Montana State Digital Library
March 15, 2005 – May 15, 2005

Natural Resource Information System (NRIS)

Goal 1: To fulfill its mandate to be the source for natural resource information in Montana, NRIS acquires, integrates, maintains, and documents natural resource data and information needed for understanding, managing and utilizing Montana's natural resources, and environment.

NRIS completed and posted new data offerings:

- Added the Montana Schools Database to the NRIS collection on May 1. The data is accessible via the MT Digital Atlas, the Data Bundler or the Data List.

- Completed two reports summarizing results of Surveys of Species of Concern in Northwest Montana and in Grassland/Sagebrush Habitats. Work was funded by MFWP State Wildlife Grants, and significant new data was entered into the NHP databases.

- 25 reports published by NHP before 1999 were scanned and posted on the web, doubling the number of NHP reports available on the website in full text pdf format.

Program statistics are not available due to the loss of personnel. Web statistics for this period will be generated when systems staff positions are filled.

Goal 2: A broad range of user groups can easily locate data in effective formats. Users find this information augmented with related datasets to increase its value. Potential NRIS users are well informed of information available through the clearinghouse and trained in the use of NRIS tools. Staff assistance is available when needed to assist users in locating and utilizing data.

Services:

- Completed work on a set of applications to provide improved access to DEQ remediation site information. First, we incorporated remediation site data into MSL's Digital Atlas (http://maps2.nris.state.mt.us/mapper/index.html) under the Environmental Impacts tab. Then, we developed a specialized tabular query interface to provide additional pathways to these data for DEQ users: http://nris.state.mt.us/deq/remsitequery/portal.aspx. This work will be the basis for a future effort to present selected site data for all DEQ-regulated facilities.

- Completed work on Montana County Health Profiles web query application and submitted it to the Environmental Public Health Tracking Project for review and comment.

- Due to insufficient staff hours, we were unable to guarantee that work would begin on the new version of DEQ's Total Maximum Daily Load (TMDL) interface this fiscal year. DEQ has therefore decided to have this application developed through other means. They plan to serve the application through MSL and we will continue to incorporate TMDL data into the NRIS collection.

Outreach:

- NHP staff met with BLM State Office, Resource Bureau staffing Billings to review projects, services, priorities and funding.

- Held 1-day training session in use of NHP web application, for BLM and USFWS biologists in Billings offices. Also held biologists' web training for USFWS Helena Office staff.

- Held 1-day field training on amphibian & reptile identification and management for USFS, BLM and FWP biologists in southeast Montana.

- Presented NRIS/NHP services and resources to Office of Surface Mining, Regional State Technical Team "New Technologies" workshop.

- Met with DEQ Wetlands Coordinator to plan statewide wetland mapping initiative, focusing on methodology and NRIS/NHP role in that work.

- Met with MFWP managers to review and clarify NHP role, services to FWP, staffing and funding levels.

- Participated in DPHHS planning sessions related to their Environmental Public Health Tracking (EPHT) project.

- Posted results of NHP web survey (focusing on user needs/priorities, satisfaction and "future" administration of NHP).

- Attended Western Region NHP Meetings; MT staff gave presentations on new methods for aquatic database development & ecosystem classification/mapping, and on streamlined methods for processing animal observation and occurrence data.

- Participated in a planning session with a subcommittee of the Montana Geographic Information Council (MGIC) for the purpose of developing a statewide approach to implementing and using GIS technology. Funded a contract with Janet Cornish of CDM Montana to prepare a draft table of contents, a state of the state regarding GIS in Montana, and a proposed planning process. This material will be reviewed by MGIC at their meeting on June 2.

- Attended quarterly meeting of the Montana Watershed Coordination Council's Water Quality Monitoring Subcommittee.

- Met with USGS and interested parties to discuss stewardship of the National Hydrography Dataset, a catalog of the nation's rivers, streams and reaches. Under an MOU with the USGS, NRIS will act as the official steward for Montana data and will mediate future additions and corrections submitted by public agencies. NRIS will also provide training for the software used to edit the NHD.

- As a member of the MontanaView Consortium, NRIS helped put together a grant proposal to the USGS that would establish a portal for Montana's LandSat and other public-domain satellite imagery. Through the portal, any interested Montanan will be able to view and download free satellite images for purposes such as education, business, agriculture, and scientific research.

Goal 3: In order to fulfill its mandate as described under Issues 1 and 2, NRIS secures adequate and stable funding.

- Review is underway of NRIS interagency agreements for FY06. Although it is unlikely that current agreements are adequate to carry the program through FY06, it is apparent that there is much more GIS work to be done and agencies will continue to require assistance from MSL.

Library Information Services

LIS Goal 1: State employees have the information that they need to make good public policy recommendations and decisions *and* LIS Goal 3: Montana citizens have easy access to a comprehensive collection of state publications.

Creating a institutional repository (IR) has been one need discussed since NRIS and LIS combined to form the digital library. Capturing and preserving the intellectual output of the state in both print and electronic forms is a critical component of LIS services to both employees and citizens. Creating this IR expands access to research and brings heightened relevance to the institutions we support. The IR has the potential to serve as a tangible indicator of the state library's commitment to quality access and to demonstrate the scientific, societal, and economic relevance of the state's research activities. It increases our institution's visibility, status, and public value. That's a pretty hefty weight for any one tool to carry since creating a digital library is not just finding the one "killer app" that will solve all the difficulties digital access brings with it. It will take a series of these applications working in concert and a staff of highly trained, technology competent staff in order to complete the vision for a truly digital library. But with the purchase of the new OCLC product we have taken a giant step towards creating that digital arm that will extend our reach by providing an immediate and valuable complement to the existing state library services.

Not all references to a completely digital library reflects that these tools require a human component to acquire, oversee, manage and maintain any materials cataloged or preserved within them. The staff has most recently had just three days of basic training that provided them with the know-how necessary to harvest (meaning to gather) and ingest (meaning to permanently preserve) state publications. We are taking our first baby steps. (As of the first of June we have ingested 128 documents into the IR, 71 of which are Natural Heritage Reports. It will be a slow steady growth based on library staffing, the mandates produced by the Permanent Public Access Committee, and the hoped for participation of all state agencies. Currently we can physically catalog and ingest only about 10 documents per day and we have quite a bit of catching up to do.)

There very few choices for applications like this in the library community, you could count the viable possibilities with one hand. Half of them are open source that although would require no licensing fees, we would have liked to but could not take advantage of due to LIS staffing and technical limitations. The rest are extremely expensive enterprise solutions too far out of our fiscal reach to even seriously consider since lean years might place the entire repository in jeopardy. With the purchase of this product have reached a compromise we believe provides us with the best possible solution. This OCLC Digital Archive is a first generation product. LIS will be involved in its growth as partners with OCLC and we expect many of our needs to be versioned into the application as it matures.

Here are some of the ways that what OCLC is calling their Digital Archive and what we are calling our Institutional Repository are different from ContentDM, another similar tool provided by OCLC for different purposes:

OCLC Digital Archive
- Concerned with preservation
- Integrated into current cataloging workflow tool (Connexion)
- Provides access through existing library catalog
- Focuses on publications

- Guaranteed access over years as digital formats change

OCLC CONTENTdm
- Concerned with access
- Separate functions required to get records into WorldCat
- Provides access through separately created interface
- Focuses on digital images
- No guarantee of continued access as digital formats change

It is our belief that eventually these two applications will merge and it has been implied by representatives from OCLC that maintaining two separate products will eventually become cost prohibitive and development on both will overlap, so there is a high probability that at some point both these tools will work together in tandem.

LIS Goal 2: The staff of Montana libraries know about and have access to the professional literature that they need.

We have worked with the Library Development Division to acquire and catalog $3,985.61 worth of books out of their professional literature budget that will form a traveling reference for Montana librarians and their boards.

Likewise we have used NHP and NRIS employees as guides to the purchase, in the last six months 108 books ($4,212.97) and 2 new journal titles ($1,574.53 in addition to the spring EBSCO renewal of $4,482.65) that focus and refine our state's special collection of natural resources texts, government information resources and technology-related manuals.

LIS Goal 4: Users have easy and comprehensive access to information through the library.

This goal is a challenge both physically and digitally. The library has been torn apart for the last six months with the remodel. We are constantly shifting furniture and surplus materials for ourselves and others in order to find new places to "tuck" things while the renovation of the conference room and the restructure of the second floor continues. Easy access to information for our visiting patrons or assemblies in this environment is not conducive to quiet contemplation, research or study, or learning and teaching.

We have had four new wireless public access computers installed. They are very nice and fast, sleek and impressive looking but we are still working out the bugs inherent in installing any new system. Our LIS web pages still require the loving touch of a devoted programmer. Access could be improved not only within our own organization (an intranet will eventually become essential) but to our patrons as well with struggles over such things as single password log-in and customized interfaces that more adequately address our online offerings such as, "Where do I find your catalog online?"

Personnel Notes:

The second recruitment for an additional web application developer closed on April 11. We have completed the interview process and reference checks are underway. We hope to have the position filled before the end of June.

We decided to recruit for an additional GIS analyst to fill the position vacated by our Water Information System coordinator. We have already completed the interview process and hope to have this position filled before the end of June as well.

The second round recruitment for a library systems specialist closed on 4/30. On 5/10 both interview applicants withdrew their names from consideration. This has been a very difficult position to fill. We hope to have the position filled soon. Any delays in filling this position increase the delays in moving forward with developing any library-related applications.

Jamie Harmon resigned her position due to personal reasons. It was hard losing a fantastic employee. The Outreach Librarian position will close at the end of June.