

**NRIS Advisory Committee meeting
June 17, 2010**

Data management discussion piece

Relevant statutes:

90-15-303. Interagency cooperation. (1) State agencies shall cooperate with the library and the committee in the planning of the natural resource information system.

(2) Within the limits of available resources, **state agencies shall provide data requested by the library for purposes of the natural resource information system and the Montana natural heritage program.** If an agency does not possess requested data or is unable to locate requested data, the agency shall inform the library. It is not necessary for an agency to conduct fieldwork or literature searches to obtain requested data.

90-15-201. Duties of committee. The committee shall examine the following matters and make recommendations to the library concerning:

(1) criteria for the categories and types of data to be collected for a natural resource information system;

(2) criteria for the format of data collection;

(3) identification of existing sources of relevant data in the public sector;

(4) identification of data acquisition, storage, and retrieval methodologies that are economical and efficient, that minimize or eliminate the duplication of databases, and that utilize computer networking;

(5) probable costs to agencies furnishing required data and probable costs of managing the data;

(6) probable benefits to be realized by the establishment of a natural resource information system;

(7) operation of the Montana natural heritage program; and

(8) other items the committee considers of importance to the establishment of a natural resource information system.

Traditional library model:

Libraries purchase, license or otherwise acquire information resources with the intent to make those resources available to their patrons. What types of information and in what format the information is collected is primarily determined through libraries' collection development policies. These policies also typically determine how long libraries will keep resources before those resources are archived or weeded and discarded.

In this traditional model, except during the acquisition process, libraries tend to work very independently from publishers. This has traditionally been the case with NRIS. NRIS works closely with data publishers (primarily our partners) to acquire data. NRIS then hosts that data and makes it available for download or through online applications in a manner consistent with user needs.

This model meets user needs by providing them with information they need from a single source and via a mechanism that is typically free and available to all. Unlike the mission of data creators and publishers, which vary widely, it falls within a library mission to make that data freely available. It is this model that NRIS has always followed and where both users and publishers have found value in NRIS as a clearinghouse for Montana GIS data.

The amount of information produced has increased significantly and is being produced by significantly more players since NRIS came into existence. Subsequently, users' demand for GIS data has increased and continues to increase as well. This has made fulfilling the role of GIS clearinghouse much more challenging. One challenge in particular is in regard to the currency of data which, in some cases, can be very dynamic. Some datasets may be complete and unchanging overtime and may remain relevant to users far into the future. Other datasets are incredibly dynamic and only the most current data may be useful. And, for still other datasets users may require both current as well as older data to conduct specific analysis. NRIS must be prepared to respond to all of these users' requests. One of the major disadvantages of the traditional model is that as data becomes outdated, whether it is replaced with more current data or not, significant work must be done to keep the clearinghouse data collection up-to-date, relevant and useful to NRIS patrons. NRIS must seek out or be made aware of more correct or more recent data. Lacking this, out-of-date data which may or may not be accurate and may or may not be available in more current iterations, may be all that NRIS has in our collection. This is not necessarily wrong or bad, especially if the data is of value to patrons. It is, however, up to the patron to review any and all associated metadata and to be informed about the data selected.

Finally, even within this ownership model, there have been instances where entities have requested that libraries remove contents from their collections. However, these requests rarely result in loss of patron access to the information in question since by arguing that it is within the mission of the library to insure unfettered access to the information requested. This freedom is yet another reason why the role of the library is so valued in our society.

The Federated Model:

As stated, since the inception of NRIS more and more entities have begun to create and manage GIS data collections and more and more entities have begun to make that data available in a variety of ways to a variety of users groups including the public.

While this certainly impacts NRIS, it does not lessen, and some may argue that it actually increases the value of NRIS as NRIS continues its role as a "one stop shop" GIS clearinghouse. Through changes in technology, the actual ownership model required to provide access to data has changed. Now, with the creation of the Montana GIS Portal, it is possible for publishers to retain ownership of their data but to make it discoverable and accessible by publishing metadata with NRIS. This is a model that NRIS has embraced and is working to support for those publishers that choose to make their data available to

the public. If however, publishers do not have the mission or resources to make data available themselves, NRIS will continue to support the traditional data ownership model. And publishers may choose to make their data available via both models. For example, publishers may choose to make their most current data available via map services which are discoverable through the Portal. Out-dated or archived data may then be transferred to NRIS for archiving. Discovery of archived data would still be available through the Portal but the metadata would clearly state, if necessary, that the data is not the most current data available. Archived data may be made available via services, downloadable data or as offline data. These types of decisions can and should be made based primarily on user need with input from publishers and NRIS staff.

Of key importance, is that data producers, and particularly those identified in statute, must make their data available. The onus remains on NRIS to seek out new data and information resources to provide to our patrons. That said, there is also onus on data source agencies, as identified in statute to help NRIS make data available to the public. It is the mission of NRIS to ensure that this happens and we will continue to work with our partners to do so.