

MEMORANDUM OF UNDERSTANDING

between the

NATURAL RESOURCE INFORMATION SYSTEM, MONTANA STATE LIBRARY & CORE FUNDERS

Funding for Core Services Fiscal Years 2010/2011

This Memorandum of Understanding (MOU), entered into this 1st day of July, 2009 between the Montana State Library (MSL), Natural Resource Information System (hereinafter referred to as NRIS) and our core funders

1) PURPOSE

This MOU is intended to implement and operate the Montana Natural Resource Information System and the Natural Heritage Program established by Chapter 650, Laws of 1983, and Chapter 395, Laws of 1985, and codified under Title 90, Chapter 15, MCA, and to implement the appropriation made to the Department by the 61st Legislature under House Bill 2 to partially fund the Natural Resource Information System and the Natural Heritage Program.

2) PRODUCTS AND SERVICES

- a) MSL will utilize its General Fund allotment for NRIS and funding passed through from selected agencies under House Bill 2 (hereinafter referred to as core funding) to maintain NRIS and the Natural Heritage Program (NHP) and to provide primary or essential information products, services, and related expertise to governmental agencies, universities, private business, organizations, and the public, with emphasis on service to the agencies providing funding under House Bill 2 (hereinafter referred to as source agencies), to include the following:
 - i) Maintain the infrastructure (hardware, software, physical plant) necessary to provide NRIS & NHP products and services including:
 - (1) Maintaining a robust hardware platform to ensure the effective management, security and broad, consistent availability of NRIS & NHP information resources and services, including web servers, application servers, Internet mapping servers, database servers, data storage and associated systems (data backup, battery power, backup power, air conditioning, etc.)
 - (2) Maintaining a comprehensive suite of vendor software as necessary to maintain NRIS & NHP. This includes but is not limited to the purchase of licenses for GIS, operating systems, relational database management systems, web services, application development and network administration.
 - (3) Provide ongoing maintenance of data, information resources and applications described in more detail below.
 - (4) A system for archiving of datasets to ensure access to the historical record of natural resource information. NRIS will utilize expertise developed by the Library of Congress and other institutions to archive GIS datasets including imagery.
 - ii) Maintain and routinely update the NRIS clearinghouse for important natural resource information, including:
 - (1) Tools that allow users easy access to natural resource information including the Montana GIS Portal, and other integrated mapping applications such as the Montana Digital Atlas and Topofinder I and II;
 - (2) Natural Heritage databases that document the status, observations, occurrences, range, predicted habitat and characteristics of Montana animals, plants and habitats, emphasizing those of conservation concern;
 - (3) Statewide and regional data-layers made available through governmental agencies, organizations and the private sector including the Montana Spatial Data Infrastructure (MSDI) data sets.

- (4) Reports, monographs, and reference materials; and,
 - (5) Metadata relating to all data and information in the made available by NRIS & NHP.
 - (6) Historical natural resource data.
- iii) Theme stewardship and stewardship assistance
- (1) Both NRIS & NHP serve as state MSDI stewards. NRIS serves as the state and federal steward for the National Hydrography Dataset and is the co-steward of the Orthoimagery framework layer; NHP serves as the state steward for the land cover framework layer and assists the Department of Environmental Quality with the stewardship of the wetlands framework layer.
 - (2) NRIS works with the Montana Geographic Information Officer (GIO), the Montana Land Information Advisory Council (MLIAC), and the Base Map Service Center (BMSC) to ensure the long term success of all of the MSDI framework layers. Specifically, NRIS takes on the responsibility of providing assistance to the stewards of all of the natural resource framework layers: Hydrography, Geology, Hydrologic Units, Soils, Wetlands, Land Cover. A cooperative agreement between NRIS and BMSC to provide the similar stewardship assistance for Orthoimagery and Elevation.
 - (3) NHP maintains the Montana Land Stewardship databases with information from public land management agencies, the Montana Department of Administration and other conservation landowners.
 - (4) NHP maintains compatibility with Natural Heritage programs in other states and provinces, and conduct a regular exchange/updating of state and national/global element data with NatureServe. Cooperate with NatureServe and other heritage programs to ensure that Montana has access to the most current and complete range wide data available, and that Montana's contributions to regional and national data syntheses is current and accurate.
- iv) Provide products and services to governmental agencies, universities, private business, organizations, and the public, including:
- (1) Provide natural resource kiosks for self service natural resource data and information access through available public access computers via the internet. The initial emphasis will be on presenting current tools and applications with a focus on natural resources (Air information, Water information, Land information). This will help hone current applications and could spur the development of new tools to help users with a variety of tasks including access to preformatted maps, interactive information discovery, visualization and access applications, access to metadata relating to clearinghouse data, and direct access to raw datasets used by GIS, IT, and natural resource professionals. Within the Montana State Library these kiosks will be dedicated physical workstations with self help materials easily accessible to users. These materials will be made available to any interested libraries for distribution to their patrons;
 - (2) Develop data and information discovery methods that broaden access to NRIS & NHP data and applications and link users of NRIS data and applications to related information (e.g. holdings represented in the Montana State Library catalog, and the Montana Memory Project map archive);
 - (3) Provide reasonable mediated request service to aid users who need NRIS & NHP data to augment the self service described above;
 - (4) Respond to questions and information requests related to the identification, assessment, status and management of Montana's flora, fauna and natural communities, emphasizing species and habitats of conservation concern.
 - (5) Assemble and serve information documenting the biology and management of species and habitats, and the stewardship status of public lands and conservation easements through the online Montana Field Guides, Species of Concern Search reports, and the Natural Heritage TRACKER web applications.
 - (6) Provide phone support, online tutorials, and user technical support, including group training, for access to clearinghouse information and use of information access tools;
 - (7) Participate in and promote interagency coordination and sharing of information through active participation in the activities of the Montana Land Information Advisory Council, the Montana

Association of Geographic Information Professionals, and similar groups, and through participating in planning and reporting meetings with source agency representatives;

- (8) Assisting source agencies to expose their data via the Internet in general, and the Montana GIS Portal in particular, in a manner that facilitates discovery, visualization and access, including developing standard templates and procedures relating to geospatial data dissemination, developing data sharing protocols and procedures that enable agencies to expose their data for access by others, including NRIS for incorporation in the NRIS clearinghouse, and providing limited technical support relating to source agency data dissemination services.

v) Education, Training and Outreach

- (1) Maintain staff having knowledge and expertise in GIS, information management and dissemination systems, web application development, network and web administration, vegetation ecology, zoology, botany, Montana's natural resources, natural communities and species of concern, and program administration, and maintain the office infrastructure necessary for staff to carry out their functions.
- (2) Conducting education and outreach activities to keep users advised of additions to and modifications of NRIS & NHP information resources and information access tools;

- b) Consultation on additional services and products: NRIS will provide the products and services described above and will respond to user requests to the maximum extent possible using the resources supported through core funding. If source agency information assimilation, management or dissemination needs extend beyond the services described above or if source agency requests for NRIS products and services exceed the ability of NRIS to respond in a timely manner, NRIS will work with agency staff to develop strategies and identify resources to meet agency needs.

3) COMPENSATION

- a) The Departments shall pay to the NRIS a total of \$567,032 for the biennium in quarterly payments. NRIS will invoice the Departments for each quarterly payment 30 days in advance of the due date for the payment based on the amounts below (amounts shown are total annual payments).

Agency	Amount
FWP	\$69,341
DEQ	\$88,927
MDT	\$31,844
DNRC	\$49,154
Universities	\$44,250
\$283,516	TOTAL (annual)

4) REPORTING

Within thirty days following the end of each fiscal year, NRIS will submit to the Department liaison a report summarizing the products and services completed during the year that were completed using core funding and a description of the core-funded activities that NRIS will engage in during the forthcoming year.

5) PERIOD OF AGREEMENT

This MOU is effective July 1, 2009 and terminates June 30, 2011.