

MEMORANDUM OF UNDERSTANDING

between the

NATURAL RESOURCE INFORMATION SYSTEM, MONTANA STATE LIBRARY

&
Core Funders

Funding for Core Services Fiscal Years 2014/2015

This Memorandum of Understanding (MOU), entered into this 1st day of July, 2013 between the Montana State Library (MSL), Natural Resource Information System (hereinafter referred to as NRIS), and our core funder. provides as follows:

1) PURPOSE

This MOU is intended to implement and operate the Montana Natural Resource Information System, including the Water Information System (WIS), and the Montana Natural Heritage Program (MTNHP) 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 63rd Legislature under House Bill 2 to partially fund the Natural Resource Information System and the Montana Natural Heritage Program.

2) PRODUCTS AND SERVICES

- a) MSL will utilize its General Fund appropriation for NRIS and the WIS, Montana Land Information Act funds, and funding passed through from selected agencies under House Bill 2 (hereinafter referred to as core funding) to maintain NRIS and the MTNHP 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 those agencies that provide 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 & MTNHP products and services including:
 - (1) Maintaining a robust hardware platform to ensure the effective management, security and broad, consistent availability of 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 & MTNHP. 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 and related geographic information. By participating in the National Digital Stewardship Alliance (NDSA) Geospatial Subgroup, NRIS will stay abreast of current guidelines to archive spatial data to implement and maintain a GIS archives program for the NRIS Clearinghouse and the Montana Spatial Data Infrastructure (MSDI).

- ii.) Maintain and routinely update the Geographic Information clearinghouse for important natural resource information and supporting spatial datasets, including:
 - (1) Web pages and web applications that allow users easy access to natural resource information including the Geographic Information Data List, the Montana GIS Portal, and other integrated mapping applications such as the Montana Digital Atlas, Topofinder and GIS Data Bundler. The MSL Geographic Information web site was developed to consolidate resources available from the NRIS and the Base Map Service Center (BMSC) (previously a program of the Department of Administration) web pages and this site went into production in January 2013. This site will continue to be enhanced and the old NRIS and BMSC pages will be decommissioned in FY 14. An updated Data Bundler tool is currently under development with an expected release in early FY14.
 - (2) Web mapping services that allow users to access current GIS data through local GIS systems without maintaining local data copies that are large, quickly out of date and costly to maintain. Currently available web mapping services include the MSDI Administrative Boundaries, Cadastral, Geodetic Control, Imagery, Structures, Land Cover, Wetlands, Structures, Transportation. Services currently in development for release in FY14 include Montana Hydrography, Hydrologic Units, and Geographic Names. We also anticipate a 2013 National Aerial Imagery Program (NAIP) Imagery dataset to be flown. If so, we will add this dataset to the MSDI Image Server Service upon delivery.
 - (3) Natural Heritage databases that document the status, observations, occurrences, structured survey locations, range, predicted habitat and characteristics of Montana animals, plants and habitats, emphasizing those of conservation concern;
 - (4) Statewide and regional data-layers made available through governmental agencies, organizations and the private sector including the MSDI data sets;
 - (5) Historical natural resource data;
 - (6) Reports, monographs, and reference materials; and,
 - (7) Metadata relating to all data and information made available by MSL Geographic Information & the Montana Natural Heritage Program.

- iii.) Montana Land Information Act (MLIA) Administration and Montana Spatial Data Infrastructure (MSDI) Oversight
 - (1) With the passage of House Bill 38, the Montana Legislature officially moved the Administration of the Montana Land Information Act to the State Library. MSL is the Chair of and provides staffing for the Montana Land Information Advisory Committee. MSL also provides administrative support for the MLIA Grant Program.
 - (2) MSL Geographic Information provides direct stewardship of eight MSDI Framework Layers: Administrative Boundaries, Cadastral, Geodetic Control, Geographic Names, Hydrography, Orthoimagery, Structures and Addresses, and Transportation. MTNHP 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.
 - (3) MSL provides assistance to the stewards of the remaining framework layers: Elevation, Geology, Hydrologic Units, and Soils.
 - (4) MTNHP maintains the Montana Land Management databases with information from public land management agencies, the Montana Department of Administration and other conservation landowners. Land management information is accessible through the Natural Heritage MapViewer.
 - (5) MTNHP maintains compatibility with Natural Heritage programs in other states and provinces, and conducts a regular exchange of up-to-date state and national/global element data with NatureServe. MTNHP cooperates 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.) Water Information System Administration

- (1) MSL coordinates efforts to improve hydrographic data and provides support to Water Information users throughout Montana with the goal of identifying opportunities to collaborate in order to make high quality water information available to all Montanans as efficiently and affordably as possible.
- (2) MSL manages the Montana Hydrography Dataset as a statewide water information reference dataset with the goal of providing a high quality state wide dataset available for use by state, local, and private interests as the best available hydrography data in the state.
- (3) MSL manages and maintains the Montana Water Information System web site as a discovery hub for Montanans to discover information about water in the state. This site will include access to the Montana Hydrography dataset for use by GIS professionals as well as access to tools for the general public to access and visualize a broad range of water related information indexed to the Montana Hydrography Dataset.

v.) MSL provides products and services to governmental agencies, universities, private business, organizations, and the public, including:

- (1) Natural resource companions for self-service natural resource data and information access via the web and promoted through Montana public libraries. Currently available companions include the Hunting Companion and the Fishing Companion. Companions 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. MSL develops data and information discovery methods that broaden access to NRIS & MTNHP data and applications and link users of NRIS data and applications to related information (e.g. holdings accessible through the Montana State Library Web Discovery System, DiscoverIt, represented in the Montana State Library catalog, and the Montana Memory Project map archive);
- (2) Reasonable mediated request service to aid users who need NRIS & MTNHP data to augment the self service described above;
- (3) Science staff with the zoological, botanical and ecological expertise to respond to questions and information requests related to the identification, assessment, status, and management of Montana's flora, fauna and biological communities, emphasizing species and habitats of conservation concern.
- (4) Assembles and serves 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 and/or Map Viewer web applications.
- (5) Phone support, online tutorials, and user technical support, including group training, for access to clearinghouse information and use of information access tools;
- (6) 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.

vi.) 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) Participates in and promotes interagency coordination and sharing of information through active participation in the activities of the NRIS Advisory Committee, Montana Land Information Advisory Council, the Montana Groundwater Steering Committee, the Montana Drought Advisory Board,

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

- (3) Through a series of webinars, presentations and attendance at statewide library conferences and workshops, provide natural resources and GIS education to Montana librarians through the Geographic Literacy Campaign. By helping Montana librarians understand how to use available natural resource and GIS applications, Montana librarians in turn promote these resources to their patrons.
- (4) Conduct education and outreach activities to keep users advised of additions to and modifications of NRIS & MTNHP 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 Department shall pay to the NRIS a total of <same amount as previous biennium> in quarterly payments to be made on or before the dates specified below. NRIS will invoice the Department for each quarterly payment 30 days in advance of the due date for the payment.

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

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, 2013 and terminates June 30, 2015.

6) LIAISON

The Department designates <Advisory Rep> or her successor, as liaison under this MOU. All communication between NRIS and the Department will be through the designee noted above at the following address and phone number: <Agency Address>. NRIS designates Evan Hammer, Digital Information Manager, Montana State Library, or his successor, as liaison under this MOU. All communication between NRIS and the Department will be through the designee noted above at the following address and phone number: 1515 E 6th Ave., Helena, MT 59620, (406) 444-5355.

7) TERMINATION

Either party may terminate this MOU by notice in writing to the opposite party at the address set forth above at least 30 days prior to the effective date of termination. The notice of termination will contain the reasons for termination.