

**DRAFT**

**New Service Model Report  
Geology Planning & Implementation Team Recommendations  
To Be Submitted December 15, 2009**

**Background**

On August 10, 2009 the University Library Executive Committee approved the creation of the Geology Planning & Implementation Team (GPIT). Formally recruited by mid-September, the group began meeting in September 2009. The team was formed in response to ongoing discussions begun with the School of Earth, Society, and the Environment (SESE) following the formation of the School, which brings together the departments of Atmospheric Sciences, Geology, and Geography. The team's discussions centered on a plan to move the Geology Library from the Natural History Building and integrate its collections and services with the Grainger Engineering Library Information Center (hereafter Grainger Library), while maintaining the integrity and identity of the collection. This move will allow long-term development plans to move forward in the SESE, provide longer hours of access to the collection, provide better access to materials due to enhanced cataloging and better preservation of the print collection, bring related collections in closer proximity and will continue to stimulate the purchase of electronically-available geology and geology-related materials to create and build a robust virtual collection.

The team recognizes and appreciates the incredible strengths of this deep and historically-rich collection, and acknowledges that the tradition of the library is important not only to its current users, but also to generations of alumni. Geoscientists around the world recognize that the UIUC Geology collection is a treasure, for it includes an impressive collection of rare books, and unusually complete collections of serials, monographs, state survey publications, guidebooks, and maps. Thus, the strategy of the move must be designed to preserve and improve the collection, while recognizing that usage patterns have shifted greatly in recent years and that many of the library's users prefer to access the collection on-line. We anticipate that the result of this move will ultimately be better access to collections and improved service for users.

The team's charge (<http://www.library.illinois.edu/nsm/geology/index.html>) spoke to the importance of user consultation and the need to address service and collection needs. A second priority was to propose specific steps and necessary resources to accomplish the integration along with a timeline for implementation. Much of the team's initial time was spent reviewing the collection in terms of size and

overall use. Data showing use of both serials and monographs helped the team to visualize and quantitatively assess, for example, which high-use serials should be available online, and which low-use serials might be stored off site and retrieved and delivered within 24-48 hours.

Some discussion concerning the Geology Library took place prior to the team's creation. Documentation on the Physical Sciences and Engineering Division's response to then-Provost Katehi's letter recommending library consolidations, subsequent discussions with the Library, and notes on the open forum (April 3, 2009) are available at <http://www.library.illinois.edu/nsm/psed/index.html>. These documents and discussions ultimately led to the creation of the team, and our charge.

Because some discussion concerning the Geology Library had already occurred prior to the team's creation, including a draft memorandum of understanding (prepared by Steve Marshak), and due to the fact that the team was equally charged with implementation along with planning, much of the initial consultation took place within the committee. Faculty representatives spoke for their colleagues as we discussed collection access, location of materials, consolidation and services. However, in order to communicate directly with affected faculty, a draft of this report was distributed to SESE faculty on December 4, 2009 with an invitation to an open meeting held December 10, 2009 (Room 206 NHB, 11 a.m.). The team invited written comments and feedback at any time prior to February 1, 2010; in addition, the Executive Committee of SESE has been kept informed of the activity of the GPIT during the semester.

### **Description of Relevant Research and Teaching Programs**

The School of Earth, Society and Environment (SESE), formed in 2007, joins the resources of the departments of Geology, Atmospheric Sciences, and Geography at the University of Illinois to study the Earth System and its societal interactions. Each department independently offers bachelors, masters, and doctorate degrees, and maintains disciplinary specific research programs. Graduates of the departments pursue careers in research, academia, education and/or industry. In addition, the School offers a new interdisciplinary major in "Earth, Society, and Environment," a liberal arts degree with the goal of educating citizens to recognize and appreciate the range of physical and human interactions that affect the Earth System over time; these students are uniquely situated at the cutting edge of academic and professional work concerning the environment and global change. The student population of the School has been growing rapidly; the number of undergraduate majors doubled between 2007 and 2009. Users of the library include students, faculty, and staff of the three departments, as well as students and researchers from other units across campus. These include:

- The Department of Geology currently employs 14 tenure/tenure-track faculty, 4 AP teaching staff and research faculty, and 6 post-docs. It enrolls 55 undergraduate majors, 32 graduate students and teaches approximately 3500 students in general education courses.
- The Department of Atmospheric Sciences (DAS) currently employs 12 faculty and 4 AP teaching staff and research scientists. It enrolls 70 undergraduates, 50 graduate students, and teaches approximately 2000 students in general education courses
- According to the 2008-2009 Campus Profile data, the Department of Geography employs 14 faculty and 9 AP teaching staff and research faculty. It enrolls about 30 undergraduate majors, 45 graduate students, and teaches approximately 1500 students in general education courses. It covers the physical and human aspects of the discipline, and thus a portion of its personnel utilize the Geology Library.
- The School's interdisciplinary major currently enrolls 396 undergraduate and graduate majors, and is growing. In addition, the School anchors the Environmental Fellows Program, which currently enrolls about 80 students. Additional programs are under consideration.
- Other units on campus that utilize the Geology collection include: the Illinois State Geological Survey; the Illinois State Water Survey; the U.S. Geological Survey; the Department of Civil and Environmental Engineering; the Department of Anthropology; the Department of Plant Biology; the Department of Animal Biology; and NRES, the Natural Resources and Environmental Studies Department.

### **Data Gathered and Consulted**

The team began by reviewing a document written by Geology Librarian Lura Joseph titled, "Geology Library Reconfiguration Criteria." This document proposed a decision tree based on this study of the collection over the past few years. There was agreement about the three statements made at the beginning of the document: 1) duplicate monographs and serials can be moved to Oak Street, 2) older editions of monographs can be moved to Oak Street, 3) journals available online can be moved to Oak Street. The team also examined spreadsheets showing use of both serials and monographs. These data showed that there are a few very high-use journals but many more with a low use per volume. Approximately 100 titles have five or more uses over the past 7.5 years, while approximately 200 titles have two or more uses (both average per volume per serial title over the last 7.5 years). Serial titles with less than 1 use, on average, per volume, account for approximately 25,000 volumes. The Geology Library staff does regular pick-ups of serials used in-house and charge and discharge them to collect use data. The spread sheets can be found on the New Service Model web page under Geology Planning & Implementation Team (<http://www.library.illinois.edu/nsm/geology/index.html>).

### **Vision, Mission, Values, Guiding Principles or Goals**

The primary mission of the Geology Library is to serve the information needs of the researchers, scholars and teachers in the School of Earth, Society and Environment, as well as other related programs and surveys at the University of Illinois at Urbana-Champaign. Providing excellent service for our users, even in a period of economic crisis, is our highest guiding principle. We seek to maintain the high quality and reputation of the geology collection, as the collection transitions into an increasingly virtual, digital format.

No matter where the physical collection resides, increasing emphasis on electronic format will allow a leaner, browsable physical collection. Considerable progress has already been made in this direction. However, some amount of physical material in a browsable location will still be needed for the near term. A core collection, representative of most geographic areas and subdisciplines, is needed to answer reference questions, and for scholars and researchers to physically browse. In the future, we anticipate that this core physical collection will diminish, or at least change, as more sophisticated online resources and tools become available.

In order to achieve this vision of a lean but representative, core physical collection, duplicates, older editions, and print journals for which there is an assured availability online will be transferred to Oak Street, the library's high-density facility located adjacent to campus. In addition, low-use monographs, monographic series, and journals will also be transferred, unless they are needed for the core browsable collection. Most geologic maps will also be transferred to the high-density facility. It is recognized that access to the map collection represents a particular challenge, because users of maps are often uncertain as to which specific map they are looking for before they begin their search.

Access to the material moved to the Oak Street facility will be facilitated by improved cataloging and creation of finding aids. Monographic series and geologic map sets and series will be cataloged in greater detail, and indexes for map series will be scanned and made available online. Our goal is to increase access to information while reducing our footprint in order to free up space and reduce expenses.

### **Recommendations**

The process to move the Geology collection to a new model (described above) has been underway for the past three to four years. Approximately 25% of the original onsite collection of over 100,000 volumes has already been relocated. We anticipate this continuing relocation of the physical collection will be more than replaced by access to online collections including books, serials, book series, and government

reports. This refocusing of the collection on virtual materials is completely in line with user trends, supporting use with online collections.

## **Collections**

- Serials with fewer than 2 uses per volume per serial (over 7.5 years) should be considered for transfer to Oak Street. However, the Geology Librarian will identify certain types of serials (those with a local focus, field guides, congresses, items not indexed) that should be considered for the onsite collection regardless of use. The goal is that approximately 30,000 serials volumes can be transferred to Oak Street based on low use.
- At the other end of the spectrum, high-use serials will be acquired online (where available) with the corresponding print serial volumes transferred to Oak Street. This recommendation adds approximately 1400 serial volumes that can be transferred to Oak Street.
- Of the current 30,000 monographs in the Geology Library, approximately 12,000 of them have not circulated in the past 7.5 years. An additional 3,000 monographs have circulated once during that time. The team recommends that those monographs used one time or fewer since 2002 be transferred to Oak Street, accounting for approximately 15,000 volumes. However, the Geology Librarian will identify reference or reserve materials that can be retained in an onsite collection.
- The total count of the Geology collection (non-map) materials remaining will be approximately 30,000 volumes (an estimated 30% of the original collection). The team recommends these volumes be located in call-number order and integrated with other materials already in the Grainger Library stacks (see Space Recommendations).
- Geology Library maps are currently estimated to number anywhere from 55,000 to 100,000 sheets. The team proposes that an inventory of Geology Library maps be conducted to determine the size and scope of this important collection (see Costs). Following procedures recently established by the Map and Geography Library (please see this presentation on our web site:<http://www.library.illinois.edu/nsm/geology/MapstoOakStreet.pdf>), the team recommends that, post-inventory, Geology Library maps be deduplicated, weeded, and the majority of them be sent to Oak Street with full record cataloging (see Costs). However, a small number of heavily-used maps may be retained in an onsite collection.
- Considering that users commonly need to take maps out of the library, we further recommend that scanning/duplicating facilities be made available for users either at the Grainger Library or centrally within the University Library; these services must be cost-neutral and completed within a

reasonable time frame. As is currently the case, circulation of maps will depend on a number of factors, most importantly the physical condition of the map.

- Requesting maps from Oak Street will require implementing procedures established by the Map and Geography Library. These procedures include folders of approximately 20 maps (grouped by relationship and/or geographic proximity); folders are sent to a library where patrons review and either circulate or reproduce the needed map. In order to facilitate searching and retrieving, we recommend that map names and authors be included in a searchable field in the bibliographic record and that index maps be scanned and made accessible.
- Special formats currently housed in the Geology Library include fiche, film, CDs, and large-sized pieces such as folios (e.g., atlases; collections of seismic-reflection profiles; collections of cross sections). These items will need special handling as their distribution is decided. The Grainger Library has eliminated its microfilm holdings and transferred out all film cabinets. In addition, a review by University Archives of library files may result in the transfer of historically-important papers to the Archives.
- It is important to note that the Geology collection contains many rare books and manuscripts; these items have already been relocated to the Library's Rare Book and Manuscript Library where they are preserved and well cared for.

### **Services**

- It is essential that the Library continue to have a subject specialist with disciplinary knowledge of Geology and Atmospheric Sciences, providing the full range of services as previously provided from the Geology Library, but relocated to Grainger Library. These services include collection development, reference, user education, specialized web pages and finding aids. We strongly recommend that the budget for materials remain with this subject specialist (and any future geology - atmospheric science selector) and that it be increased as is feasible to continue to grow the strengths of this internationally-important collection. The importance of retaining a qualified subject selector in this field cannot be overstated.
- General library services, such as reserves, circulation, interlibrary loan and recalls will be provided by Grainger Library.
- Specialized map reference service, including locating maps, requesting maps and reproduction of maps, will be provided by a trained library staff member.

- There will continue to be a Geology Virtual Library website, which will provide electronic services, including e-reserves, e-books, and other access to online materials. This may include the option to engage in virtual reference services such as Instant Messenger, Ask a Librarian (real time chat reference) or other technologies.

### **Staffing**

- Geology Library staff will be relocated to other units; we strongly recommend that the staff be moved to the Grainger Library in order to meet expanding needs of that unit due to the relocation of the Geology and Physics/Astronomy libraries. In addition, it is very important that staff with specialized skills, such as map cataloging and retrieval, be moved with the collection to further support this transition and continue to provide excellent service.

### **Space**

- The team recommends that approximately 30,000 volumes currently in the Geology Library be transferred to the Grainger Library. The 30,000 volumes, at an average of approximately 2 inches per volume, equals approximately 5,000 linear feet and therefore approximately 1,600 shelves (if each shelf is the standard 3 feet). Grainger Library will be able to free up some space through weeding and processing materials for Oak Street. However, it is unknown at this time if these measures will create the sufficient space needed. If necessary, we thus recommend the purchase and installation of compact shelving, including the costs of shifting materials/books and the temporary relocation of engineering materials.
- The team further recommends that a small number of map cases will be placed in Grainger Library. This number will be determined following the map inventory and title/set review. Map cases must be non-acidic and securable; suitable work tables will be needed for map processing and circulation.
- We recommend that the Geology Librarian be provided with an office in the Natural History Building in close proximity to the teaching faculty offices in order to offer on-the-spot service, reference and referrals. We further recommend that they also have an office in the Grainger Library.

### **Timeline**

The team has reviewed ongoing and existing remodeling plans for the Natural History Building as well as the space situation at the Grainger Library. Based on these reviews, the team recommends the following timeline:

- The Geology Library continues to review and process materials for Oak Street with full staff for a period ending December 15, 2011. This timeframe includes the map inventory, review and processing for Oak Street. After December 15, 2011, materials remaining in the Geology Library should only be those slated for transfer to the Grainger Library, subject to available space.
- The Grainger Library will continue to process materials for Oak Street to create space for 30,000 volumes. If they cannot clear adequate shelf space through transfers to Oak Street, they will let the Library Budget Group know by December 2010 so that the Library can identify funding and begin planning for compact shelving.
- The physical relocation and bulk transfer (in the Voyager database) of materials from Geology to Grainger Library should begin no later than December 15, 2011.
- The Geology Library will vacate existing space in the Natural History Building no later than February 28, 2012.

#### **Costs**

- The proposed Geology Library map inventory requires a minimum of a half-time graduate student hourly for six months. This is a critical step in this process and must be funded. The costs associated with this position are approximately \$8,400.00.
- The continuing cost of analytics requires the work of a cataloger. We recommend the continuation of this position and person for half-time for approximately 20 months, to December 2011. The costs associated with this position are approximately \$20,000 per year.
- It is unknown at this time if Grainger Library will be able to absorb approximately 30,000 volumes and a small number of map cases. We recommend funding for Grainger Library to assess, process and move print materials – primarily bound volumes of journals that are available in electronic format - to Oak Street.
- If necessary, we recommend the purchase and installation of compact shelving, including the costs of shifting and the temporary relocation of engineering materials.
- We strongly recommend the move be conducted by professional library movers.
- An estimate of collection costs has been drafted. Pricing information is being finalized and a request for funding from the NSM collection pool will be submitted to the Office of Collections. Ongoing, recurring costs will be a part of this recommendation and will need to be funded with recurring dollars.

## Still to be Resolved

- Before this team was convened, the College of Engineering and the School of Earth, Society and Environment (SESE) each expressed separate concerns regarding signage and identity as potentially problematic issues if these collections and services were to be co-located. Both parties will be invited to review this draft and given the opportunity to address any remaining concerns in this regard. Bill Mischo sent an earlier draft of these recommendations to Michael B. Bragg (Professor and Associate Dean for Research and Administrative Affairs, College of Engineering). A final draft will be sent to him and to Phil Best (Assoc. Dean for Biological, Physical, and Social and Behavioral Sciences) inviting them to respond with any comments or concerns. It is important to SESE that the continued identity of the geology collection be maintained and distinctly identified and that historical plaques associated with the Library are remounted in Grainger Library.
- SESE has submitted a draft Memo of Understanding to the Provost's Office concerning the future reassignment of space vacated by the Library in the Natural History Building. This document proposes that the Provost reassign the vacated space to the School to accommodate anticipated expansion of School programs.

## Assessment Plan

The team proposes maintaining a list of barcodes for materials processed and sent from the Geology Library to Oak Street. These barcodes can then be searched against the circulation records for Oak Street to determine if any book or serial is accruing use at a rate higher than expected.

A faculty and graduate student survey, conducted approximately 1 year post-move, should be conducted to determine satisfaction levels with services, collections and facilities. In addition, follow up surveys should be done regularly to stay in touch with users and keep them informed about services and collections.

Usage statistics and basic library management statistics should be collected and analyzed regularly. These include, but are not limited to, e-journal and e-book use, book and journal circulation, patron counts, map circulation, reference counts and Oak Street circulation (either by pre-established barcode or call number ranges).

## Appendix 1

### Charge and Team Membership

The Geology Planning & Implementation Team is charged with facilitating engagement with the School of Earth, Society, and the Environment (SESE) community and other relevant campus stakeholders on planning for the future of Library services for the geological and earth sciences, and making recommendations specific to the integration of the Geology Library with the Grainger Library.

The Geology Planning & Implementation Team will:

- Consult broadly with relevant academic communities to develop an understanding of the existing and emerging information needs in the geological and earth sciences;
- Suggest opportunities for delivering the services identified above in the context of the integration into the Grainger Library facility;
- Collaborate with the NSM Coordinator to plan the specific steps needed to implement the proposed service profile, provide a timeline for implementing these steps, and define staffing and resource needs and responsibilities;
- Recommend a plan for assessing the effectiveness of any new service profile;
- Serve as a steering committee to assist the Library in implementing these recommendations;
- Provide a report of the Team's discussions and recommendations to the University Librarian and Dean of Libraries by **December 15, 2009**.

### Members:

#### Faculty from relevant units:

- Jim Best (Professor, Geology and Geography)
- Greg McFarquhar (Professor, Atmospheric Sciences)
- Steve Marshak (Director, School of Earth, Society, and the Environment)

#### Library faculty:

- Tina Chrzastowski (Professor and Chemistry Librarian), Team Leader
- Lura Joseph (Associate Professor and Geology Librarian)
- Jenny Johnson (Associate Professor and Map & Geography Librarian)
- Bill Mischo (Professor and Grainger Engineering Librarian)

- JoAnn Jacoby (Associate Professor and Coordinator, New Service Model Programs),  
Administrative Liaison

**Library staff:**

- Sheila McGowan (Geology Library)

**Resource people:**

- Michael B. Bragg (Professor and Associate Dean for Research and Administrative Affairs,  
College of Engineering)
- Philip Best (Assoc. Dean for Biological, Physical, and Social and Behavioral  
Sciences)