i>None</i>	<i>None</i>	<i>\$345K</i>	<i>\$0</i>		
Milestone 2: Create a program to digitize legacy NOAA materials for inclusion in Repository						
Step. 1. Contract with Library of Congress to digitize materials (estimated at \$250K). Needed metadata creation will be done by NOAA librarians.	None	NA	\$250K	\$0	07/2013	On going
<i>Alternative 1 (status quo)</i>	<i>None</i>	<i>None</i>	<i>\$0</i>	<i>\$0</i>		
<i>Alternative 2 (restore to FY12 levels)</i>	<i>None</i>	<i>None</i>	<i>\$0</i>	<i>\$0</i>		
<i>Alternative 3 (fully fund proposal)</i>	<i>None</i>	<i>None</i>	<i>\$250K</i>	<i>\$0</i>		
Totals for 2.						
<i>Alternative 1 (status quo)</i>	<i>None</i>	<i>None</i>	<i>\$0</i>	<i>\$0</i>		
<i>Alternative 2 (restore to FY12 levels)</i>	<i>None</i>	<i>None</i>	<i>\$0</i>	<i>\$0</i>		
<i>Alternative 3 (fully fund proposal)</i>	<i>None</i>	<i>None</i>	<i>\$595K</i>	<i>\$0</i>		

3. A strategic communications plan

Milestones and Intermediate Steps	FTE Changes	Space Changes	Costs	Savings	Start Date	End Date
Milestone 1: A coordinator and committee to create and deliver educational, outreach, and marketing programs for the NOAA libraries (\$20K for creating web-based products and limited printed materials)	None	None	\$20K	\$0	10/1/2012	On going
<i>Alternative 1 (status quo)</i>	<i>None</i>	<i>None</i>	<i>\$0</i>	<i>\$0</i>		
<i>Alternative 2 (restore FY12 levels)</i>	<i>None</i>	<i>None</i>	<i>\$0</i>	<i>\$0</i>		
<i>Alternative 3 (fully fund proposal)</i>	<i>None</i>	<i>None</i>	<i>\$20K</i>	<i>\$0</i>		
Milestone 2: A coordinator and committee to define needed continuing education programs for the NOAA librarians, identification of online and in person classes which can be taken by staff, and to obtain and report feedback on the classes or courses taken by librarians (\$15K for web-based courses and products)	None	None	\$15K	\$0	10/1/2012	On going
<i>Alternative 1 (status quo)</i>	<i>None</i>	<i>None</i>	<i>\$0</i>	<i>\$0</i>		
<i>Alternative 2 (restore FY12 levels)</i>	<i>None</i>	<i>None</i>	<i>\$0</i>	<i>\$0</i>		
<i>Alternative 3 (fully fund proposal)</i>	<i>None</i>	<i>None</i>	<i>\$15K</i>	<i>\$0</i>		
Totals for 3.						
<i>Alternative 1 (status quo)</i>	<i>None</i>	<i>None</i>	<i>\$0</i>	<i>\$0</i>		
<i>Alternative 2 (restore FY12 levels)</i>	<i>None</i>	<i>None</i>	<i>\$0</i>	<i>\$0</i>		
<i>Alternative 3 (fully fund proposal)</i>	<i>None</i>	<i>None</i>	<i>\$35K</i>	<i>\$0</i>		

4. A NOAA library organizational structure

Milestones and Intermediate Steps	FTE Changes	Space Savings	Costs	Savings	Start Date	End Date
Milestone 1: Migrate library system functions from other NOAA library systems to NOAA Library and Information System Catalog and discontinue redundant systems	None	None	None	\$ 15K	7/1/2012	9/30/2012
<i>Alternatives</i>	<i>None</i>	<i>None</i>	<i>\$0</i>	<i>\$15K</i>		
<i>Alternative 2 (restore FY12 levels)</i>	<i>None</i>	<i>None</i>	<i>\$0</i>	<i>\$15K</i>		
<i>Alternative 3 (fully fund proposal)</i>	<i>None</i>	<i>None</i>	<i>\$0</i>	<i>\$15K</i>		
Milestone 2: Participation by all of NOAA's libraries in central services (\$2,000 for chat service; \$100 for social media services)	None	None	\$2.1K	None	10/1/2012	Ongoing
<i>Alternatives</i>	<i>None</i>	<i>None</i>	<i>\$0</i>	<i>\$0</i>		
<i>Alternative 2 (restore FY12 levels)</i>	<i>None</i>	<i>None</i>	<i>\$0</i>	<i>\$0</i>		
<i>Alternative 3 (fully fund proposal)</i>	<i>None</i>	<i>None</i>	<i>\$2.1K</i>	<i>\$0</i>		
Milestone 3: Create positions to manage and develop information resources						
Step 1. Create the position of Regional Services Coordinator who will coordinate virtual reference and metadata services, training, and marketing of services to existing and new customers	+ 1 FTE	None	\$150K	\$0	10/1/2012	Ongoing
Step 2. Create the position of Electronic and Print Resources Coordinator who will establish and maintain a plan for electronic and print resources, in consultation with a committee of NOAA librarians.	+ 1 FTE	None	\$150K	\$0	10/1/2012	Ongoing
Step 3. Create the position of Repository coordinator who will have responsibility to digitize legacy NOAA materials, collect current NOAA materials, and develop and maintain repository software and systems	+ 1 FTE	None	\$150K	\$0	1/1/2013	Ongoing
Step 4. Create position of one contract cataloger to create the metadata needed to add materials to	None	None	\$90K	\$0	10/1/2013	On going

the IR for NOAA publications (\$85K) + IT costs for one workstation (\$5K)						
Step 4. Create the position of Web services coordinator to provide a central Web page to deliver collections and services	½ FTE	None	\$75K	\$0		
<i>Alternative 1 (status quo)</i>	<i>None</i>	<i>None</i>	<i>\$0</i>	<i>\$0</i>		
<i>Alternative 2 (restore FY12 levels)</i>	<i>None</i>	<i>None</i>	<i>\$0</i>	<i>\$0</i>		
<i>Alternative 3 (fully fund proposal)</i>	<i>None</i>	<i>None</i>	<i>\$615K</i>	<i>\$0</i>		
Totals for 4.						
<i>Alternative 1 (status quo)</i>	<i>None</i>	<i>None</i>	<i>\$0</i>	<i>\$0</i>		
<i>Alternative 2 (restore FY12 levels)</i>	<i>None</i>	<i>None</i>	<i>\$0</i>	<i>\$0</i>		
<i>Alternative 3 (fully fund proposal)</i>	<i>3FTE</i>	<i>None</i>	<i>\$617.1K</i>	<i>\$15K</i>		

Progress in science is built upon the work of those who came before. Demonstrations of such progress in research can be found in published scientific journals that for several hundred years have been among the most important vehicles for the dissemination of new scientific knowledge.

Committee for Economic Development, 2012

5. Acknowledgements

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Appendix A: Librarians Survey of Staffing, Costs, and Collections.

NOAA has a large number of libraries and facilities that provide library services in a wide number of locations around the country but it is difficult to determine just how many. There are several reasons for this. Firstly, what constitutes a library? Some offices have set up individual libraries and reading rooms that the more established libraries do not know about. Secondly, libraries within NOAA do not come under a single authority, but are administered by different entities. This scattering of library services means that anyone looking to find all of the places in NOAA that qualify as a library would need much more time and effort than the limited amounts that the Committee had to complete its work. For the purposes of this assessment, the Committee will limit itself to those facilities where the Committee could identify someone who would provide responses about staffing, cost, and collection information.

Many NOAA libraries participate in the NOAA Library and Information Network (NLIN) which exists to facilitate cooperation and resource sharing. The NOAA Central Library acts as the coordinating body for this NOAA network of libraries which includes maintenance of an online directory of libraries, providing contracting for serials purchases, providing ILL and chat services, and hosting periodic NOAA librarian conferences and webinars. While other libraries and collections no doubt exist outside this network, the NLIN served as a good starting point for the Committee to identify libraries to include in this report.

Through a direct survey of librarians the Committee learned details about each of these libraries. This report lists the existing and closed libraries by Line Office below. More detail about these libraries appear in Appendix A2. NOAA Library and Information Network Directory.

Existing Libraries

The National Environmental Satellite, Data, and Information Service (NESDIS) operates six libraries:

- The National Oceanographic Data Center (NODC), a component of NESDIS, oversees the **NOAA Central Library** located in Silver Spring, MD—by far the largest library in staff, collections, and square footage.
- The NOAA Central Library also operates branch libraries in Miami, FL, Seattle, WA, and Camp Springs, MD.
 - The **NOAA Miami Regional Library** operates a main library at the Atlantic Oceanographic and Meteorological Laboratory in Miami and a library at the National Hurricane Center/Tropical Prediction Center in Coral Gables.
 - The **NOAA Seattle Regional Library** operates a single library at the Pacific Marine Environmental Laboratory in Seattle.
 - The **Betty Petersen Memorial Library** in Camp Spring, MD, serves the World Weather Building staff. Funding for this library comes from NESDIS and the National Weather Service.
- The National Climatic Data Center, another component of NESDIS, operates the **National Climatic Data Center Library** in Asheville, NC.

The National Marine Fisheries Service (NMFS) operates a large number of libraries and reading rooms at their regional Fisheries Science Centers and in a number of laboratories throughout the country—14, in all. Each library receives funding and direction from the Centers or from the individual laboratory. The librarians cooperate through a NOAA Fisheries Library Consortium. Each regional fishery science center operates several libraries:

- The Northeast Fisheries Science Center (NEFSC) operates four libraries:
 - The **Lionel A. Walford Library** serves the J.J. Howard Marine Sciences Laboratory in Sandy Hook, NJ, and serves as the main library for the NE region.

- The **Woods Hole Laboratory Library** serves staff in Wood Hole, MA.
- The **Dr. James E. Hanks Memorial Research Library and Conference Room** serves staff at the Milford Laboratory in Milford, CT.
- The **Narragansett Laboratory Library Reading & Conference Room** serves the Laboratory staff in Narragansett, RI.
- The Southeast Fisheries Science Center operates three libraries (and another one closed):
 - The **Southeast Fisheries Science Center Library** in Miami, FL serves staff at the Center and serves as the main library of the SE region.
 - The **Mississippi Laboratories Library** serves Laboratory staff in Pascagoula, MS, and Stennis Space Center, MS.
 - The **Panama City Laboratory Library** serves the staff in Panama City, FL.
 - A **Galveston Laboratory Library** exists but has not been staffed or used since the 1990s.
- The Southwest Fisheries Science Center operates three libraries:
 - The **Southwest Fisheries Science Center Library** serves the staff of the Center in La Jolla, CA.
 - The **Santa Cruz Laboratory Library** serves the staff at the Laboratory in Santa Cruz, CA.
 - The **Pacific Grove Library** serves the Environmental Resources Division staff in Pacific Grove, CA.
- The Northwest and Alaska Fisheries Science Centers operate 3 libraries:
 - The **Northwest and Alaska Fisheries Science Centers Library** serves staff in Seattle, WA.
 - The **National Marine Mammal Laboratory Library** serves staff in Seattle, WA.
 - The **Auke Bay Laboratory Library** serves staff in Auke Bay, AK.
 - The **Kodiak Laboratory Library** serves staff at the Laboratory in Kodiak, AK.
- The Pacific Islands Fisheries Science Center operates one library:
 - The **Pacific Islands Fisheries Science Center Library** serves staff in Honolulu, HI.

The NOAA Office of the Chief Information Officer (OCIO) operates the **Boulder Laboratories Library** in Boulder, CO. The Library provides services not only to NOAA but also the NIST and NTIA research labs located on the U.S. Department of Commerce, Boulder Laboratories campus. NIST & NTIA provide approximately half of the funding for the Library via a cross services agreement.

The National Ocean Service (NOS) operates two libraries and provides support for library services in another:

- The **Rice Library** serves NOS and NMFS staff in Beaufort, NC.
- The **Oxford Cooperative Oxford Laboratory Library** serves Laboratory staff in Oxford, MD.
- NOS provides support for library services in Charleston, SC, through the **Marine Resources Library** operated by the College of Charleston. The Library serves the College of Charleston, the South Carolina Dept. of Natural Resources, and the NOAA Charleston CCEHBR Center.

The Office of Oceanic and Atmospheric Research (OAR) operates three libraries:

- The **Geophysical and Fluid Dynamics Laboratory Library** serves Laboratory staff in Princeton, NJ.
- The **Atmospheric Turbulence and Diffusion Laboratory Library** serves staff at the Laboratory in Oak Ridge, TN.
- The **Great Lakes Environmental Research Laboratory Library** serves the Laboratory staff in Ann Arbor, MI.

The National Weather Service (NWS) provides funding for two libraries in the NOAA Library and Information Network:

- The University of Oklahoma and the National Weather Service jointly fund the **National Weather Center (NWC) Library** at the OU campus in Norman, OK.

- NWS also provides 50% of the funding for the **Betty Petersen Memorial Library** in Camps Springs, MD, as noted above.

Closed Libraries

Over the last few decades a number of libraries within NOAA have closed, become “dormant”, or merged with other libraries.

The **NMFS Gloucester Laboratory Library** in Gloucester, MA, closed in 1994. Some of the collection went to the NOAA Central Library and the rest was either distributed to other libraries or discarded.

A **National Weather Service Western Region Library** in Salt Lake City, UT, was closed sometime in the early 2000s and the collection given away or discarded. A **NWS Central Region Library** in Kansas City, MO, was closed sometime earlier. Currently NWS does not have any libraries.

The **NOAA Coastal Services Center Library** in Charleston, SC, had a relatively large collection that included many unique studies from state and local authorities and NOAA that originated with a now-defunct Coastal Zone Information Center (CZIC), as well as other related items. The CZIC materials which represented most of the library holdings went to the NOAA Central Library in 2004. The library closed entirely in 2008. Some of the collection went to the Rice Library in Beaufort; much of the rest went to the NOAA Central Library.

Also in Charleston, SC, the NMFS Charleston Laboratory was transferred to NOS and the **NMFS Charleston Laboratory Library** collection was moved to the Marine Resources Library which serves NOAA, the College of Charleston, and agencies of the State of South Carolina. The collection still exists as separate items within the Marine Resources Library. NOAA funds the continued maintenance of the collection and provision of library services through the Library.

The **NOAA/EPA Library** in Research Triangle Park, NC, closed with the retirement of its long-time librarian in 2006. An existing EPA library in the same facility absorbed the library’s collection.

Four libraries have an uncertain future at the moment. The **NOS/CCEHBR Cooperative Oxford Laboratory Library** in Oxford, MD, serves NOAA staff at the Laboratory. The librarian retired in 2008 and research staff maintain the library with a limited number of staff hours. In addition, in 2009, library funding for the **NOS/Center for Coastal Fisheries and Habitat Research Rice Library** was eliminated. The librarian maintains the collection but has assumed other duties and the future of the library remains uncertain. The **Kodiak Laboratory Library** in Kodiak, AK, and the **International Tsunami Information Center** in Honolulu, HI, each lost its respective librarian in 2010 and no replacement has yet been chosen in either case.

Librarians Survey of Staffing, Costs, and Collections

The Committee conducted its survey of NOAA librarians via email. The questionnaire surveyed four areas of library service—staff, costs, IT support, and space/collection size.

On December 8, 2011, we sent the questionnaire to 27 librarians or other responsible individuals listed in the NOAA Library and Information Network (NLIN) directory. We sent a follow-up email to non-respondents on January 3, 2012. In January, we also contacted others associated with libraries that we had missed earlier or that we had become aware of in the interim.

We received responses with details on 28 libraries. We normalized the responses on a master spreadsheet and drew our conclusions from this data.

Staff

The questionnaire asked librarians to report the number of staff members in one of three broad categories-- professional librarians, support staff, and other staff. The questionnaire further asked for a breakdown of each of these categories into whether the staff was federal, contract, or other status (e.g., volunteer or intern), and then a breakdown by full-time vs. part-time. For each category the questionnaire also asked for the type of educational degrees held by the staff members.

The overall results show that 65 persons work in NOAA libraries; 38 professional librarians, 18 support staff, and 9 other staff. A breakdown by type of employee shows 40 persons have a federal position, 19 have a contract position, and 6 fall into the volunteer or intern status. Of the 65 library personnel, 38 have a Masters in Library Science or Information Studies and several have other advanced degrees. In addition, some have or are currently seeking an undergraduate degree in a related science subject.

Seventeen of the libraries employ a single person; many others employ only two. Many of these one- and two-person libraries have staff that only work a few hours per week. Of the remaining few libraries with one or two staff members, those persons are working less than full-time.

This report will next examine each category in more detail.

Professional Librarians

The Professional Librarian category includes those with the job title Librarian or its equivalent. These individuals have typically obtained a Masters in Library Science or Information Studies.

Among the 39 persons holding a professional librarian position, a large number (14) work at either the NOAA Central Library (9) or the Boulder Laboratories Library (5), the two largest libraries in staff, space, and collections. Of the remaining libraries, one library had 3 professional positions, one library had 2, and most of the remaining libraries had only a single professional position. A few libraries (6) do not have a professional librarian at all.

The results showed more federal employees (28) than contract employees (10) among the professional staff, with one position provided by an outside funding source (university-provided).

Most professional librarians work full-time, but a sizable number (10) work part-time with the number of hours worked varying from a low of one hour per week to a high of 32 hours per week.

All professional librarians have at least a Master's in Library Science (MLS) or its equivalent. Several of the professional librarians also have either an undergraduate degree in a related science subject and/or an additional advanced degree.

Support Staff

Support Staff includes anyone who works primarily in the library but that does not have the professional job title of Librarian. This includes library clerk, library technician, or other person who works primarily in a library setting.

Libraries reported a total of 18 support staff NOAA-wide. The NOAA Central Library (5) and the Boulder Laboratories Library (5) account for a little more than half of the total.

A comparison of the status of support staff shows 8 federal employees, 7 contract employees, and 3 that fall into the other category. Two-thirds (12) work full-time and the rest part-time. The number of hours range from 12-20 hours/week. Degrees for support staff range from undergraduate students to a couple of employees with an MLS.

Other Staff

The Other Staff category includes anyone who does not fall into the professional or support categories. This includes any staff members who have collateral duties that put them in the library part of the time, volunteers, students, or anyone else not designated professional or support.

The survey results showed only 9 employees in the Other category. Most have other duties outside the library and all but one work part-time. Most work very few hours per week (anywhere from 1-6 hours). Of these, two have an MLS degree, while at least 5 have a Bachelor of Arts, and one a Ph.D.

Clearly, NOAA libraries rely increasingly on contract employees to fill mostly support positions but also some of the professional positions. Many NOAA facilities use employees with collateral duties to staff the library and perform minimal library services.

Library Costs

NOAA spends \$3.89M for labor and benefits in the libraries that we surveyed; excluding the cost of labor contracts which several libraries maintain. Labor and benefits at the two largest libraries—NOAA Central Library and the Boulder Laboratories Library—account for \$2.3M of this total. All other NOAA libraries combined cost \$1.6M for labor and benefits; approximately \$57K per library in labor costs.

Only five libraries reported an amount for rent and utilities. Often the library rent and utilities are included within a facility's overall costs and is not broken out. This makes it very difficult to state any generalities. Of those that did, the total spent comes to around \$418K. We can make a rough estimate based upon the cost per square foot for space in the Silver Spring Metro Center complex and the total number of square feet contained in the NOAA library system. The total area used by NOAA libraries comes to roughly 82,000 square feet. Multiplying this number by the estimate of \$55.00 per square foot in Silver Spring gives a total cost of \$4.51M.

NOAA spends, through its libraries, around \$3.179M on subscriptions to both print and electronic journals and databases. This does not include all subscriptions that individual offices in NOAA may acquire on their own, and we had no easy way of getting at that information through this process. Again, together the NOAA Central Library and the Boulder Laboratories Library account for a large amount of the total--\$1.382M—and Boulder accounts for more than half of that total. Only some of those subscriptions are available to all of NOAA; much is only available to offices in the DC and Boulder areas, respectively.

Compared to journal and database subscriptions, NOAA libraries spend a paltry amount on electronic and print monographs--\$82,590 total for all libraries. Boulder Laboratories Library accounts for half of this

total—around \$40K, so most other libraries—including the NOAA Central Library--do not spend very much on updating the current book collection. This will almost certainly shrink even further in the current budget environment.

NOAA libraries do spend a substantial amount on contracts. All libraries together spend \$2.026M. The NOAA Central Library spends around 75% of this--\$1.536M. About half of that pays for library contractor staff. The remainder pays for photocopier lease, IT support, software licensing, etc.

NOAA libraries collectively spend insignificant amounts on preservation, binding, supplies, equipment, and offsite storage. Altogether the amount spent for all of these activities came to just under \$63K, or a little over \$2K per library.

IT Support

Responses show that most of the libraries rely on someone outside the library but within the local NOAA facility for IT support although some libraries perform some IT duties. For those that report a dollar amount spent, the total for all of NOAA comes to just under \$50K. However, most libraries either reported a cost of \$0.00 or did not provide a number at all. The Committee did not have enough time to gather this information for each of the 26 libraries, so this remains an area for further investigation.

Library Space and Collections

The area occupied by libraries in NOAA varies widely from 224 sq. ft. for the smallest space to ca. 28,000 sq. ft. for the NOAA Central Library. The average area comes to 2933 sq. ft., but if one removes from the calculation the two largest libraries—the NOAA Central Library and the Boulder Laboratories Library—the average comes to only 1671 sq. feet. All together, NOAA libraries occupy 82,125 sq. ft. of floor space, but the two largest libraries occupy over 38,000 sq. ft., or nearly half of the total space.

The questionnaire asked for the numbers of items that NOAA libraries held in several categories--journals, books, special/unique items, reprints, microfilm, oversized items, and maps/charts. Obtaining an exact or even close approximation in most cases is very difficult. For one, not every item held by a library has been cataloged in the online NOAA Library and Information Network Catalog (NOAALINC), so counting the number of items requires an actual physical count. Many libraries, including the NOAA Central Library, do not know for certain the number of volumes held by the library since counting all would be prohibitive. Secondly, the number also depends upon how one counts. For example, for journals, does one count only bound volumes, loose issues, or completed volumes? The number will vary depending upon the answer to the question.

Perhaps a better measure for all of the collection sizes would have been the linear feet of shelf space used in each category. As an example, the NOAA Central Library has over 3000 linear feet of shelf space in its journal collection. For the present, this report will have to rely on the best estimates of librarians of the number of items.

The questionnaire asked for the number of journal volumes held by a library. With the caveat of methodology cited above, NOAA librarians report a total of 394,154. This number does not include a number for the NOAA Central Library which probably holds another 50,000 at least, and possibly much more. The number is not easy to determine/calculate.

The same is true for the number of all other items. The total number of books and reports comes to more than 230,000, but again this estimate is low. A count of items in the NOAALINC catalog shows over 460,000 NOAA-wide. The actual number would likely come to several hundred thousand more at least and may approach one million in total. In addition to books, journals and special collections, many libraries hold a lot of microforms—over 50,000 items. In a digital age, this resource is of dwindling use.

The number of items held in offsite storage was small—only 1000 estimated. If libraries shrink their footprints, this number will grow and NOAA needs to identify inexpensive storage options.

Several librarians mentioned in their responses that their administration was considering or planning a downsizing of the collection and the footprint of their library. This is also true of the NOAA Central Library. Clearly, in the absence of a coordinated plan to downsize libraries in NOAA, individual laboratories and centers will do so on their own.

Summary

The NOAA library system consists of at least 28 libraries and possibly more monograph collections and reading rooms scattered throughout the country. All but a handful of these libraries are small in space, staff, and collection sizes. However, the fact that there are monograph collections and reading rooms created and maintained at NOAA field locations demonstrates that the field research staff want and need a library and library services to meet the requirements for their unique research programs. About half of the libraries come under the National Marine Fisheries Service with the rest scattered amongst the other Line Offices.

Many libraries have closed or entered a ‘limbo’ status within the past 20 years. Several more, including the NOAA Central Library, are under pressure to downsize or close. Upon retirement, professional full-time NOAA librarian positions are either not being replaced or are being replaced by full-time or part-time contractors who spend a minimal amount of time working in the library while working on other projects. Library budgets are being cut or eliminated, while at the same time, the NOAA research staff are requesting more and more access to information resources, library services, and library staff time for assistance on special projects.

The provision of library services and collections throughout NOAA is inequitable. NOAA facilities that have the fortune to be located near the Silver Spring campus or one of the regional centers, or which are co-located with a university campus have the best access to services and collections. At the other end of the spectrum are NOAA offices that do not have a library or librarian close by and must rely upon other resources or do without.

The same holds true for electronic services. Access to these services by NOAA staff depends largely upon a variety of factors including geographic location, IT networking capabilities/accessibility, and Line Office location. Those that don’t fall into the right cracks are out of luck. Some services are available NOAA-wide, but not enough.

Appendix B. NOAA Library and Information Network Directory.

This directory reformatted for this report with additional information 2/21/2011.

Preface

This directory contains addresses, telephone numbers, web sites, hours, and other details about NOAA libraries. NOAA staff should use their nearest line office library and can contact the NOAA Central Library in Maryland if they do not know which one this is. Please send notice of any changes to Library.Webmaster@noaa.gov at the NOAA Central Library in Silver Spring, Maryland.

Libraries by State

<p>Alaska Juneau Kodiak</p> <p>California La Jolla Pacific Grove Santa Cruz</p> <p>Colorado Boulder</p> <p>Connecticut Milford</p> <p>Florida Miami Panama City</p>	<p>Georgia Savannah</p> <p>Hawaii Honolulu</p> <p>Maryland Camp Springs Oxford Silver Spring</p> <p>Massachusetts Woods Hole</p> <p>Michigan Ann Arbor</p>	<p>Mississippi Pascagoula</p> <p>New Jersey Highlands Princeton</p> <p>North Carolina Asheville Beaufort</p> <p>Oklahoma Norman</p> <p>Rhode Island Narragansett</p>	<p>South Carolina Charleston</p> <p>Tennessee Oak Ridge</p> <p>Washington Seattle</p>

ALASKA, Juneau (Auke Bay)

Library: Auke Bay Laboratory Library
Address: NMFS Alaska Fisheries Science Center
 Auke Bay Laboratories
 Ted Stevens Marine Research Institute
 17109 Pt. Lena Loop Road
 Juneau, AK 99801-8626
Telephone: 907-789-6010
FAX: 907-789-6094
Email: Paula.Johnson@noaa.gov
Hours: 8:00 a.m. - 4:30 p.m., Monday - Friday
Personnel: Paula Johnson, librarian

Library home page:**Lab home page:** <http://www.afsc.noaa.gov/ABL/default.php>**Description of collection and services:** The collection includes books and journals on fisheries science, marine biology, zoology, chemistry, biochemistry, oceanography, and environmental effects (effects of oil, logging, marine litter, etc.).**Currently:** The library moved from the old Laboratory in Auke Bay to the new TSMRI facility in 2007. Currently the library occupies 1200 square feet at TSMRI and contains over 28,000 items, including books, journals, and microforms. The Library is currently downsizing. Records of all items in the Library appear in the NOAA Library and Information Network Catalog (NOAALINC).**ALASKA, Kodiak****Library:** W.F. Thompson Memorial Library**Mailing Address:** NMFS Alaska Fisheries Science Center
301 Research Court
Kodiak, AK 99615-7400**Telephone:** 907-481-1712**FAX:** 907-481-1702**Email:****Hours:** 8:00 a.m. - 4:30 p.m., Monday - Friday**Personnel:** [currently vacant]**Library home page:** <http://www.afsc.noaa.gov/kodiak/library/libraryhomepage.htm>**Lab home page:** <http://www.afsc.noaa.gov/kodiak>**Description of collection and services:** The collection includes books, journals, reports, and reprints on marine biology and fisheries, as well as U.S. Fish Commission Reports from 1871 and Bulletins from 1881. The public may use the library and copy material, but may not remove them from the library.**Collection size and space:** The Library is currently without a librarian. The Laboratory continues to house the books but has reduced its periodicals substantially. Long-term plans are on hold pending budget/personnel issues. Records for the holdings of the Library do not appear in NOAALINC.**CALIFORNIA, La Jolla****Library:** La Jolla Laboratory Library**Address:** NMFS/SW Fisheries Science Center
8604 La Jolla Shores Drive

La Jolla, CA 92037

Telephone: 858-546-7038, 7196**FAX:** 858-546-5651**Email:** Debra.Losey@noaa.gov**Hours:** varies --- 8 hours daily 7:00 a.m./8:30 a.m. to 3:30 p.m./5:00 p.m. Monday - Friday**Personnel:** Debra A. Losey and Robin Schnug**Library home page:** <http://swfsc.noaa.gov/textblock.aspx?&ParentMenuId=121&id=1128>**Lab home page:** <http://swfsc.noaa.gov/>

Description of collection and services: The collection includes journals, technical reports, books, microfiche, and newspapers, archives, and cd/dvd media. The library specializes in fish biology, fisheries, primarily tuna and Pacific fisheries, marine mammals, marine biology and ecology, Antarctica, tuna-dolphin interactions, oceanography, and fishery management. The library provides reference service, collection development and maintenance, document delivery and interlibrary loans.

Collection size and space: The La Jolla Laboratory Library occupies 2328 sq. ft. at the Southwest Fisheries Science Center. The librarian estimates over 180,000 journal volumes and 7200 books and reports including the Inter-American Tropical Tuna Commission (IATTC) collection, over 6000 microforms, some maps and charts, and oversize items. The Library has a number of items in storage at the facility on pallets. The NOAALINC catalog shows records of 7136 items at the Library. Journal and report holdings are listed in the IAMS LIC Union List of Serials <http://library.csumb.edu/iamslic/unionlist/>

The collection has many older materials and unique items, including: major expedition reports, early and extensive holdings of documents & publications of US NMFS and US NOAA, US Bureau of Commercial Fisheries, IATTC, Scripps Institution of Oceanography, California Fish and Game, Sea Grant and many other local, regional, national and international publications relating to marine science and fisheries research.

The laboratory also has an extensive, unique, and independent working collection of reprints on larval fishes known as the Ahlstrom Collection, which is housed and maintained by the SWFSC Larval Fish Collection scientists. The Ahlstrom Collection is not cataloged and is not in NOAALINC. A digital inventory was begun this year, but is suspended due to budget cuts.

The SWFSC La Jolla Laboratory Library has formal borrowing privileges with the University of California San Diego Libraries and the Scripps Institution of Oceanography Library (SIO Library will CLOSE in 2012), but only very limited and decreasing online access to UCSD Libraries digital collections. The laboratory and its library will be moving to a new building across the street in May(?) of 2012. With the closure of SIO Library, the SWFSC La Jolla Library will be the only library with regular hours on the SIO campus, and undoubtedly be seeing an increase in requests for assistance and access to collection.

CALIFORNIA, Pacific Grove

Library: SWFSC Pacific Grove Library

Address: National Marine Fisheries Service
SWFSC Environmental Research Division
1352 Lighthouse Avenue
Pacific Grove, CA 93950-2097

Telephone: 831-648-9028 (J. Mason) or 831-648-8515 (lab)

FAX: 831-648-8440

Email: Janet.Mason@noaa.gov

Hours: 8:30 a.m. - 5:00 p.m., Monday - Friday

Personnel: Janet Mason, biologist. Part-time (2 hours per week) in Library, rest of time other duties.

Library home page: <http://swfsc.noaa.gov/textblock.aspx?id=1128&ParentMenuId=121>

Lab home page: <http://swfsc.noaa.gov/textblock.aspx?Division=ERD&id=1315&ParentMenuId=200>

Description of collection and services: In keeping with ERD's purpose of relating natural ocean variability to fisheries, the library has a collection that focuses on natural ocean variability and fisheries in the California Current region, and coastal upwelling in eastern boundary currents. The collection contains oceanographic and fisheries science journals, reports and books.

Collection size and space: The Library occupies 248 sq. ft. of space at ERD. The staff estimates that the Library holds 6000 journal volumes and 800 books and reports, as well as maps, oversize items, and over 1200 reprints. No records for these items appear in the NOAALINC catalog because the library has never had more than minimal staffing. The library is open to the public by appointment only.

CALIFORNIA, Santa Cruz

Library: SWFSC Santa Cruz Library

Address: National Marine Fisheries Service
SWFSC Fisheries Ecology Division
110 Shaffer Road
Santa Cruz, CA 95060

Telephone: 831-420-3962

FAX: 831-420-3978

Email: Kit.Johnston@noaa.gov

Hours: 8:00 a.m. - 5:00 p.m., Monday - Friday

Personnel: Kit Johnston, Librarian

OCLC symbol: OAT

Ariel no.

Library home page: <http://swfsc.noaa.gov/textblock.aspx?id=1128&ParentMenuId=121>

Lab home page: <http://swfsc.noaa.gov/FED/>

Description of collection and services: The collection includes monographs, journals, and reports on fisheries science and economics, marine biology and fish physiology.

Collection size and space: The Library occupies 2900 sq. ft. The collection contains 7000 books and reports and an estimated 2000 journal volumes. Records for the books and reports can be found in NOAALINC. The SWFSC Santa Cruz Lab has a formal cooperative agreement with the University of California Santa Cruz which, among other benefits, provides lab staff full access to the university's online journals, books, and databases.

COLORADO, Boulder

Library: Department of Commerce Boulder Laboratories Library

Address: MC5
325 Broadway
Boulder, CO 80305

Telephone: 303-497-3271

FAX: 303-497-3890

Email: BoulderLabs.Main.Library@noaa.gov

Hours: 8:00 a.m. - 4:30 p.m., Monday - Friday

Personnel: Dottie Anderson and staff (10 total)

Library home page: <http://library.bldrdoc.gov/>

Lab home page: <http://www.boulder.doc.gov>

Description of collection and services: The Boulder Library was established in the early 50's by NOAA predecessor agencies and has always served all agencies on the Boulder campus. Funding comes through the

NOAA OCIO, the National Institute of Standards and Technology (NIST) and the National Telecommunications and Information Administration (NTIA). The NOAA Laboratories in Boulder fund the NOAA portion of the journal budget. NOAA line offices represented in Boulder are OAR, NESDIS, NWS, and NOS. Funding is divided between the three agencies by annual FTE count.

Collection size and space: The 9393 square foot Main Library is in the NIST building with a 1,276 square foot branch in the NOAA DSRC Building. The Boulder Library took an overall 20% budget cut for FY2012, was asked to no longer purchase print journals, and was tasked to begin the transition to become a “21st Century Library.” The staff consists of 5 professional librarians, 4 library technicians, and 1 library aide. All are federal employees employed by NOAA.

The collection contains books, journals, technical reports, microfiche, compact disks, and audio cassettes to support research in the atmospheric sciences, chemistry, physics, materials science, telecommunications, computer science, plasma and space physics, and mathematics. The hard-copy technical report collection includes complete holdings for reports generated at the Boulder Laboratories since 1954. Records of the book collection can be found in NOAALINC; holdings for the journals are not.

CONNECTICUT, Milford

Library: Milford Laboratory Library

Address: NMFS/NE Fisheries Science Center
212 Rogers Avenue
Milford, CT 06460

Telephone: 203-882-6543

FAX: 203-882-6517

Email: Steven.Pitchford@noaa.gov , Sylvia.Feeney@noaa.gov

Hours: 8:00 a.m. - 4:30 p.m., Monday - Friday

Personnel: Steve Pitchford and Sylvia Feeney

Library home page:

Lab home page: <http://www.mi.nmfs.gov>

Description of collection and services: The library collection is specialized in aquaculture and environmental toxicology. The collection includes 10,000 volumes and 100 journal titles.

Collection size and space: The Library occupies 1420 sq. ft. of space at the Laboratory. Staff estimates 20,720 journal volumes, 2570 books and reports, over 11,000 reprints and a number of microforms. NOAALINC contains records 1800 of the books and reports, but not the journals or reprints.

FLORIDA, Miami

Library: NOAA Miami Regional Library @ AOML (A Branch of the NOAA Central Library)

Address: Atlantic Oceanographic and Meteorological Lab.
4301 Rickenbacker Causeway
Miami, FL 33149

Telephone: 305-361-4428 (general services and reference)
305-361-4429 Linda Pikula

FAX: 305-361-4448

Email: Linda.Pikula@noaa.gov, Gloria.Aversano@noaa.gov, and Christie.Wiley@noaa.gov

Hours: 8:00 a.m. -5:00 p.m., Monday - Friday

Personnel: Linda Pikula, Gloria Aversano (splits time between this library and the NHC/TPC Library), and Christie Wiley

Library home page: <http://www.aoml.noaa.gov/general/lib>

Lab home page: <http://www.aoml.noaa.gov>

Description of collection and services: The library supports coastal and open ocean programs, tropical and hurricane meteorology, air-sea interaction, ocean physics, chemistry, acoustics, atmospheric chemistry, and marine geology. Special collections include: NOAA Laboratories Technical Report Series for atmospheric sciences, the Harris B. Stewart Collected Papers, foreign and Caribbean meteorological reports, handwritten local weather records, WHOI technical reports and dissertations, film loops of weather, and historical weather data of Key West and Miami.

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Library: NOAA Miami Regional Library @ National Hurricane Center/Tropical Prediction Center

Address: 11691 SW 17th Street
Miami, FL 33165-2149

Telephone: 305-229-4406

FAX: 305-553-9879

Email: nhclibrary@noaa.gov

Hours: 9:00 a.m. - 5:00 p.m., Tuesday, Wednesday and Thursday or by appointment

Personnel: Gloria Aversano, Librarian; Linda Pikula, Regional Librarian

Library home page: <http://www.aoml.noaa.gov/general/lib/lib1/nhclib/index.htm>

Lab home page: <http://www.nhc.noaa.gov>

Description of collection and services: The library collection specializes in the field of atmospheric science and tropical meteorology. It includes books, technical reports and journals primarily in relation to all stages of hurricane genesis and development. In addition the library contains local handwritten weather records and observations for Miami. NHC/TPC is a non-lending library.

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Library: NMFS/SE Fisheries Science Center Library

Address: 75 Virginia Beach Drive
Miami, FL 33149-1099

Telephone: 305-361-4229

FAX: 305-361-4499

Email: Maria.Bello@noaa.gov

Hours: 8:00 a.m. - 4:30 p.m., Monday - Friday

Personnel: Maria Bello

OCLC symbol: OAJ

Ariel no.: 199.242.232.10

Library home page: <http://www.sefsc.noaa.gov/library.jsp>

Lab home page: <http://www.sefsc.noaa.gov>

Description of collection and services: The collection includes books, journals, and reprints on marine fisheries, marine biology, endangered species, fisheries stock assessments, ecology, and cooperative gamefish and billfish tagging programs.

FLORIDA, Panama City

Address: NMFS Panama City Laboratory Library

3500 Delwood Beach Road
Panama City, FL 32408

Telephone: 850-234-6541 ext 227

FAX: 850-235-3559

Email: Emily.Harrell@noaa.gov

Hours: M - F 8:00 to 12:00 (subject to change).

Personnel: Emily Harrell

Library home page: <http://www.sefsc.noaa.gov/labs/panama/library/library.htm>

Lab home page: <http://www.sefsc.noaa.gov/labs/panama/>

Description of collection and services: The collection includes approximately 1000 books, 350 hard copy serials, technical reports, reprints, a slide collection, and vertical files on fisheries. The library produces a serials holdings list and a staff publications list, available online. The library also offers librarian chat service M - F 8:00 to 12:00.

HAWAII, Honolulu

Library: Pacific Islands Fisheries Science Center Library

Address: Pacific Islands Fisheries Science Center
2570 Dole Street
Honolulu, HI 96822-2396

Telephone: 808-983-5307

FAX: 808-983-2902

Email: Ani.Au@noaa.gov

Hours: 7:30 a.m. - 12:30 p.m.; 1:30 - 4:30 p.m.
Monday - Friday (closed every other Friday)

Personnel: Ani Au Turner

Library home page: <http://www.pifsc.noaa.gov/library/>

Lab home page: <http://www.pifsc.noaa.gov/>

Description of collection and services: The collection includes books, journals, and reprints, and approximately 800 translations related to the following topics of the Pacific region: marine fisheries, marine ecology, oceanography, marine mammals, marine turtles, and ichthyology.

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Library: Center Library

Address: International Tsunami Information Center (ITIC)
737 Bishop Street, Suite 2200
Honolulu, HI 96813

Telephone: 808-532-6422

FAX: 808-532-5576

Email:

Hours: 9:00 a.m. - 3:00 p.m., Monday - Thursday, by appointment

Personnel: [currently vacant]

Library home page: <http://www.tsunamiwave.info/>

International Tsunami Information Center home page: <http://ioc3.unesco.org/itic/>

Description of collection and services: In support of NOAA and IOC (Intergovernmental Oceanographic Commission) tsunami mitigation efforts, ITIC retains, collects, and disseminates information dealing with tsunamis. The collection includes scientific research, IOC publications, educational materials, post-tsunami surveys, and historical materials. Works from the disciplines of seismology, oceanography, coastal engineering,

and disaster management are found here, in many languages. A resource for visitors and scientists or emergency managers attending ITIC sponsored training, the library also services the Secretariat of the Intergovernmental Coordinating Group for the Pacific Tsunami Warning System (ICG/PTWS, formerly ICG/ITSU), and handles inquiries from the general public.

MARYLAND, Camp Springs

Library: Betty Petersen Memorial Library

Address: NOAA Science Center
World Weather Building Room 103
5200 Auth Road
Camp Springs, MD 20746

Telephone: 301-763-8266

FAX: 301-763-8434

Email: jan.thomas@noaa.gov

Hours: 8:30 a.m. - 5:00 p.m. Monday - Wednesday; Friday

Personnel: Jan Thomas

Library home page: <http://www.lib.ncep.noaa.gov/>

Lab home page: <http://www.ncep.noaa.gov> and <http://www.star.nesdis.noaa.gov/star/>

Description of collection and services: The library contains a specialized meteorological and oceanographic collection of about 7,000 volumes. A small number of those volumes cover physics, mathematics, historical weather information, and computer support. In addition, the library has atlases, a collection of WMO publications, NOAA/NESDIS technical notes and technical reports, NWS/NCEP technical notes and reports, and weather or ocean related publications from other government organizations, from other countries, and from universities.

MARYLAND, Oxford

Library: Oxford Marine Library
Cooperative Oxford Laboratory

Address: NOAA/NOS/CCEHBR
904 South Morris Street
Oxford, MD 21654-1323

Telephone: 410-226-5193 ext 1126

FAX: 410-226-5925

Hours: 8:00 a.m. - 4:30 p.m., Monday - Friday

Personnel: Shawn McLaughlin, Karen Hayman

OCLC symbol: OAX

Ariel no.: 140.90.118.205

Library home page: <http://mrl.cofc.edu/oxford/>

Lab home page: <http://www.chbr.noaa.gov>

Description of collection and services: The Cooperative Oxford Laboratory Library is a part of the National Ocean Service's Center for Coastal Environmental Health and Biomolecular Research Charleston Laboratory. It is a highly specialized library established to assist laboratory biologists in their research on diseases of marine fish and shellfish. The library is in a facility shared by the National Ocean Service and the Maryland Department of Natural Resources. Much of the library collection is made up of current subscriptions to approximately 45 scientific journals in the fields of pathobiology, fisheries, habitat, nature conservation, and

ecology. The library maintains a collection of reprints, newsletters, technical and information bulletins, maps, photographs, newspaper clippings and a dissertation and thesis collection.. The serial and monographic collections total over 13,500 volumes, and there are over 25,000 reprints in the reprint collection.

MARYLAND, Silver Spring

Library:NOAA Central Library

Address: 1315 East-West Highway
2nd Floor, SSMC3
Silver Spring, MD 20910

Telephone: 301-713-2600 ext. 157 (reference and information desk)

FAX: 301-713-4598 (admin.) or 4599 (ILL)

Email: Library.Reference@noaa.gov, Interlibrary.Loan@noaa.gov

Hours: 9:00 a.m. - 4:00 p.m., Monday - Friday

Personnel: Neal Kaske, Library Director, and staff

Staffing: Currently the staff numbers 18--6 federal, 9 contractors, and 3 part-time volunteers.

Library home page: <http://www.lib.noaa.gov/>

Description of collections and services: The collection contains books, historical and current journals, hard-copy technical reports, reports on microfiche and microfilm, and audio cassettes. The library also provides access to digital media in both tangible (CDs, DVDs, etc.) and intangible formats (Internet accessible). Because it is a central library for NOAA, a multi-faceted agency, the collection is also multi-faceted and contains works on meteorology, climatology, oceanography, marine chemistry, marine biology, marine fisheries, remote sensing, and ecology. The public may use the library and make copies, but may not remove the material from the library except on interlibrary loan basis. The library has been a selective government depository for GPO publications since September 1993.

Collection size and space: The Library also maintains the NOAA Library and Information Network Catalog (NOAALINC) which shows the holdings of all participating NOAA libraries to NOAA staff and to the world through a web interface. These NOAA libraries can also use the system to perform traditional library functions such as circulation of materials to staff and receipt records of journals. The NOAA Central Library occupies currently ca. 29,000 sq. ft. of floor space on 2nd Floor of Silver Spring Metro Center III and has an estimated collection size of over half a million volumes. The NOAA Central Library has been asked to reduce its footprint by 30% and has begun planning for this reduction.

MASSACHUSETTS, Woods Hole

Library: Woods Hole Laboratory Library

Address: NMFS/NE Fisheries Science Center
166 Water Street
Woods Hole, MA 02543-1097

Telephone: 508-495-2260

FAX: 508-495-2258

Email: Jacqueline.Riley@noaa.gov

Hours: 7:00 a.m. - 3:30 p.m., Monday - Friday

Personnel: Jackie Riley

Library home page: <http://www.nefsc.noaa.gov/libraries/>

Lab home page: <http://www.noaa.gov/>

Description of collection and services: The Library was established in 1871 by Spencer F. Baird. The collection supports research in marine ecosystems, fisheries stock assessments, biological sampling, oceanography, population dynamics, social sciences, statistics, economics, and protected species. Holdings include complete archives of the US Fish Commission, DFO, CAFSAC, ICES, NAFO, NMFS, and NEFSC bulletins and reports as well as current and rare serials, books, fiches, atlases, and historical items.

MICHIGAN, Ann Arbor

Library: Great Lakes Environmental Research Laboratory (GLERL) Library

Address: 4840 S. State Rd.

Ann Arbor MI 48108-9719

Telephone: 734-741-2242

FAX: 734-741-2248

Email: Giselle.Maira@noaa.gov

Hours: 8:00 a.m. - 4:30 p.m., Monday - Friday

Personnel: Giselle Maira

Library home page: <http://lib.glerl.noaa.gov/library/>

Lab home page: <http://www.glerl.noaa.gov>

Description of collection and services: The collection supports the laboratory's broad ecosystem approach to research activities for both the Great Lakes and marine coastal environments. The current collection emphasizes freshwater studies, particularly in the Great Lakes. Formats include print, film, fiche, audio cassette, and CD-ROM. Current holdings include periodicals, books, technical reports, technical memoranda and dissertations. The public may access the collection for research purposes and may make copies, but materials are loaned through interlibrary loan.

MISSISSIPPI, Pascagoula

Library: Pascagoula Laboratory Library

Address: NMFS/SE Fisheries Science Center

P.O. Drawer 1207

3209 Frederic Street

Pascagoula, MS 39568-1207

Telephone: 228-549-1617

FAX: 228-769-9200

Email: Lagena.Fantroy@noaa.gov

Hours: 8:00 a.m. - 4:30 p.m., Monday - Friday

Personnel: LaGena Fantroy

Library home page: <http://www.aoml.noaa.gov/general/lib/pasca2.html>

Lab home page: <http://www.nmfs.noaa.gov/pascagoula.htm>

Description of collection and services: The library holds a specialized collection on National Seafood Safety, marine mammals, ichthyoplankton, fisheries, fishery gear (including TEDS and by-catch devices), as well as general marine biology and marine resources. The library is open to the public for reference only. The collection is non-circulating.

NEW JERSEY, Highlands (Sandy Hook)

Library: Lionel A. Walford Library

Address: NMFS/NE Fisheries Science Center

James J. Howard Marine Sciences Laboratory at Sandy Hook

74 Magruder Road

Highlands, NJ 07732

Telephone: 732-872-3035

FAX: 732-872-3088

Email: Claire.Steimle@noaa.gov

Hours: 8:00 a.m. - 4:30 p.m., Monday - Friday

Personnel: Claire L. Steimle, Angela C. Cook

Library home page: <http://sh.nefsc.noaa.gov/library.htm>

Lab home page: <http://sh.nefsc.noaa.gov/>

Description of collection and services: The library was established in 1961 with the founding of the Sandy Hook Marine Laboratory. Lionel Walford organized the Sandy Hook Laboratory as a center of game and sportfishing research and formed it into one of the world's foremost marine environmental research centers. The original library collection was comprised of Dr. Walford's own donated books and personal papers. In 1985, the entire holdings of the library were destroyed by fire. About 90% of the current collection was received through donations from other libraries and the scientific community at large. The library specializes in marine sciences, oceanography, ichthyology, marine environmental matters and pollution, and marine ecology. The collection contains books, serial titles, government documents, and reprints. The Chart Room contains nautical, bathymetric, and topographic charts, maps, and atlases; tide and current tables; and climatological data of the U.S. from 1914. The library houses a collection of pamphlets and ready-reference material on approximately 300 subjects such as seafood products, ocean dumping, climate and fisheries, beach erosion, artificial reefs, shipwrecks, etc. The library also holds a collection of older materials, including some of the major expeditions: Galathea Reports, Swedish Deep-Sea Expedition, Dana Reports, Papers of the Danish Biological Station, Reports of the "Michael Sars" Expeditions, Revue der hydrobiologie und hydrographie, Papers from the Tortugas Laboratory, Meddelelser om Gronland, Bulletin of the U.S. Fish Commission, Bulletin of the Museum of Comparative Zoology, Bulletin of the U.S. National Museum, and Serial Atlases of the Marine Environment.

NEW JERSEY, Princeton

Library: NOAA Geophysical Fluid Dynamics Laboratory Library

Address: Princeton University Forrestal Campus

201 Forrestal Road

Princeton, NJ 08540-6649

Telephone: 609-452-6550 or 609-452-5334

FAX: 609-987-5063

Email: Gail.Haller@noaa.gov or Bea.Amend@noaa.gov

Hours: 8:30 a.m. - 4:00 p.m., Monday - Friday

Personnel: Gail Haller and Beatrice Amend

Library home page:

Lab home page: <http://www.gfdl.noaa.gov>

Description of collection and services: The collection includes works on oceanography, ocean-atmosphere interaction, computer science, applied mathematics, hydrology, physics, geophysics, fluid dynamics,

meteorology, atmospheric chemistry, paleoclimatology, cloud physics, monsoon and mesoscale meteorology, hurricane dynamics, climatology, climate change, numerical weather prediction, geochemistry, marine biology, and applied mechanics.

NORTH CAROLINA, Asheville

Library: National Climatic Data Center Library (NCDC access only)

Address: Federal Building
151 Patton Avenue
Asheville, NC 28801-5001

Telephone: 828-271-4677

FAX: 828-271-4009

Email: Mara.Sprain@noaa.gov

Hours: 8:30 a.m. - 5:00 p.m., Monday - Friday

Personnel: Mara Sprain

OCLC symbol: OAQ

Ariel no.:

Library home page: <http://local.ncdc.noaa.gov/library/> (NCDC access only)

Center home page: <http://www.ncdc.noaa.gov/>

Description of collection and services: The library contains books, journals, articles, CD-ROMs, maps, atlases, NCDC corporate historical materials, NCDC's publications, models, microforms, and videos related to climate data. For climate data, please contact NCDC Customer Services, 828-271-4800, or visit the NCDC web page.

NORTH CAROLINA, Beaufort

Library: Rice Library

Address: NOS Center for Coastal Fisheries and Habitat Research
101 Pivers Island Road
Beaufort, NC 28516-9722

Telephone: 252-728-8713

FAX: 252-838-0809

Email: Patti.Marraro@noaa.gov

Hours: 7:45 a.m. - 4:30 p.m., Monday - Friday

Personnel: Patti M. Marraro

OCLC symbol: OAN

Ariel no.:

Library home page: <http://www8.nos.noaa.gov/ricelibrary>

Lab home page: <http://www.ccfhr.noaa.gov>

Description of collection and services: The collection includes books, journals, and reprints on marine biology, marine fisheries, ecology, oceanography, habitat restoration, and remote sensing of the environment.

The NOAA Beaufort Laboratory has maintained a catalogued, lending collection on Pivers Island, North Carolina since 1913. The collection houses not only the historical documents demonstrating the transition of the Laboratory through the Bureau of Commercial Fisheries, U. S. Fish and Wildlife Service, NOAA Fisheries and NOAA Ocean Service (NOS) and a general collection covering the subject areas of ecology, habitat restoration, marine biology, marine fisheries, oceanography, and pollution but also 2 Special Collections: the Rare Books Collection and the Austin B. Williams Collection. In 2007, the Rice Library was moved into a new

location which provides security for the collection and protection from potential hurricane threats (I.e., exit security alarms system, compact shelving, floorplan above historical 100-year flood stage and high-impact windows). In 2008, NOS funding for both print and electronic resources was eliminated and the Laboratory research staff have had to rely on limited access provided through Fisheries-wide and NOAA-wide licensing agreements. However, these resources are even more limited with the recent cancellations of American Fisheries Society journals and BioOne; which are needed by the NOAA Fisheries personnel working on stock assessments and SEDAR and the NOAA Oceans researcher staff working on invasive species, harmful algal blooms and mercury pollution.

OKLAHOMA, Norman

Library: National Weather Center Library

Address: 120 David L. Boren Blvd., Suite 4300
Norman, OK 73072-7303

Telephone: 405-325-1171

FAX: 405-325-1130

Email: Ginny Dietrich gdietrich@ou.edu

Hours: 8:30 to 5:00 p.m. Monday through Friday (during spring and fall semesters also open to 7:00 p.m. on Monday through Thursday and from 2 to 6 p.m. on Sunday)

Personnel: Ginny Dietrich

Library home page: <http://www.nwc.ou.edu/library.php>

Lab home page: <http://www.nssl.noaa.gov>

Description of collection and services: The National Weather Center Library serves NOAA researchers and staff located in the National Weather Center, including the National Severe Storms Laboratory, Weather Forecast Office, Radar Operations Center, Storm Prediction Center and Warning Decision Training Branch. The Library also serves faculty, researchers, students and staff in the College of Atmospheric and Geographic Sciences at the University of Oklahoma, and its partners including the Oklahoma Climatological Survey, Center for Analysis and Prediction of Storms, Center for Spatial Analysis and Cooperative Institute for Mesoscale Meteorological Studies. The collection includes books, monographs, journals, online resources, climatological data, technical memoranda, slides, videos and microforms.

RHODE ISLAND, Narragansett

Library: Narragansett Laboratory Reading Room

Address: NMFS/NE Fisheries Science Center
Narragansett Laboratory
28 Tarzwell Drive
Narragansett, RI 02882-1199

Telephone: 401-782-3200

FAX: 401-782-3201

Email: Deborah.Curtner@noaa.gov,

Hours: 8:00 a.m. - 4:30 p.m., Monday - Friday

Personnel: Deborah Curtner

Library home page:

Lab home page: <http://na.nefsc.noaa.gov/>

Description of collection and services: The collection contains journals and reprints on marine science, oceanography, and fisheries biology. The on-site holdings include the National Archive of NOAA's Large

Marine Ecosystem (LME) Program, including case studies of ecosystem changes in 29 of 64 of the world's LME's. A cooperative agreement exists with the University of Rhode Island's Pell Marine Science Library which allows NOAA/NMFS employees access to the Library's collection as well as borrowing privileges which effectively completes the collection.

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Library: National Sea Grant Library

Address: University of Rhode Island - Bay Campus
Ocean Science and Exploration Center
15 Pier Road
Narragansett, RI 02882

Telephone: 401-874-6114

FAX:

Email: nsgl@gso.uri.edu

Hours: 8:00 a.m. - 4:00 p.m., Monday-Friday

Personnel: Cynthia Murray, Coordinator; Joyce Winn, Publications Coordinator

Library home page: <http://nsgl.gso.uri.edu>

Lab home page:

Description of collection and services: The National Sea Grant Library (NSGL) is the digital library and official archive for NOAA Sea Grant documents. It is the only comprehensive collection of Sea Grant-funded documents from over 30 programs and projects across the country. This collection encompasses a wide variety of subjects, including oceanography, marine education, aquaculture, fisheries, aquatic nuisance species, coastal hazards, seafood safety, limnology, coastal zone management, marine recreation, and law.

The NSGL provides global access to over 17,000 full-text digital documents through the 47,000-record, searchable publications database. For those documents that aren't available electronically (including videos and DVDs), or for those patrons without high-speed internet access, the NSGL will be happy to provide hardcopy loans (worldwide) to aid scientists, teachers, students, fishermen, and others in their research and studies.

SOUTH CAROLINA, Charleston

Library: NOAA/NOS/Center for Coastal Environmental Health and Biomolecular Research (CCEHBR)

Mailing Address: c/o Marine Resources Library
P.O. Box 12559
Charleston, SC 29422-2559

Street Address: 217 Fort Johnson Road, Building 8
Charleston, SC 29412

Telephone: 843-953-9370 (Helen Ivy, Director)
843-953-9373 (Sarah Houston, Interlibrary Loan Borrowing, Cataloging)
843-953-9372 (Maggie Applegate, Interlibrary Loan Lending, Serials)

FAX: 843-953-9371

Email: ivyh@cofc.edu

Hours: 8:30 a.m. - 5:00 p.m., Monday-Friday

Personnel: Helen Ivy, Maggie Applegate, Sarah Houston

Library home page: <http://mrl.cofc.edu/>

Center home page: <http://www.chbr.noaa.gov>

Description of collection and services: The CCEHBR conducts interdisciplinary research to resolve issues related to coastal ecosystems health and environmental quality, including public health impacts. Some of the

high-priority items addressed include harmful algal blooms and their consequences, characterization of marine mammal health, land use impacts on coastal ecology, forensics and genetic applications to support marine wildlife laws, diagnosis and mitigation of fish, oyster, and shrimp diseases. The Marine Resources Library is a cooperative facility that is funded by The College of Charleston, South Carolina Department of Natural Resources, and NOAA/NOS/CCEHBR and that supports the College of Charleston marine biology graduate and undergraduate programs, the South Carolina Department of Natural Resources Marine Resources Division, NOAA/NOS/CCEHBR, and the Hollings Marine Laboratory with reference, instruction, and interlibrary loan services. The collection of 35,000 monographs, 10,000 bound journals, 6 online scientific databases, and over 8,800 electronic full-text scientific journals emphasizes marine biology, marine ecology, fisheries science, ichthyology, invertebrate zoology, toxicology, marine forensics, biotechnology, bioinformatics, marine genomics, ecotoxicology, phycology, and biochemistry.

TENNESSEE, OAK Ridge

Library: Atmospheric Turbulence and Diffusion Division Library

Address: P.O. Box 2456
Oak Ridge, TN 37831

Telephone: 865-576-1233

FAX: 865-576-1327

Email: Maggie.Robinson@noaa.gov

Hours: 8:00 a.m. - 4:30 p.m., Monday - Friday

Personnel: Maggie Robinson

Library home page:

Division home page: <http://www.atdd.noaa.gov>

Description of collection and services: The library collection includes over 5,000 papers that are out-of-print or rare, journals, and approximately 3,000 books on atmospheric turbulence and atmospheric diffusion. Mathematical modeling, dry and wet deposition, and climate and atmospheric change studies with a strong emphasis on instrumentation are prominently represented in the library. The library also contains all the publications of scientists and staff from the Atmospheric Turbulence and Diffusion Division since the inception of the division.

WASHINGTON, Seattle

Library: NOAA Seattle Regional Library

Address: E/OC43, Building 3
7600 Sand Point Way NE
Seattle, WA 98115

Telephone: 206-526-6241

FAX: 206-526-4535

Email: Brian.Voss@noaa.gov , Seattle.Library@noaa.gov

Hours: 8:00 a.m. - 4:30 p.m., Monday - Friday

Personnel: Brian Voss

Library home page: <http://www.wrclib.noaa.gov/>

Lab home page: <http://www.wrc.noaa.gov/>

Description of collection and services: The library supports research in the areas of meteorology, physical and chemical oceanography, geochemistry, atmospheric physics, ocean engineering, mathematics, statistics, and computer science. Special collections in the library include the Rudolph Preisendorfer Memorial Collection, an 800-volume library of classic works in mathematics and statistics; holdings on Puget Sound; a complete

collection of monographs from the National Science Foundation Israel Program for Scientific Translations; and nautical, hydrographic, and topographic charts and maps.

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Library: National Marine Mammal Laboratory Library

Address: NMFS Alaska Fisheries Science Center
7600 Sand Point Way NE, Building 4
Seattle, WA 98115-6349

Telephone: 206-526-4013

FAX: 206-526-6615

Email: Sonja.Kromann@noaa.gov , nmml.library@noaa.gov

Hours: 7:30 a.m. - 4:00 p.m., Monday-Friday

Personnel: Sonja Kromann

Library home page: <http://www.afsc.noaa.gov/library/>

Lab home page: <http://www.afsc.noaa.gov/nmml/>

Description of collection and services: The library has a unique collection of marine mammal literature. The collection includes over 15,000 volumes of books, journals, and theses, as well as an extensive reprint file. Subject coverage includes biology, zoology, diseases, conservation, fisheries, ecosystem management, population dynamics, ecological modeling, statistics, whaling, sealing and international and domestic legislation and treaties that impact marine mammals. The NMML Library also contains archives of northern fur seal research, International Whaling Commission documents, and International North Pacific Fisheries Commission documents.

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Library: Alaska/Northwest Fisheries Science Center Library

Address: 2725 Montlake Boulevard East
Seattle, WA 98112-2013

Telephone: 206-860-3210

FAX: 206-860-3442

Email: Craig.Wilson@noaa.gov , nwfsc.library@noaa.gov

Hours: 8:00 a.m. - 4:30 p.m., Monday - Friday

Personnel: Craig Wilson

Library home page: <http://lib.nwfsc.noaa.gov/>

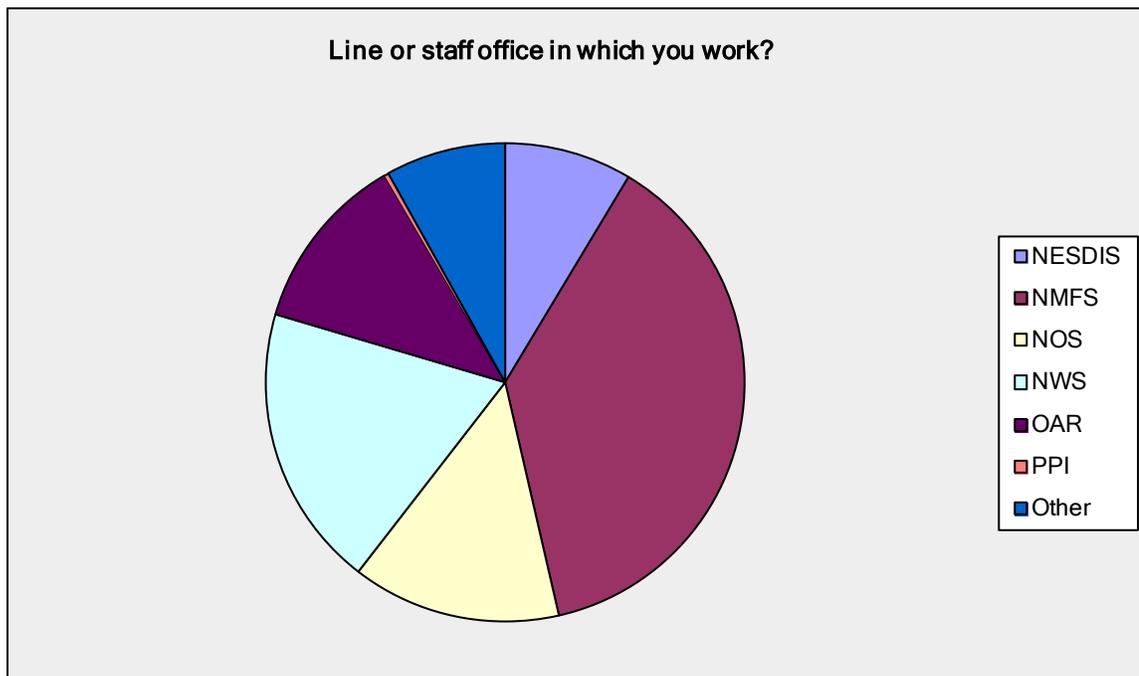
Lab home page: <http://www.nwfsc.noaa.gov>

Description of collection and services: The library supports the Northwest Fisheries Science Center's research programs, as well as the agency's Northwest Regional Office and the Alaska Fisheries Science Center at Sand Point. The library collection spans many scientific fields, including chemistry, biochemistry, microbiology, oceanography, marine biology, fisheries science, zoology, ecology, conservation, fisheries management, statistics and mathematics, population dynamics, ecological modeling, aquaculture, seafood technology, technology transfer, and Endangered Species Act issues.

Appendix C. Raw Data from the Survey of Current Use and Ratings by NOAA Staff Regarding the Value and Effectiveness of NOAA Libraries.

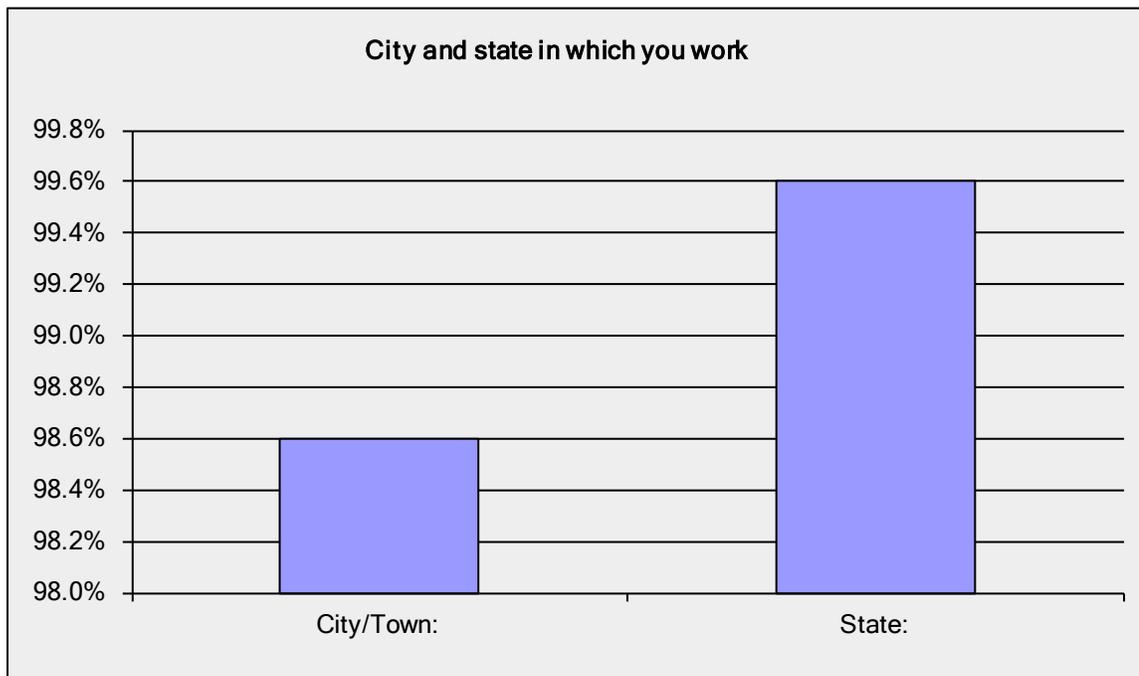
Use of NOAA Libraries

Line or staff office in which you work?		
Answer Options	Response Percent	Response Count
NESDIS	8.6%	296
NMFS	37.8%	1302
NOS	14.1%	484
NWS	19.1%	657
OAR	12.0%	414
PPI	0.3%	11
Other	8.1%	280
<i>answered question</i>		3444
<i>skipped question</i>		11



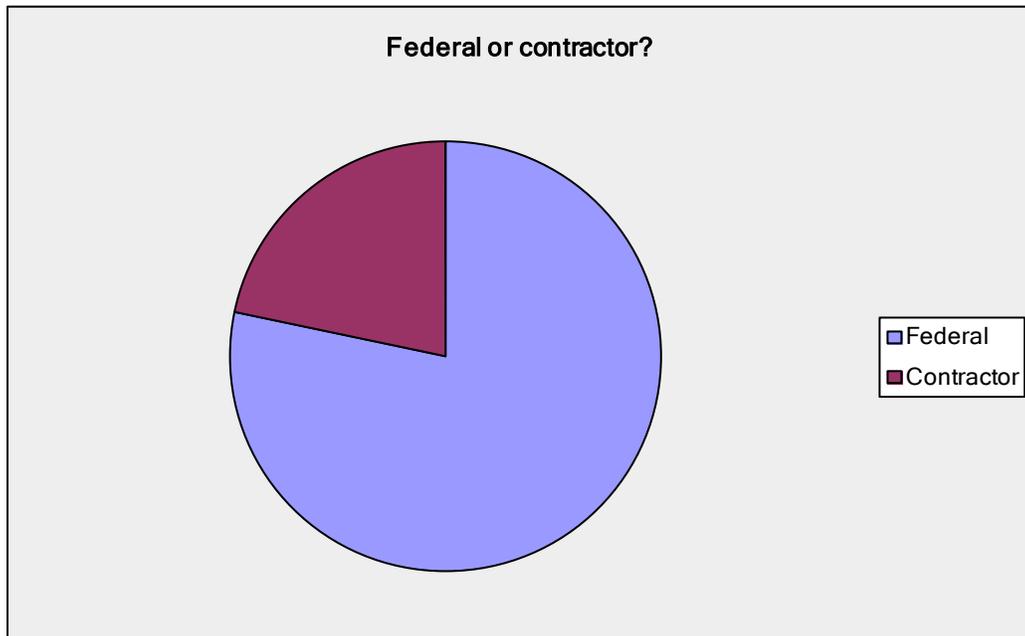
Use of NOAA Libraries

City and state in which you work		
Answer Options	Response Percent	Response Count
City/Town:	98.6%	3396
State:	99.6%	3428
<i>answered question</i>		3443
<i>skipped question</i>		12



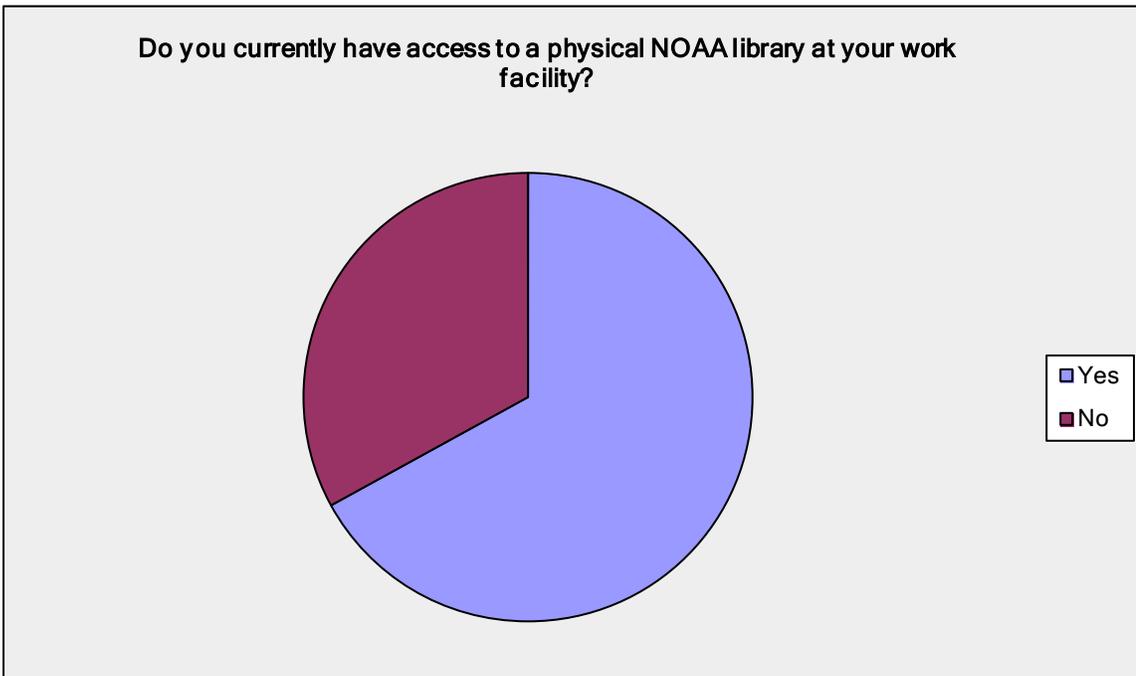
Use of NOAA Libraries

Federal or contractor?		
Answer Options	Response Percent	Response Count
Federal	78.3%	2674
Contractor	21.7%	742
<i>answered question</i>		3416
<i>skipped question</i>		39



Use of NOAA Libraries

Do you currently have access to a physical NOAA library at your work facility?		
Answer Options	Response Percent	Response Count
Yes	67.0%	2276
No	33.0%	1119
<i>answered question</i>		3395
<i>skipped question</i>		60



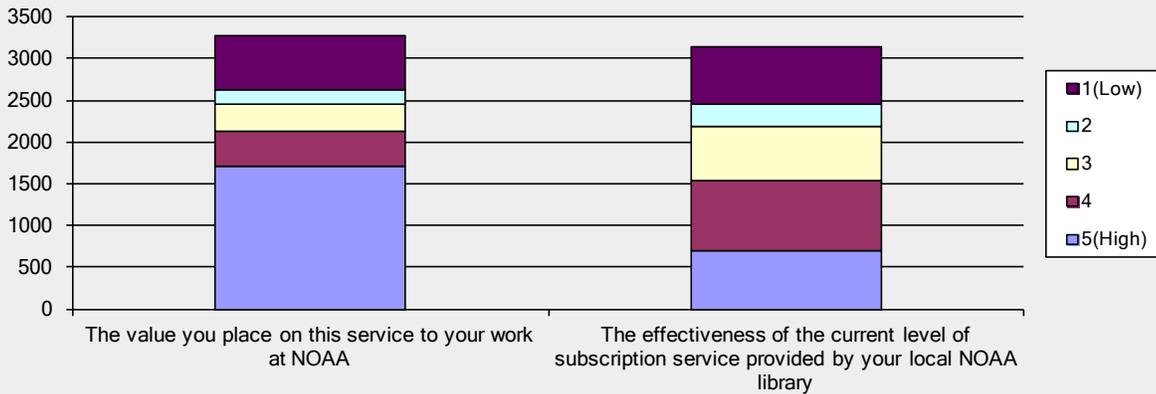
Use of NOAA Libraries

The following questions will ask you to rank your responses from 1(Low) to 5(High). Please complete the full set of rankings.

1. Your access to electronic journals remotely from your NOAA library

Answer Options	1(Low)	2	3	4	5(High)	Response Count
The value you place on this service to your work at NOAA	650	164	339	419	1710	3282
The effectiveness of the current level of subscription service provided by your local NOAA library	686	267	652	842	703	3150
<i>answered question</i>						3294
<i>skipped question</i>						161

The following questions will ask you to rank your responses from 1(Low) to 5(High). Please complete the full set of rankings. 1. Your access to electronic journals remotely from your NOAA library

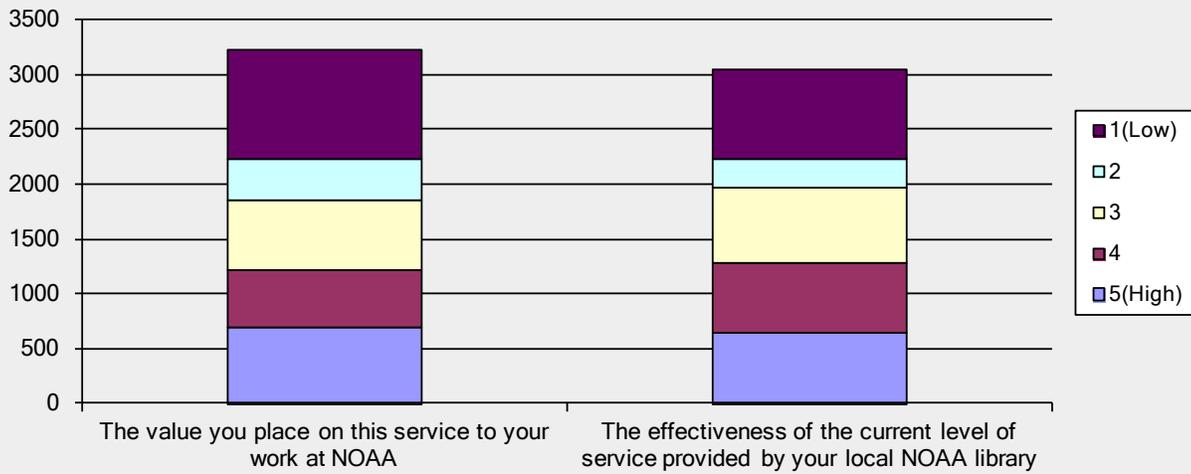


Use of NOAA Libraries

2. Your access to unbound recent printed journals in your NOAA library

Answer Options	1(Low)	2	3	4	5(High)	Response Count
The value you place on this service to your work at NOAA	997	378	635	520	699	3229
The effectiveness of the current level of service provided by your local NOAA library	813	261	684	643	645	3046
<i>answered question</i>						3242
<i>skipped question</i>						213

2. Your access to unbound recent printed journals in your NOAA library

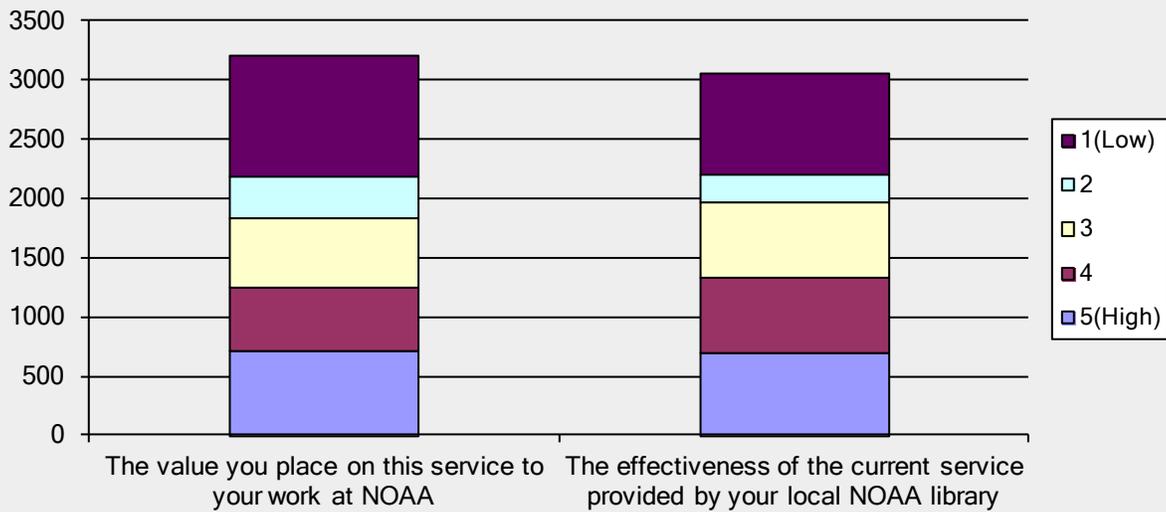


Use of NOAA Libraries

3. Your use of bound, archived printed journals in your NOAA library or by checking them out where possible

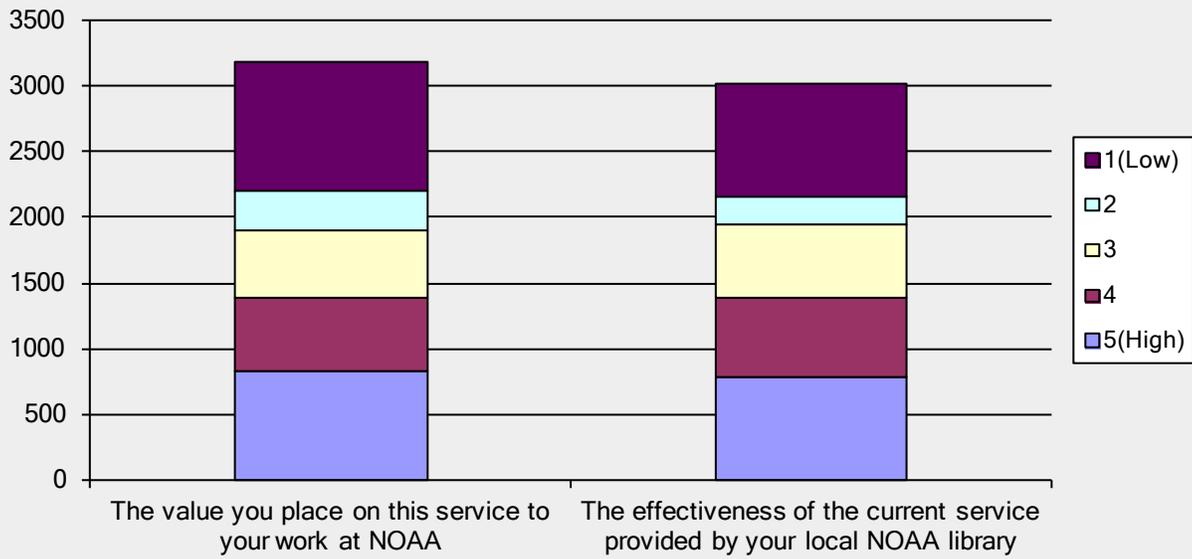
Answer Options	1(Low)	2	3	4	5(High)	Response Count
The value you place on this service to your work at NOAA	1012	356	584	538	712	3202
The effectiveness of the current service provided by your local NOAA library	852	232	625	640	699	3048
<i>answered question</i>						3224
<i>skipped question</i>						231

3. Your use of bound, archived printed journals in your NOAA library or by checking them out where possible



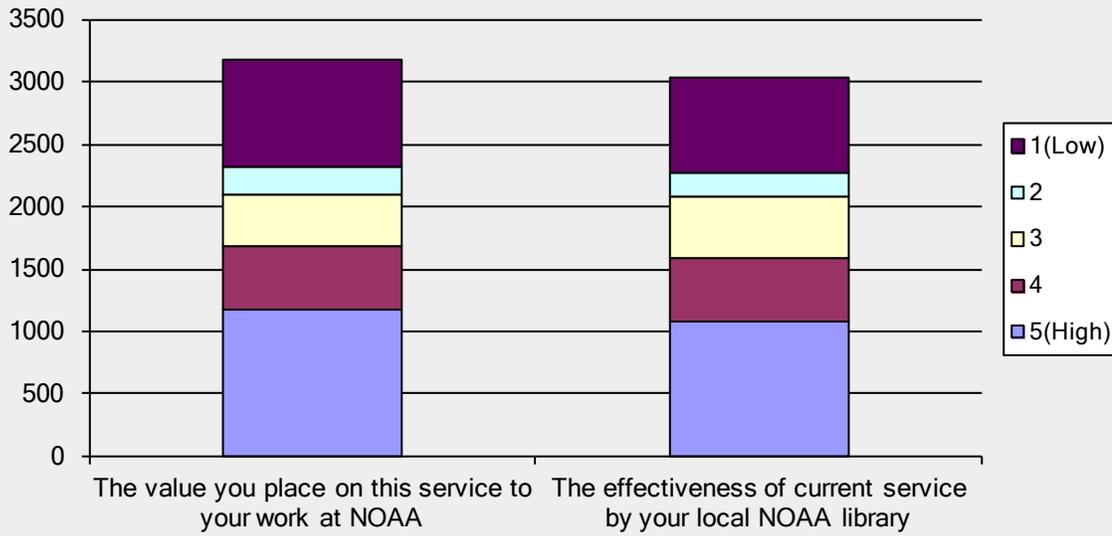
Use of NOAA Libraries						
4. Books you checked out from your local NOAA library						
Answer Options	1(Low)	2	3	4	5(High)	Response Count
The value you place on this service to your work at NOAA	984	292	517	551	842	3186
service provided by your local NOAA library	867	200	570	604	786	3027
<i>answered question</i>						3198
<i>skipped question</i>						257

4. Books you checked out from your local NOAA library



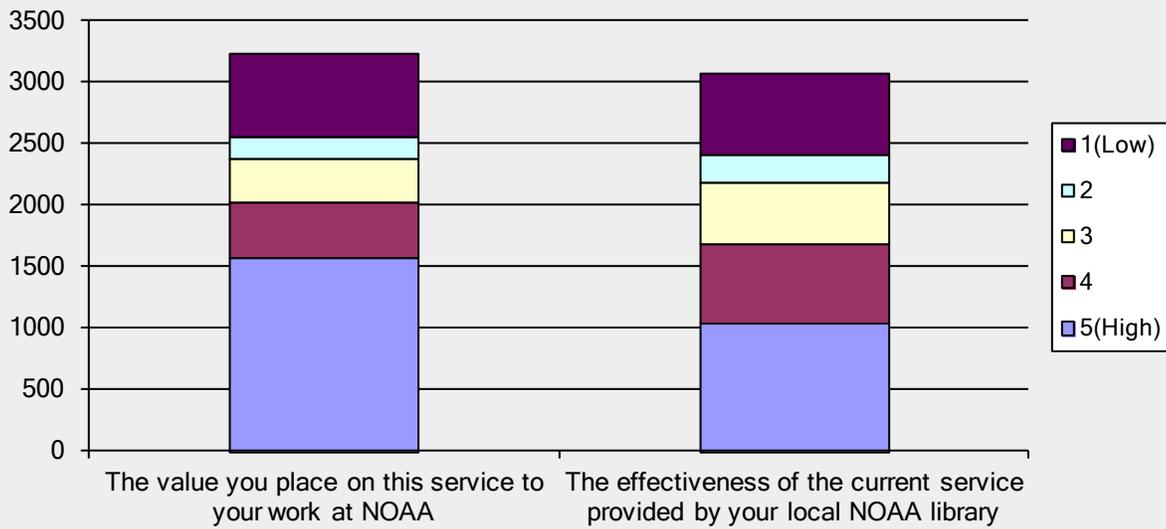
Use of NOAA Libraries						
5. Books, journal articles, technical reports, or other materials obtained for you from other libraries through Inter-library Loan						
Answer Options	1(Low)	2	3	4	5(High)	Response Count
The value you place on this service to your work at NOAA	852	227	414	507	1172	3172
The effectiveness of current service by your local NOAA library	759	196	487	515	1068	3025
<i>answered question</i>						3185
<i>skipped question</i>						270

5. Books, journal articles, technical reports, or other materials obtained for you from other libraries through Inter-library Loan



Use of NOAA Libraries						
6. Your access to electronic databases (e.g. Web of Science, Science Citation Index, ASFA, etc.)						
Answer Options	1(Low)	2	3	4	5(High)	Response Count
The value you place on this service to your work at NOAA	669	180	350	459	1568	3226
The effectiveness of the current service provided by your local NOAA library	667	224	505	649	1028	3073
<i>answered question</i>						3236
<i>skipped question</i>						219

6. Your access to electronic databases (e.g. Web of Science, Science Citation Index, ASFA, etc.)

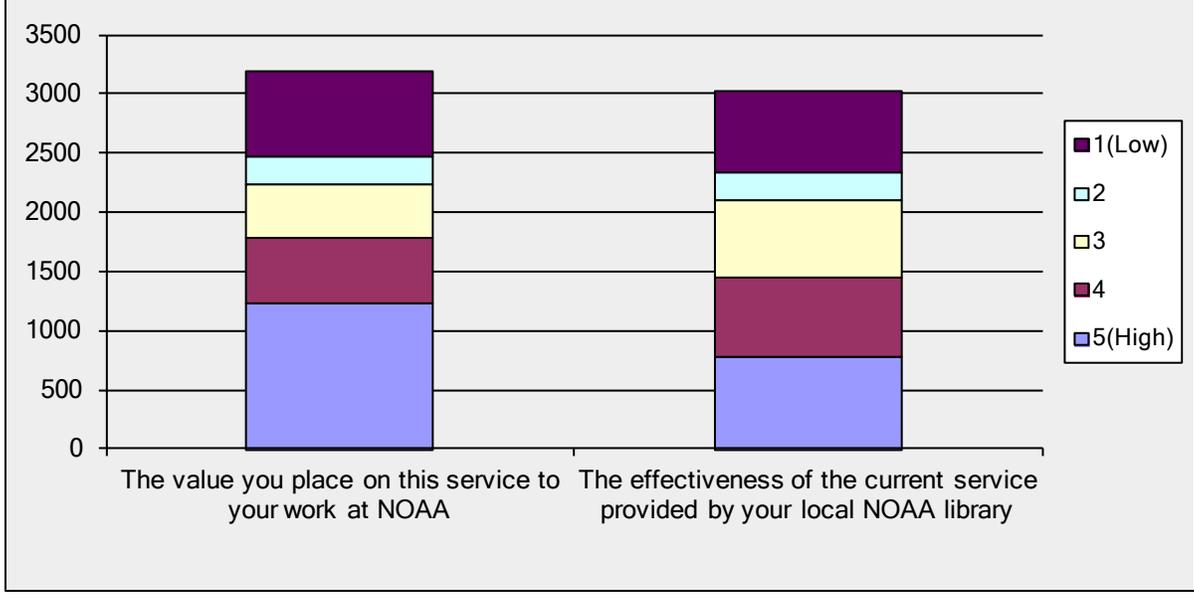


Use of NOAA Libraries

7. Your access to other electronic library services, such as JSTOR, E-books, electronic library catalog, citation management software (e.g. EndNote), subject guides, etc.

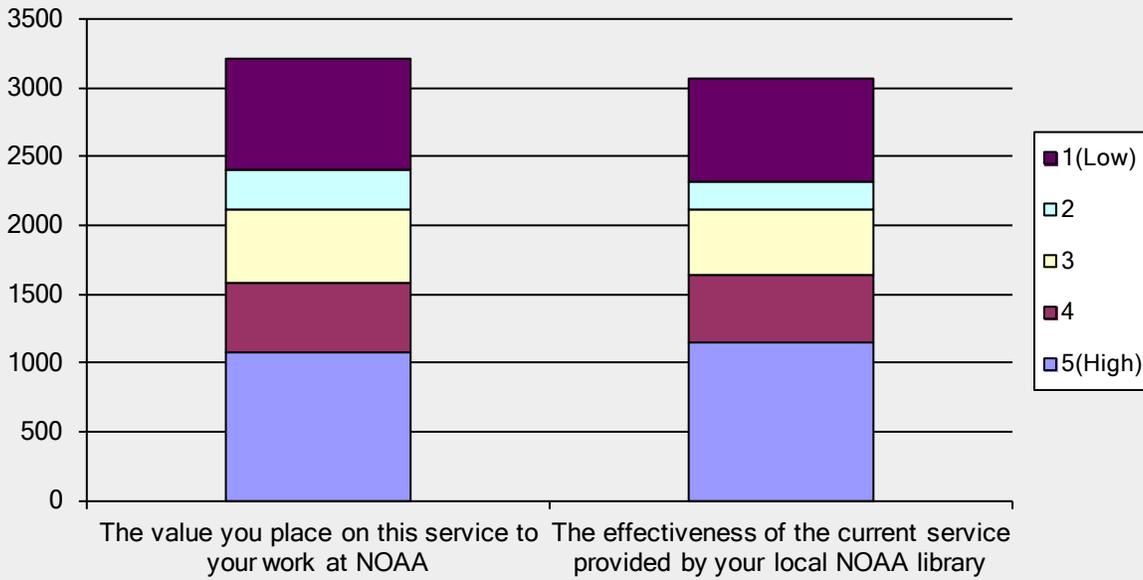
Answer Options	1(Low)	2	3	4	5(High)	Response Count
The value you place on this service to your work at NOAA	723	233	464	539	1235	3194
The effectiveness of the current service provided by your local NOAA library	685	232	661	664	779	3021
<i>answered question</i>						3206
<i>skipped question</i>						249

7. Your access to other electronic library services, such as JSTOR, E-books, electronic library catalog, citation management software (e.g. EndNote), subject guides, etc.



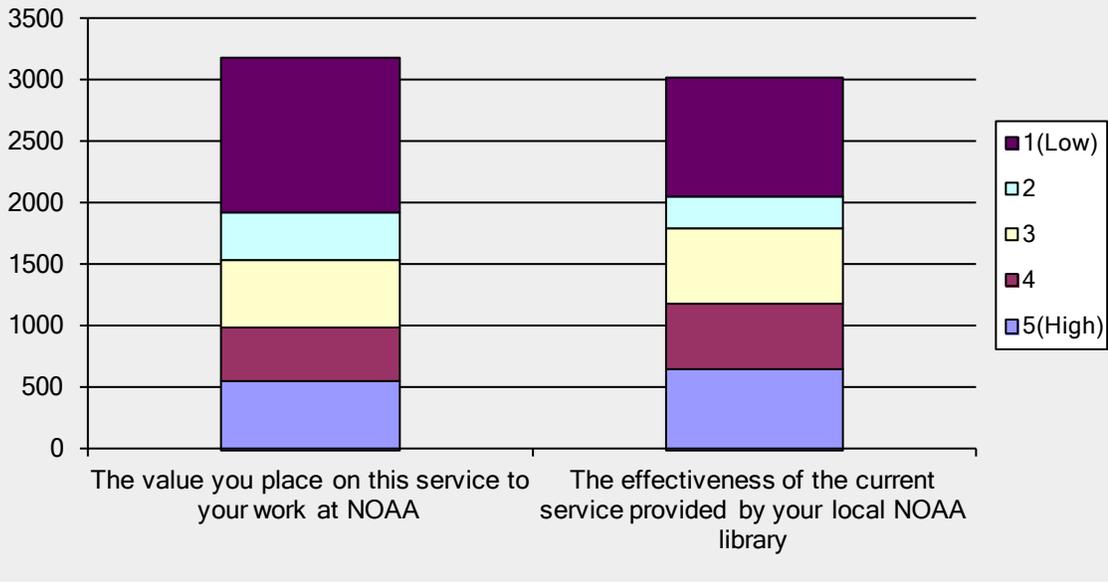
Use of NOAA Libraries						
8. Your consultation with librarians, such as help with literature searches, database selection, online training, etc.						
Answer Options	1(Low)	2	3	4	5(High)	Response Count
The value you place on this service to your work at NOAA	816	284	539	502	1069	3210
The effectiveness of the current service provided by your local NOAA library	756	195	480	488	1142	3061
<i>answered question</i>						3227
<i>skipped question</i>						228

8. Your consultation with librarians, such as help with literature searches, database selection, online training, etc.



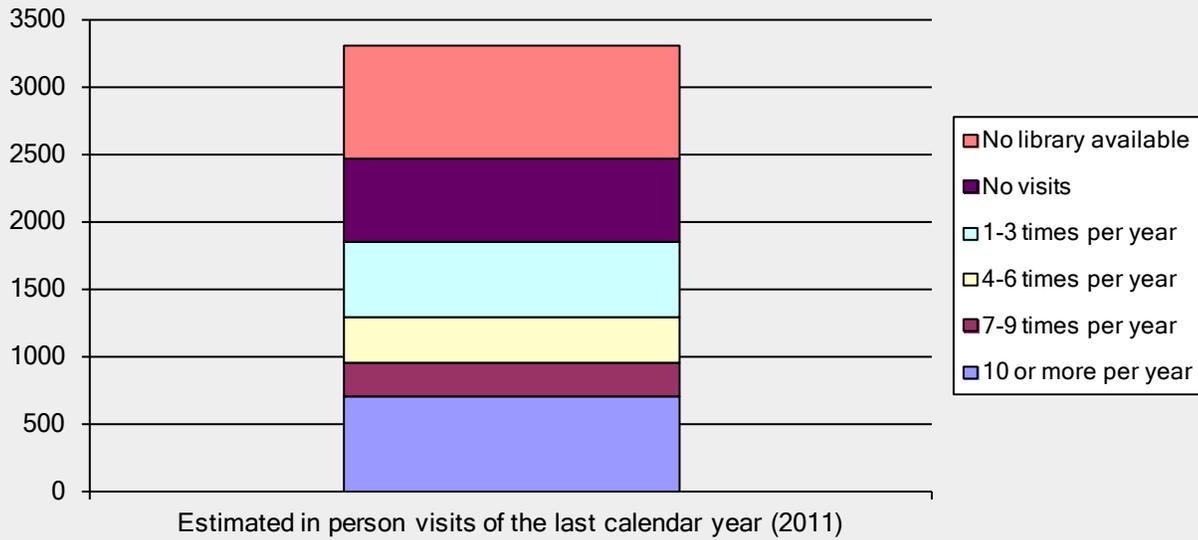
Use of NOAA Libraries						
9. Your use of space in a NOAA library for work, collaboration, reading, etc.						
Answer Options	1(Low)	2	3	4	5(High)	Response Count
The value you place on this service to your work at NOAA	1248	388	561	435	547	3179
The effectiveness of the current service provided by your local NOAA library	973	256	616	532	642	3019
<i>answered question</i>						3197
<i>skipped question</i>						258

9. Your use of space in a NOAA library for work, collaboration, reading, etc.



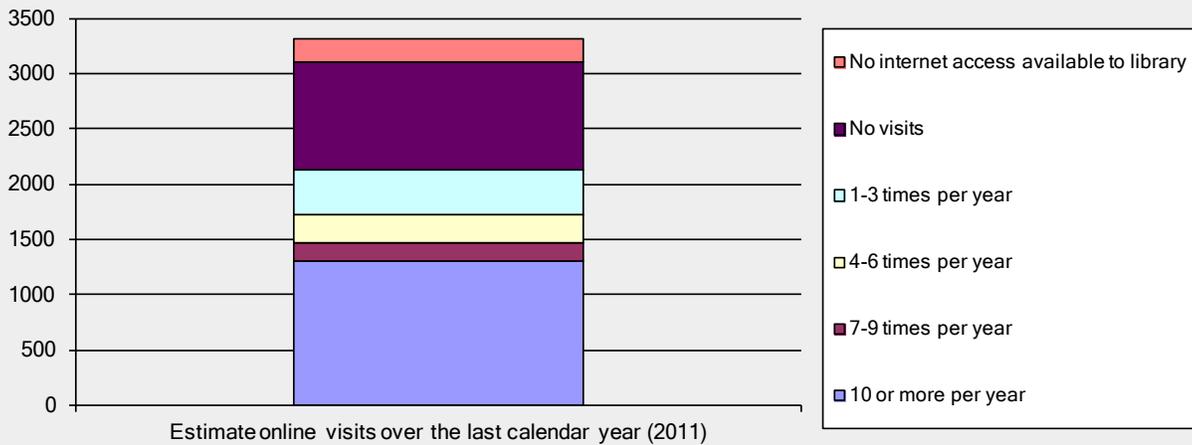
Use of NOAA Libraries							
10-A. Please estimate the number of times you have visited your local NOAA library in person over the last calendar year (2011)							
Answer Options	No library available	No visits	1-3 times per year	4-6 times per year	7-9 times per year	10 or more per year	Response Count
Estimated in person visits of the last calendar year (2011)	833	617	558	344	253	694	3299
<i>answered question</i>							3299
<i>skipped question</i>							156

10-A. Please estimate the number of times you have visited your local NOAA library in person over the last calendar year (2011)



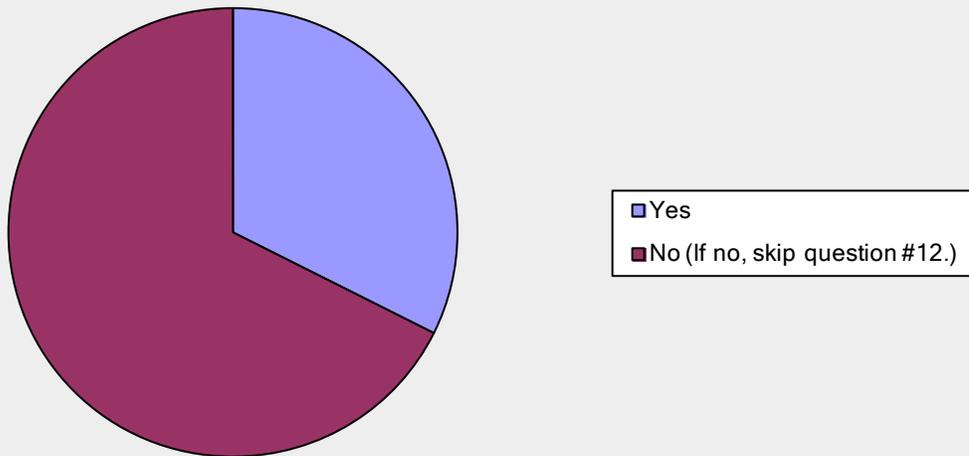
Use of NOAA Libraries							
10-B. Please estimate the number of times you have visited your local NOAA library online over the last calendar year (2011)							
Answer Options	No internet access available to library	No visits	1-3 times per year	4-6 times per year	7-9 times per year	10 or more per year	Response Count
Estimate online visits over the last calendar year (2011)	211	983	400	255	164	1301	3314
<i>answered question</i>							3314
<i>skipped question</i>							141

10-B. Please estimate the number of times you have visited your local NOAA library online over the last calendar year (2011)



Use of NOAA Libraries		
11-A. Do you use other libraries (non-NOAA) to fill your work-related information needs?		
Answer Options	Response Percent	Response Count
Yes	32.4%	1063
No (If no, skip question #12.)	67.6%	2213
<i>answered question</i>		3276
<i>skipped question</i>		179

11-A. Do you use other libraries (non-NOAA) to fill your work-related information needs?

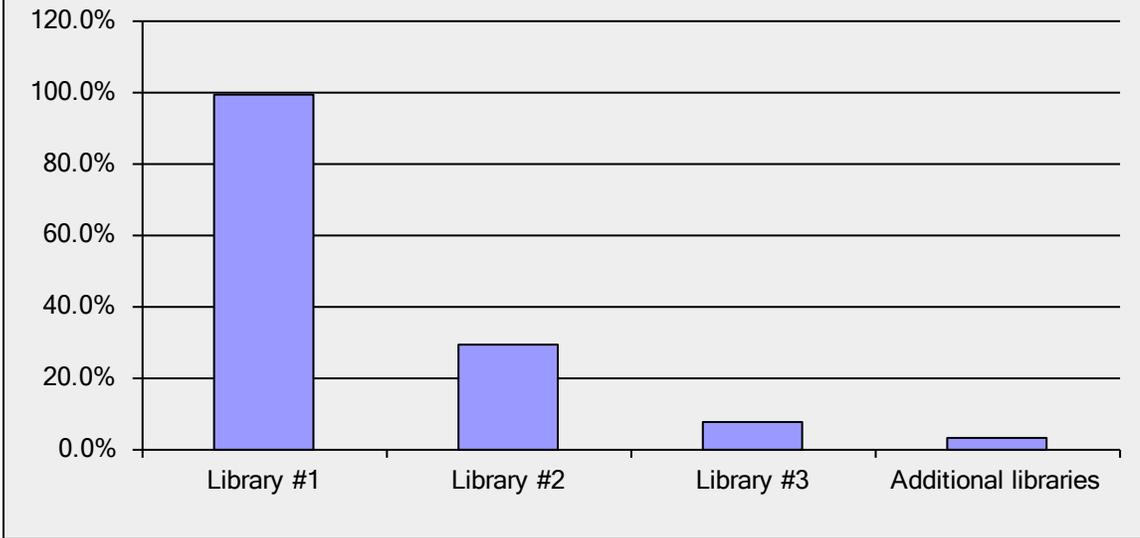


Use of NOAA Libraries

11-B. What other libraries do you use (please list their names below)

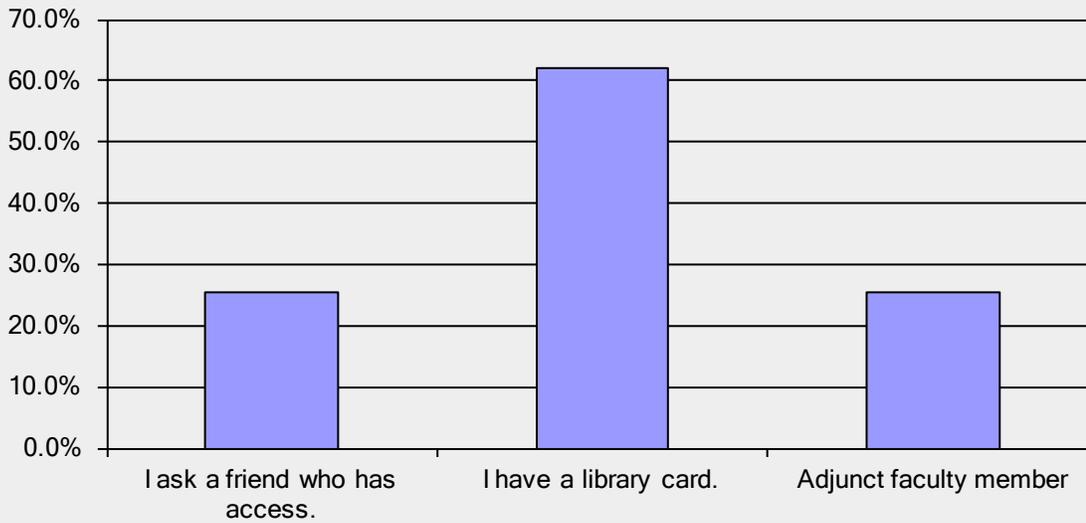
Answer Options	Response Percent	Response Count
Library #1	99.4%	1083
Library #2	29.1%	317
Library #3	7.6%	83
Additional libraries	3.0%	33
<i>answered question</i>		1089
<i>skipped question</i>		2366

11-B. What other libraries do you use (please list their names below)



Use of NOAA Libraries		
11-C. How do you gain access to these other libraries?		
Answer Options	Response Percent	Response Count
I ask a friend who has access.	25.4%	215
I have a library card.	62.2%	527
Adjunct faculty member	25.3%	214
Other (please specify)		448
<i>answered question</i>		847
<i>skipped question</i>		2608

11-C. How do you gain access to these other libraries?



Use of NOAA Libraries

11-D. What types of work-related information do you obtain from non-NOAA libraries? Please specify

Answer Options	Response Count
	1080
<i>answered question</i>	1080
<i>skipped question</i>	2375

12. Are there other library services you use or might use such as manuscript reviewing and editing, bibliography development, citation analysis, content management for a Web page, design and construction of a database, translation, etc., If so, please briefly describe the services.

Answer Options	Response Count
	1039
<i>answered question</i>	1039
<i>skipped question</i>	2416

13. Any questions or comments you would like to provide regarding NOAA library services and/or collections or the lack of services and/or collections.

Answer Options	Response Count
	1300
<i>answered question</i>	1300
<i>skipped question</i>	2155

If you have asked questions and wish to have a reply, please provide your email address.

Answer Options	Response Count
	156
<i>answered question</i>	156
<i>skipped question</i>	3299

Appendix D. Selected Comments from Questionnaire Question #13.

The questionnaire that the Committee sent out to NOAA contained an item that gave responders the opportunity to provide “Other comments you would like to make about NOAA library services and/or collections or the lack of services and/or collections.” The Committee received 1300 comments in response and provides a selection of them below.

“ For a major earth science research organization such as NOAA, access to important journals in atmospheric and earth science is woefully inadequate.”

“ The total lack of access defines our lack of scientific professionalism as an agency and it's embarrassing and offensive. I realize we are at a remote location where a brick and mortar library would be inefficient, but the decision not to provide on line access to journals is a decision to devalue research and science in the enterprise of our agency. It makes statements that we are a science agency feel fraudulent.”

“ Library is fundamental infrastructure for research and operations, just like power, communications, and IT; it should be supported as such.”

“ Yes, as a scientist working for the government, it is ridiculous that we, as NOAA employees in the pacific region, do not have open access to journal and electronic databases from our desktops. This is a common concern in the region. We have been told that we could ask the science center's librarian to look up anything we need, but this is unrealistic when conducting research and policy analysis. I do have access to the university of Hawaii system so a lot of people go through me to get publications, but when I graduate, I will no longer have that access. Please do something to give us university-type access to academic research articles at NOAA.”

“ I am shocked at the lack of electronic journal access to major publications from within NOAA (e.g., no access through JSTOR to issues of Ecology more recent than 2009). I find NOAA's electronic journal access to be wholly inadequate when compared to a major research university.”

“ Scientific research depends on the services provided by the library. This includes achieved documents, journals and other sources of information that are not available electronically. Continued support of the library is essential to good science.”

“ The NOAA Library is an incredibly important research resource, both in terms of its holdings and the services provided by the staff. If NOAA wants to continue to call itself a "Science" agency, the Library should continue to receive adequate funding.”

“ Please do not trim our library services. They are absolutely essential to the work we do in Boulder, which is almost 100% research. One cannot do research without ready access to literature.”

“ Although "Atmospheric" is part of NOAA, access to atmospheric science, and especially atmospheric chemistry and air pollution, journals is woefully inadequate. I understand that money is tight, but if OAR expects its scientists to do world-class research, adequate resources should be provided so that all relevant journals can be accessed freely by everyone who needs them.”

“ Without the services currently provided by the NOAA library I would not be able to carry out my research program. I consider these services to be absolutely essential and their loss would be a serious problem for me and my research group.”

“ Without the NOAA library services of providing copies of journal articles that we can not (afford or store) at a local NWS office, we would be blocked from doing a literature search--effectively stopping most of our research efforts. We use the online access to the Journals and this is also a great tool that if we lost the access; it would also effectively stop our research and any efforts of continuing education.“

“ Access to physical libraries and their content remain an essential component of scientific research. Please keep them. Also, I am consistently limited in my access to on-line journals to which NOAA is an institutional subscriber (usually because my IP is not on whatever list has 'access'. Usually journals in a different discipline). I strongly urge NOAA to ensure ALL NOAA employees have full and complete access to ALL online subscriptions held by NOAA.“

“ Our component of NOAA has cut to the bone our subscription services so that we have had no new print journals in over a year...our librarian does a fantastic job of keeping us supplied through online processes and interlibrary loans, but even the online subscriptions are threatened due to budgetary constraints, and it is detrimental to our ability to do the best research without a fully accessible research library. Funding needs to be maintained for research libraries at the labs. You can fund the central library and centralize everything there, but really, how many 'researchers' work in Silver Spring? The field laboratories are where you need the resources, not at Central so someone can get a promotion!“

“ An on-site library and librarian are essential for a fisheries research laboratory. I use the library and librarian frequently in my work. The closing of the library and elimination of the librarian position would greatly impede my ability to do my job as a researcher. Contrary to popular belief by administrators and IT staff who do not use the library services in their work, not all literature can be found online. The knowledge and expertise of a highly trained and educated librarian cannot be replaced by a search engine. I consider myself quite adept at using electronic library services; however, I cannot always find obscure documents and our librarian is always successful in doing so. Also, the librarian provides great support for inter-library loans, the purchasing of books, the maintenance of journals and books with a non-existent budget.“

“ The recent decline in library services has become a true hindrance to conducting research.“

“ We should have one central library with ALL e-journals. If too expensive merge with NASA, USDA, DOE, etc. Climate research necessitates large spectrum of scientific subjects, and therefore journals, and not just Nature, Sciences and a few others. It is quite frustrating to have students picking books or articles for me because NOAA does not have them on-line (I am not going to wait 2-3 weeks for interlibrary loan) and my local University will deny me access.“

“ Access to more electronic journals is imperative for proper research and information. I support maximum access to electronic journals...“

“ The NOAA Central Library Reference Desk is absolutely fundamental for my needs in finding and accessing non-AMS journals (e.g., JGR, Tellus, Nature) and Interlibrary Loan to stay current on the latest research for application to our local forecast and warning services, but also to bolster our local research. The Reference Desk staff (especially ...) have always (and I mean *ALWAYS*) provided exceptional, fast, and efficient service and consultation. If NOAA is to provide cutting edge services that make a difference to the nation, in particular for the NWS mission of saving lives and mitigating property damage, there are simply other places to look for cuts than the NOAA Central Library. The NOAA Labs do a fine job of basic and applied research, but true research-to-operations takes place at field offices, and the literature support for that comes from the NOAA Central Library.“

“ Our libraries and online services are critical components of conducting research.”

“ The library services at my local-NOAA library are excellent and I would not be able to complete my tasks w/o the collection and librarian support. I do know that recently there has been some cuts in \$\$ support that has resulted in some loss of access to journals on -line, particularly back issues (e.g., American Fisheries Society) that our library always gets for us, but not w/o additional effort. The UC library nearby is very helpful, but both the journal collection (on-line and hard copy) and more notably the books collection is lacking for a large portion of the books and references needed for day to day research activities for my work - the UC does not have many of the specific fish, fisheries, aquatic studies, fisheries management, resource mgt books and references needed to carry out my job. In general, the UC supplements my local NOAA library but the UC library can not replace my NOAA library given its current collection. Over the past 10 years I have found that I have needed my local librarian more in the more recent years, even with the greater access to information on the web. Historical documents and hard to find agency reports are not easily found (if at all) on-line. In addition, my local NOAA librarian and library is increasingly more important as I have to wade through the flood of material, often not well vetted, on-line.”

“ Please continue the NOAA library services in place or at the very least increase the resources available via journal subscriptions, texts, and other reading material. Having a library physically onsite strengthens and promotes active research necessary for being a leader in the multidisciplinary field of fisheries science.”

“ Our on-site NOAA library is essential to my functioning at the highest possible level in my research position.”

“ Access to electronic journals at our lab is unbelievably dismal. The journal "Nature", for example, is not available electronically. Most of the journals I used to browse are no longer available to us online. I believe my effectiveness as a scientist is severely curtailed by not being able to keep up with the latest published research in my field. Access to journals (not just articles that I already know about) is extremely important to me.”

“ I'm sure NOAA library is trying to provide services even to more remote field locations such as ours. I could probably do a better job of researching the possibilities on-line. Perhaps NOAA library could do better outreach on what they are able to offer, particularly to remote sites far from the Silver Spring campus.”

“ Need more internet subscriptions to marine science journals for non-silver spring NOS employees. Why do NOS employees who do not reside in Silver Spring not have e-access to Science direct, or e-subscription access to the major important journals in marine science (i.e. marine ecology progress series, Journal of Experimental marine biology and ecology, estuaries, estuaries and coasts, continental shelf research, etc.) Journal e-access for NOS employees not based in Silver Spring needs to vastly improve in my opinion. I pretty much locate a journal article I want and know I will not have access to it through NOAA and use my alumni graduate institution to retrieve the article. That is unless of course I am not properly searching for articles in the NOAA e-journals search engine.”

“ Please try to increase the number of journals with full access. This is extremely valuable for doing research.”

“ The library (main and branch) in Boulder have been very important to my career and research for multiple decades. Their proximity, broad coverage with journals and books, and services by librarians have greatly improved my efficiency. They have been crucial in allowing me to expand my fields of study and to keep current. They have enabled me to publish papers with significantly greater depth and impact than I could have with limited library resources.”

“ Please do not cut or curtail this important budget item. It is very important involving our research.”

“ IT is a new science that needs to be reflected in NOAA libraries through the use of/access to IT Research such as Gartner. This is a must for IT personnel. The 2nd recommendation is to have on-line IT Training such as that provided by "Books 24x7" or a service of this sort.“

“ We have an appalling lack of access to scientific journals. At times, it impedes my ability to do research. I have heard it was a lack of money. I think it is a huge problem that NMFS doesn't have a mass license for all of applicable journals. Our librarian is aware of the lack as well.“

“ Our library services seem to have declined severely in the past years. We don't have access to several key journals. I am afraid that our research quality will ultimately suffer because of this lack of information.“

“ The state of access to scientific research needed to complete my job is completely inadequate. it is embarrassing and frustrating how much we are asked to do with so little. we lack MOST key electronic subscriptions to vital journals and books. how can we lead the US in science when we can't even research the state of current knowledge? sadly, many of us resort to non-sanctioned means to get access to these materials. I strongly urge more funding and support to this core resource for all of NOAA.“

“ 1. In response to 10-A. As a Research Fishery Biologists I have visited the local librarian at least once per week during the last year to obtain access scholarly journals not available on line at my local institution. This service has been invaluable to completing my assigned research in a timely and cost effective manner. 2. In response to 10-B. I visit the online portal to my local library almost daily to search for scholarly articles, to download electronic citations to my personal endnote database, and to download pdf's of the scholarly article if online access is available at my local institution. 3. Enhanced electronic access to ALL scholarly journals related to fisheries science, regardless of the physical location of the individual employee (or the vagaries associated with the funding priorities of the local NMFS library) would increase research productivity in a cost effective manner for ALL NMFS Research Fishery Biologists.“

“ The library is a valuable resource to researchers. Our work both begins and ends there. It houses the articles and books we need to do our job, and it houses our finished product, research papers.“

“ They provide an essential service and it would be cost prohibitive to replace their capacity within our internal structure. They should be a major focus of any research organization where knowledge is the main product. This NOAA Center library is one of the oldest collections in the NOAA Library system and maintains an extensive print collection of information resources on site. However, this NOAA library has been without line office funding for the local library since 2008 and therefore, is lacking access to a wide variety of current research literature. Since 2008, the research staff have relied on limited access to electronic resources via NMFS-wide and/or NOAA-wide licensing agreements, interlibrary loans, adjunct professorship, and friends in order to meet their current information needs. The time involved in obtaining information from outside sources, hinders the response time needed in applying for research grants, the completion of current NOAA research projects and the dissemination and/or publication of cutting edge research results.“

“ As a researcher, it is extremely important to have a local NOAA library to perform literature searches - either bound journals/books or online. The librarian fills an important role to our laboratory in that she helps us perform literature searches and keeps us informed of any new material received in our library, which makes my time (and other researchers) much more efficient.“

“ Library services are critical for research scientists, we are crippled when we are unable to do thorough literature reviews. Librarians are also necessary and help to find articles and journals that we would otherwise

be unable to find. Librarians also make our time more valuable by letting us continue to work while they research the literature. Most scientists are not properly trained to be able to fulfill the functions that a librarian fills.“

“ When I arrived to this field office, I found that staff has no clue which library to even access, let alone how, to obtain peer review literature. I continue to access the WRC library on rare occasion simply because I know how. I suppose I could turn the effort into a research project, but readily available info on field office access to library services is buried or missing entirely! We are not listed in 'Library 101' on the Central library, so where do we go?!?!?“