### **Natural Resource Information System (NRIS)**

July 23, 2003 – September 24, 2003

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.

Completed and are now serving the updated maps and GIS boundaries of Legislative Districts for the 2005-2013 regular sessions.

Met with staff from the Department of Revenue (DOR) and Department of Administration's (DOA) GIS Bureau to discuss joint efforts to provide more current web access to DOR's CAMA database (property information used for tax valuation) along with the DOA's Cadastral GIS database (detailed parcel level ownership). It was agreed that NRIS would received monthly CAMA data feeds from DOR, post process those data and integrate into our clearinghouse as well as provide parsed data to DOA. DOA is now providing NRIS direct access to its cadastral data. NRIS will join the two data sources into a variety of data 'views' customized for different uses and will provide access to those views via its web site and web applications.

Updated new and revised State Trust Lands information in the Stewardship database and set up process for regularly receiving and updating with new information from DNRC Helena staff.

Began intensive quality control of Biotics References database, correcting 236 existing references and creating 250 new records. The field season has thus far contributed to the creation of 20 new Element Occurrences, 27 revised Element Occurrences, and six new point observation records.

Entered extensive new Animal Species Characterization data; established weekly export procedure to download Characterization Abstract data from Oracle tables to SQL, to populate the Plant and Animal web field guides and keep them as current as possible.

Completed project report for US Bureau of Reclamation: Milk and Marias River Watersheds: Assessing and Maintaining the Health of Wetland Communities.

Met with and participated in the Homeland Security GIS task force to discuss data development needs and applications of GIS in the Homeland Security arena.

Continued to play an active role to encourage and support the development and refinement of priority datasets, serving on most of the Montana Geographic Information Council (MGIC) Implementation Teams (I-Teams) and chairing four.

Continued working with USGS representatives from Denver to discuss, plan, and begin implementing the USGS "National Map" application from the State Library. The National Map now loads data from the NRIS clearinghouse when a user views an area within Montana.

Met with DEQ Wetland Program staff and cooperators regarding development of a new wetland mapping project and data layer for Montana.

Goal 2: A broad range of user groups can easily locate data in effective formats. Users find that this information is 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.

#### Web Use and Requests:

Starting with this report, we are trying a new format for reporting web use and mediated request trends that we hope you find more meaningful and useful. The summary table is divided into two parts; mediated data requests and web use.

For web statistics we are providing counts of **Document Views** (largely static html pages), **Dynamic Page Views** (these are pages generated dynamically and generally represent interactive web content), **GIS Files Downloaded** (this represents an explicit count of various types of files on our system that GIS professionals download for use in their GIS systems), and **Visitor Sessions** (this is an estimate of the number of users who used the site during the reporting period). For all statistics, we provide current fiscal year to date figures, as well as the same figures for last FY year to date, along with a % change between the two periods.

For this report, we are reporting web statistics for the Natural Heritage Program separately from the NRIS state program. Further analysis and discussion is necessary to determine if this is appropriate. Although the primary access to Heritage data has been through the program's own web site in the past, the trend is to serve more Heritage data through NRIS and Fish, Wildlife and Parks on-line applications. Implications are that additional metrics, specific to that program and more representative of its broad range of functions, may be identified in future reports.

# Natural Resource Information System Statistics State Program Jul-Aug 2003

|                      | Jul-Aug FY02 | Jul-Aug FY03 | % Change |
|----------------------|--------------|--------------|----------|
| Mediated Data        |              |              |          |
| Requests             |              |              |          |
| Total Active Users*  | NA           | 1,205        | NA       |
| Total Requests       | 284          | 283          | -0.3%    |
|                      |              |              |          |
| Web Services         |              |              |          |
| NRIS State Program   |              |              |          |
| Document Views       | 382,816      | 461,141      | 20.5%    |
| Dynamic Page Views   | 299,060      | 407,638      | 36.3%    |
| GIS Files Downloaded | 71,115       | 50,896       | -28.4%   |
| Visitor Sessions     | 99,118       | 103,830      | 4.8%     |
|                      |              |              |          |
| <u>NHP</u>           |              |              |          |
| Document Views       | 24,966       | 31,791       | 27.3%    |
| Dynamic Page Views   | 21,584       | 24,114       | 11.7%    |
| Visitor Sessions     | 12,517       | 18,970       | 51.6%    |

<sup>\*</sup> An active user is defined as one who has made a request within two years prior to the last month shown in the column heading. This data is not available for the FY02 period because our new consolidated request log information goes back only to July 1, 2001.

#### Services:

Completed initial conversion of NRIS web site to new standardized, template-driven model. The new model provides a cleaner, less cluttered interface with better navigation, and provides the ability for further changes through modification of a single template.

Continued updates and maintenance of the MT drought monitoring page, including conversion of this site to the NRIS standardized template-driven model. NRIS maintains this comprehensive source of drought information as a service to the Montana Drought Advisory Committee.

Completed and launched a new sub-watershed review portal for a joint project with the U. S. Forest Service (USFS) and the Natural Resources Conservation Service (NRCS). This portal provides access to on-line maps that display the boundaries of watersheds as modified by NRIS staff during a QC process, and allows viewers to comment on the accuracy of the boundaries or provide suggestions for improvement to NRIS.

Added several new search options to the Thematic Mapper, including legislative districts and public land survey sections. These additional options allow users greater control over the display and report output of the Mapper.

Continued implementing design changes in Heritage web pages. Purpose of the pilot design is to improve ease of use, create visual appeal and achieve greater compliance and consistency with the state government design template.

Added several additional Heritage Program report pdf's to website, which now contains full-text versions of over 60 reports, a threefold increase from 1 year ago.

Began creating statewide map series of Stewardship data for distribution to DNRC Trust Lands field offices, in conjunction with Tom Schultz, Trust Lands Bureau chief. Maps will be sent to each office, which will review them and submit corrections.

#### Outreach:

Met with representatives of the Montana Stockgrowers Association (MSGA) to discuss outreach opportunities. This lead to an invitation to present on several NRIS-related topics at MSGA's annual convention in Billings this December.

Met with representatives from the Department of Public Health and Human Services (DPHHS) and the Department of Environmental Quality (DEQ) to discuss a new project called the Environmental Public Health Tracking (EPHT) network. Under a grant from the Centers for Disease Control, these two agencies are attempting to link environmental causes to health issues. Project leaders have expressed great excitement on learning of the extensive environment-related information assimilated by NRIS, and are very interested in NRIS's on-line interactive tools that provide visualization opportunities.

Made a training presentation relating to NRIS information and on-line information access tools to the Gates Institute library convention in Billings.

Recent monthly NRIS Seminars were well-attended. In July, "TopoFinder II: A New Breed of Web Mapping" was presented by NRIS Web Manager Jon Nehring. Duane Anderson, NRIS GIS Program Manager, presented a demonstration on the NRIS Digital Atlas of Montana in August.

Plans to participate in national GIS Day on November 19 are now underway. Fifth grade students from a local school will once again be invited to MSL for learning activities. An NRIS Seminar will be planned on GIS Day as well. These events have proved to be a good source of media coverage in the past, as well as a good outreach opportunity with our local community.

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

A determination has been made that the \$37,500 annual budget shortfall resulting from the legislative session will be split between the NRIS state program and the Natural Heritage Program. Both programs will attempt to make up the deficit through contracts, relying on additional contract overhead to fund supplies and equipment purchases. This is a particularly tight year, as significant expenditures are still necessary in order to complete the implementation of the storage area network as well as complete the physical plant upgrades to our computer equipment room. We have received considerable funding support commitment from our partners, including Fish, Wildlife and Parks, the Natural Resources Conservation Service, and The Nature Conservancy (through the Heritage Program) to help defray the costs of these infrastructure improvements.

To augment our core budget, we have entered into thirteen contracts with local, state and federal government agencies to perform work that compliments our mission. We are also completing work on an IMLS grant to serve geospatial data on-line, and have just received a grant from the Federal Geographic Data Committee to improve our metadata services. The combination of core funding, contracts and grants is adequate for NRIS to continue operation at roughly the same level as in FY02/03, but leaves little room for contingencies.

The Heritage Program is currently operating sixteen projects (grants or contracts) for database and applications development and data services, and twenty-eight projects for data collection and information development.