





Letter from the Montana State Librarian

The Montana State Library is committed to strengthening libraries and information services for all Montanans through leadership, advocacy, and service. The outstanding staff and partners of the State Library strive to meet this mission every day.

International library strategist Lorcan Dempsey challenges librarians to think about how we can collaborate to solve infrastructure challenges in ways that improve economies of scale, which then permits librarians and information professionals to focus more resources on innovation and opportunities for community engagement.



Through cutting edge digital content administration, consulting services, education, and creative collaboration, we at the State Library focus much of our energy and creative resources to support the infrastructure on which our partners rely. And we challenge ourselves and our partners to be innovative collaborators in our communities.

Over the past year, the Montana State Library staff has worked to find innovative ways to collaborate to expand our services and the services of libraries and partners throughout the state. As a result, Montana libraries are better positioned to be their communities' choice for discovery and exchange of information and ideas. GIS professionals are creating new and better data that is utilized at the local, state and federal levels and by the private sector to make more informed decisions. And our patrons around the state and the world experience the benefit of unprecedented access to information about Montana. Our dedication to strengthening libraries and information services for all strengthens community life for all Montanans.

Sincerely, unn Stapp

Jennie Stapp Montana State Librarian

Page 2

2014 Annual Report Overview

The Montana State Library is committed through leadership, advocacy, and service to strengthen libraries and information services for all Montanans. This report reflects the accomplishments of the Montana State Library during the 2014 fiscal year.

Our Statewide Library Resources Division reaches all Montana citizens through 1) the consulting and training we provide to community libraries; 2) our statewide purchases for content and collaborative resources that ensure that all libraries can offer their patrons up-to-the-minute accurate information on everything from health care to business management and industry-leading services; 3) our innovative programs that get informational materials into Montanans' hands more quickly and efficiently; and 4) our provision of reading materials for those who would not be able to read otherwise. Our Digital Library Division reaches out to state and federal employees, to the natural resource community and to the general public, providing vast quantities of unique information, such as that created by state government, as well as natural resource and geospatial data about Montana, that are accessible with the click of a mouse. This kind of ready access saves people, state and federal agencies, and business owners incredible amounts of time and money.

Access to information is the foundation of good government and government accountability; an informed citizenry; a strong business community; and a progressive educational foundation. Without the Montana State Library and its many services to our citizens, businesses, and government employees, the state of Montana would lack in information resources. The value of the services outlined in this report cannot be overstated.

Revenue and Expenditures

Revenue

General Fund	3,272,405
Federal	988,582
Natural Resource Information System Core Funding	283,523
Coal Severance Tax	562,583
Montana Shared Catalog	277,558
Grants/Other	218,883
Montana Land Information - Contract	892,149
Contracts	39,135
	6,534,818

Montana Land Information - Contracts Grants/Other Montana Shared Catalog Coal Severance Tax NRIS Core Funding Federal General Fund

Expenditures

Natural Resource Information System	
& Base Map Service Center	2,205,068
Library Development	1,556,041
Grants To Libraries	718,680
Montana Shared Catalog	277,558
Library Information Services	664,726
Administration	604,892
Talking Book Library	507,853
	6,534,818



Discover It!

Discover It! is Montana's statewide integrated information discovery tool designed to perform a comprehensive search of all of the library's resources, from catalogs to journal articles to digital collections and more. Discover It! links directly to all the information found in over 30 different information resources from one google-like search box. In FY14, Montanans performed over 18.5 million searches in Discover It! statewide, and nearly 93,000 articles – available only to registered library patrons – were used thanks to this site.

Discover It! can be customized to search information that specifically meets the needs of each library's unique patron base. Whether it's a medical professional researching clinical trials at a hospital library, a student searching age-appropriate articles and online primary resources like the Montana Memory Project, or a public library patron discovering links to magazines the library may subscribe to individually, any Montanan can use Discover It! to find relevant results from subscription resources and other high quality resources.

The 24 statewide EBSCO databases that include premium subscription content, the Montana Memory Project, and 170 library catalogs (including the Montana Shared Catalog member libraries, Butte-Silver Bow Public Library, and Lewis & Clark Library) are available to all Montana libraries via Discover It! The Montana Natural Heritage Program Field Guide and Montana Geographic Information Systems (GIS) Data records were added to Discover It! this year.

Try Discover It! at: http://research.msl.mt.gov.



Montana's Public Libraries



Montana Shared Catalog

During its Spring 2014 members meeting, the MSC membership voted to fund another fulltime support staff position. The new position will focus on catalog record maintenance and additional technical support for the membership.

The MSC also added two public libraries (Judith Basin County Free Library and Hobson Community Library), and one academic library (Fort Peck Community College) to its membership in FY14. One school library (Big Timber K-8 School) withdrew from the consortium. There are now 168 libraries and branches within the MSC membership located in 94 communities.

In late 2013, as a result of the discussions during the Fall 2013 members meeting, the MSC support staff created and presented a detailed proposal to reorganize the system configuration and operation policies that govern how the integrated library system functions. This proposal was approved by the Executive Board and then put into action as the MSC Reorganization project that began in January 2014. The goals of the project are to: 1) streamline system operation in order to reduce future annual cost increases; 2) achieve more effective library development and resource sharing among member libraries; and 3) better position the consortium in a rapidly changing, technological environment.

The MSC use of cloud-based products and mobile applications continued to increase with the addition of the MobileCirc app that is now in use by more than 20 libraries. Sixty libraries are currently using or testing the new "Enterprise" online catalog search interface. Finally, the MSC staff has been active participants in the vendor's "pilot testing" program for their soon-to-be released BLUEcloud Analytics and Cataloging software.

5,093,227	Total Circulation
956,160	Number of Unique Titles
429,588	Registered Patrons
168	Member Libraries
94	Communities
Montana Shared Catalog	

From MSC Member:

"The Joliet Public Library is a small, rural library located in Carbon County with a service population of 2,200 hardy souls. The JPL has been a member of the MSC since 2010. Being a member of this consortium has enabled us to offer the same services that any of the large public libraries offer their patrons. MSC levels the playing field. We participate in **Interlibrary Loans and** Montana Library2Go, both made easier with our membership in MSC. The cost of using an integrated circulation, inventory and reporting software as a member of the consortium is as much as 50% less than if we had to pay full price. This cost savings enables many small libraries to participate without breaking their budget. Membership in MSC also provides members with system, cataloging, training and support experts, which is an invaluable asset in this day and age, particularly for a small library. Thanks to the MSC, we small libraries can offer our patrons access to all of the electronic and print materials that are available at today's libraries."

Consulting and training topics during this reporting period include:

- library governance;
- collection management;
- library federations;
- new director orientation;
- personnel issues;
- compliance with Montana Public Library Standards;
- annual reporting of public library statistics;
- library law;
- public library district development;
- branch creation;
- library federation plans of service;
- ADA compliance;
- E-Rate filing;
- strategic planning;
- digital librarianship;
- EDGE participation;
- ethics;
- community engagement;
- collection management;
- intellectual freedom and patron privacy;
- library insurance needs;
- library web presence;
- future of libraries;
- broadband challenges and opportunities in Montana;
- MSL Statewide Library Resources website;
- library workplace applications;
- mobile applications;
- annual OCLC enrollment;
- inter-local agreements;
- library accounting;
- and library administrative and technology planning.

Statewide Library Resources

Statewide Library Consultants

Three full-time traveling library consultants offer consulting services in general and specialty areas of library development and provide continuing education opportunities for librarians and library trustees statewide. Specialty areas include digital literacy, information technology, access to information and resources, community development and partnerships, and lifelong learning.

The consultants presented 39 in person and online trainings that 534 librarians and library trustees attended. They responded to 911 requests for information and consulting assistance and made 99 visits to libraries around the state, travelling 23,007 miles.

Statewide Training and Certification

The State Library Commission has identified training as one of the primary goals of the agency. Under Montana's Public Library Standards, library directors are required to receive 60 continuing education hours every four years covering all aspects of librarianship: administration, public service, collections management, and technology. All library staff are encouraged to attain and maintain certification as are public library trustees. To support the certification program, the State Library is committed to providing quality learning opportunities to every library in Montana.

The State Library sponsored and participated in training events onsite throughout the year:

 The 2013-14 Summer Leadership Institute began with an intensive three-day seminar at Carroll College in July 2013, and concluded with participants presenting the outcomes of their leadership initiative projects to the MT State Library Commission in April, 2014. Participants developed a project that was meaningful to them and their community, ranging from a reorganization of the library space in Fairfield, MT to make room for cozy reading nooks within the stacks, to a rebranding effort system-wide in Flathead County, and launching a new early childhood program in Miles City. The library director in Clancy used the skills she learned to work with her board to create a better plan with sufficient resources for staffing, which has helped her to alleviate burnout.

- September 2013: Fall Workshops with 200 attendees at the Red Lion Colonial Inn in Helena. The hot topics at Fall Workshops included the role of libraries in assisting patrons to access HealthCare.gov, and evolving world-wide resource sharing.
- February 2014: The State Library hosted the Montana Library Association's Offline conference held at Carroll College in Helena, attended by nearly 100 participants. The theme of the 2014 offline was the next generation of shared activities and resources for libraries in Montana. Lorcan Dempsey of OCLC delivered the keynote address.
- Spring Library Federation meetings: MSL staff conducted several trainings at library federation meetings, focused on strategic planning, future of libraries, accounting practices, library online apps and webpages, and board development.
- April 2014: Montana Library Association annual conference, Billings. MSL staff presented a dozen sessions at MLA reaching more than 200 librarian learners.
- May-June 2014: Trustee and director trainings in Kalispell and Butte featured a Human Resources specialist discussing the outlook for hiring and best practices

for securing new leadership at the library. Nearly half of all of Montana's librarians reported in the 2010 census that they were older than 55.

While onsite training remains an important activity, MSL continues to utilize online learning technologies to support learners anytime, anyplace. Through webinars, a monthly blog post of online training available for free from outside Montana, and a growing set of resources posted to the MSL Learning Portal, librarians may now maintain their certification and keep their skills up-todate even if they are not able to travel to conferences. In FY14, the State Librarian launched a monthly Webside Chat series an informal online update and discussion about current topics of concern to the library community. Nearly 80 current and useful training videos can be viewed at any time on the State Library's Vimeo channel: http://vimeo.com/channels/403784.

Several factors going back to FY12 resulted in an increase in applications for library certification from MSL: MSL added training staff, many libraries acquired Internet access for the first time, and MSL tripled the number of online training events it offered. These factors resulted in an immediate 20% increase in certification applications that has been sustained since 2012. Notably, there are more voluntary applicants: just one quarter of applicants in 2014 were library directors who are required to maintain current certification; the remainder were voluntary certifications from library staff and trustees. This increase in voluntary certifications motivated MSL staff to seek out efficiencies in FY14 to accommodate the increased demand without increasing staff time, so that a fully online CE application process will be launched in the first quarter of FY15.





Montana State Library Training Channel

Nearly 80 current and useful training videos can be viewed at any time on the State Library's Vimeo channel: http://vimeo.com/ channels/403784.

Ready 2 Read

MSL worked with MT Fish, Wildlife & Parks, MontanaPBS, and the MT Head Start Collaboration Office to develop a series of six videos that support the existing "Ready 2 Read Goes Wild" trunks. Using the "Wild" trunk themes (owls, ungulates, tracks, creepycrawlies, water, and bears), the videos feature topic specialists with the goal of helping early childcare educators as well as parents and caregivers understand a) the basic information on each topic; b) how to present science lessons to children age 3 – 5 years old; and c) how to incorporate literacy into science education. All of the trunk contents, activities, and videos are aligned with the newly-released (2014) Montana Early Learning Standards as well as with the Head Start Child Outcomes Framework. The videos are now available online at http://www. pbslearningmedia.org/collection/ready-2read-goes-wild/.

22 libraries in communities of varying sizes and from different areas of the state. Three tribal libraries and one school-community library were also represented. Attendees heard from experts on block play, effective practices for mixed-age storytimes, and how to make your library a destination for children, among others. The Ready 2 Read program reached approximately 61,000 children last fiscal year in communities throughout the state.



At the 2014 Ready 2 Read Rendezvous, we hosted a total of 38 librarians, representing

Montana Talking Book Library

The 2013 Montana Legislature approved funds to hire a part time temporary digital technician in the Montana Talking Book Library's (MTBL) volunteer recording program to begin converting local Montana cassette titles to audio digital. A total of 25% (231 titles) were successfully converted and are currently circulating to Montana patrons. The first Montana title converted to audio digital was "Blind Your Ponies" by Stanley Gordon West.

Without the many volunteers assisting the superb MTBL staff daily, we would not be able to provide the services we do to over 4,000 registered Montana patrons. We appreciate the daily volunteer efforts accomplished for our patrons. Each fall, a volunteer recognition luncheon is held to honor the many volunteer contributions. The keynote speaker was volunteer Jim Daily of Butte, (featured in the photo passing out playing cards to follow the event's theme "Volunteers Deal a Great Hand.")

The first new digitally recorded local Montana title "Hand Raised: The Barns of Montana," in partnership with the Montana Historical Society Press, was successfully digitally recorded and uploaded to the National Library's Services (NLS) online BARD (Braille and Audio Reading Download) website for patrons nationwide to download and enjoy. The local recording program is a vital enhancement to the 75,000 NLS titles we circulate from MTBL and the 47,500 NLS BARD online titles available for patrons to download.

MTBL Volunteers



Montana Memory Project

The Montana Memory Project (MMP) encourages cultural institutions to digitize historic and contemporary resources reflecting Montana's rich cultural heritage and to make them freely available for lifelong learning on the web.

The MMP now receives materials from 38 contributing cultural organizations, including archives, museums, and all types of libraries. It includes 730,039 items, which is an increase of 300,034 images since the last fiscal year. Currently, there are 77 collections that are part of the Montana Memory Project, an increase of 30% over last year. Digital collections include maps, photos, rare books, documents, publications, letters, diaries, oral histories, audio recordings, and other cultural materials. On average, 8,500 users visit the webpages per month.

The Montana Memory Project is a partner with the Mountain West Digital Library, enabling MMP content to be included in the Digital Public Library of America-a national collection of online resources. Becoming partners of these larger repositories has also resulted in increased opportunity for training and collaboration.

The MMP is full of rich, interesting content that tells the stories of Montana's history. The characters are the citizens of this state and their stories are reflected in the MMP. The MMP offers an opportunity to travel through time and experience slices of history through its collections—the MMP brings that history to life. Visit the Montana Memory Project at: http://mtmemory.org.



MontanaLibrary2Go

MontanaLibrary2Go provides downloadable ebooks and audiobooks free of charge to Montanans through their local, participating library. Eighty-nine of Montana's public and academic libraries and their branches participate in MontanaLibrary2Go, providing their patrons with access to a vast collection of popular titles and bestsellers in all genres, from children's literature to mystery novels to cookbooks and much more. A total of 13,563 ebooks (an increase of 73% over last year) and 9,930 downloadable audiobooks (an increase of 67% over last year) are shared among the participating libraries, with more titles added monthly. Patrons can download titles to a variety of devices, including tablets, e-readers, smartphones, and mp3 players, or they can read or listen online on their computers. Montanans checked out 467,320 items between July 1, 2013 and June 30, 2014 (an increase of 68% over last year). MontanaLibrary2Go brings the library into the patron's home, in isolated rural areas of Montana as well as urban environments. This shared collection brings enormous value to all participating libraries—literally pennies per book for the smallest libraries and less than a dollar per book for the largest.

Check out MontanaLibrary2Go at: http://montanalibrary2go.org.

Usage Way Up!

With an increase in numbers of ebooks and audiobooks the MontanaLibrary2Go, circulation increased 68% over last year.

New Program Botanist

In October, Andrea Pipp joined MTNHP as the new Program Botanist. Andrea's 28vear career in the fields of botany and wildlife biology has focused on forestry, stream and wetland restoration, transportation, and development (residential, oil, and gas) projects for the federal, state, tribal, and private sectors. Her expertise is in vascular plant (native/exotic), lichen, and bryophyte identification, rare plant surveying and monitoring, wetland delineation, and technical writing.

At the MTNHP, she focuses on the backlogs in the State ranking process, botany database, and Plant Field Guide. Approximately 418 vascular plant species are categorized as "Status Under Review". A process has begun to prioritize the species that can be reviewed in 2015. **Botanical data submitted** to the MTNHP are being reviewed for quality control and recently available electronic datasets are being sought for inclusion into the MTNHP botany database. Plans include populating the Plant Field Guide with text and photographs of many of our lichen and mosses Species of Concern.

Montana State Digital Library

Montana Natural Heritage Program

Predictive Habitat Models

The Montana Natural Heritage Program (MTNHP) Zoology Program has led the effort to create predictive distribution models and relative habitat suitability models for hundreds of vertebrate species. MTNHP initiated efforts to fully evaluate these models in formal write-ups for individual species. Basic model outputs are available for all species of concern and full model writeups are completed for 26 species to be used as focal species for habitat management and conservation efforts by the Prairie Pothole Joint Venture and the Montana Bird Conservation Partnership. Model write-ups are available for download at: http://mtnhp.org/models/.



MapViewer

The newest version of MapViewer was released in June of 2014. This version replaces Tracker, which has been our primary mapping application since 2005. This new version of MapViewer is significantly faster, runs on multiple browsers, and is easier to use with many new features including a new "Add Observation" function with the ability to attach observation photos. http://mtnhp.org/mapviewer/

Montana Field Guide

The Field Guide (http://fieldguide.mt.gov/) is one of MTNHP's most frequently consulted resources and includes guides on animals, plants, lichens, and ecological systems. Details on the state conservation status ranks for plant and animal Species of Concern are being added to the Montana Field Guide under the heading of State Rank Reason. Inclusion of this information allows agency biologists, resource managers, and the general public to see all of the criteria associated with conservation status rankings, making species rankings more transparent and allowing them to provide feedback when new information is available. Other recent enhancements to the Field Guide include updated range maps for many animal species; new maps for plant observations; and the addition of over 4,000 new georeferenced photos.

An online photograph submission application allows Field Guide users to submit their species and habitat photos for consideration for inclusion into the Field Guides. This new tool helps populate the species and habitat photos. View the photo submission app at:

http://fieldguide.mt.gov/UploadImage. aspx.

Montana Natural Heritage Program, continued

Bat Monitoring Project

Montana's bat populations face a wide array of issues, including loss of roosting sites, collision and drowning hazards at sites where they forage and drink, and the potential arrival of Pseudogymnoascus destructans, the cold-adapted soil fungus that causes White-Nose Syndrome and has decimated bat populations in eastern North America. These issues, and the low reproductive output of bats, highlight the need to gather baseline information that can be used to mitigate impacts to populations. Beginning in the fall of 2011, MTNHP has led a collaborative effort to document roost habitat characteristics and year-round spatial and temporal activity patterns of Montana's bats.

Collaborators include the US Forest Service, US Bureau of Land Management, Montana Department of Environmental Quality, Montana Fish, Wildlife and Parks, the National Park Service, Bigfork High School Cave Club, the US Fish and Wildlife Service, the MPG Ranch, the Fort Peck Tribes, Confederated Salish Kootenai Tribes, the Northern Rocky Mountain Grotto cave club, Plum Creek Timber Company, and ABR, Inc.

To-date, collaborators have deployed over 50 temperature and relative humidity data loggers near known winter bat roosts. Most known bat hibernacula in Montana are now being monitored. Collaborators have also established a nearly statewide array of 55 passive ultrasonic detector/recorder stations that are deployed year-round and powered by solar panels and deep cycle batteries. These recording stations have resulted in more than 3.6 million sound files containing nearly 20 terabytes of information. Highlights to-date include numerous first records of species in regions with previously limited bat survey effort; numerous first records of bat activity during the fall, winter, and spring months; documentation of temperatures at which bats are active yearround; documentation of winter bat roost temperatures; documentation of nightly activity patterns throughout the year; and the potential year-round presence of species previously considered migratory.



Geographic Information Program

From US Geological Survey analyst

"My compliments on your website, by the way. It is really easy to use and delivers excellent data."

From Department of Environmental Quality, Public Water and Subdivisions Bureau staff

"Excellent performance now, thanks so much. My day wouldn't work without NRIS!"

Land

In order to meet user demand for higher accuracy parcel data that better aligns with aerial photography, the Geographic Information program implemented a transition of custodianship of the digital Public Land Survey System (PLSS) from the Bureau of Land Management (BLM). That transition was completed with the first release of CadNSDI Montana Vintage on July 1, 2014 as an export from the Esri Parcel Fabric. Staff plans guarterly releases of the adjusted PLSS along with coincident tax parcel and boundary data. Accuracy adjustments are based on new GPS and photo-interpreted control data. In order to better communicate areas of change, the Program – with the assistance of the MSL IT application developer – rolled out a CadNSDI Montana web site: http://mslapps.mt.gov/ Geographic Information/Applications/ cadnsdi/ where users can submit potential accuracy enhancement projects and monitor the progress of those already underway.

Water Information

The Montana Hydrography Working Group has been reinvigorated and meets quarterly to discuss hydrography data needs. Three state agencies (DEQ, DNRC, FWP), as well as the US Geological Survey, US Forest Service, National Park Service, and the Montana Climate Office, participate in the working group. Efforts over the past year have primarily focused on improved transparency to the hydrography stewardship process with the overall goal of making demonstrable progress improving the quality of the hydrography dataset. Notable accomplishments include publication of a stewardship and edit submission guide, ongoing development of workflows to leverage existing hydro-related datasets to systematically find and fix data issues throughout a sub-basin, and development of a web application that allows users to submit and track hydrography revisions online.

Improving hydrography data quality will assist in meeting the goals and objectives of the State Water Plan.

Information Discovery

With the assistance of the MSL IT staff, the Geographic Information Program completed the re-write of the Data Bundler in early 2014. While the basic functionality of the bundler remained intact, it is built using software that, unlike the previous version, is supported by the vendor. The re-write included a much slicker and more intuitive map based interface. And while the old edition required almost daily reboots, the new edition runs nearly flawlessly without staff intervention saving several hours of staff time a week.

Consistent with the FY14 Geographic Information work plan, IT and Library Information staff explored options for the current Digital Atlas. Because the Digital Atlas makes use of software that is no longer vendor supported, maintaining the status quo is not an option. The Digital Atlas Research team was asked to investigate similar commercial and home grown applications and provide a recommended alternative that would meet current user needs while moving from outdated technology. After a survey of use cases and current technology, the preferred alternative recommended to management is to re-write the application in-house. A project charter has been drafted and staff is expected to begin work in early 2015.

The Program also launched a new web presence that brought back the concept of a Montana geographic information clearinghouse beyond a data perspective. The page incorporates a Facebook newsfeed that can now reach multiple user communities. Explore at: http://geoinfo.msl.mt.gov/.

Library Information Services

In fiscal year 2014, Library Information Services (LIS) launched the Montana State Library Government Information Facebook page as a means to support two way communications among state agencies, libraries, and the public in order to encourage active use of state government information. LIS staff regularly posts contemporary and historic state government information of popular interest. This year LIS staff also assumed leadership of a state agency roundtable dedicated to developing social media best practices among state agencies. A recurring topic addressed by this roundtable is how state agencies manage their social media channels as records and what software they use to archive content made or received that documents the transaction of official business.

LIS staff extracted and transformed metadata associated with digitized Montana state publications in order to meet the collection requirements of the Mountain West Digital Library and Digital Public Library of America. The addition of Montana state publications in these two discovery portals greatly expands their potential audience.

In commemoration of the 100th anniversary of women's suffrage in Montana, LIS created a "Women in Montana" web page (http://research.msl.mt.gov/Home/ state_publications/women_in_montana. aspx) that complemented the Montana Historical Society's "Women's History Matters" project. The LIS web page highlighted the accomplishments and experiences of Montana women as found within the pages of our collection of digitized state publications. LIS also hosted a traveling exhibit on Women's History with the State Law Library of Montana.

In February 2014, the MSL Commission approved a new Circulation and Information Access policy. This policy aligns our stated policies regarding electronic resources access with current practices and licenses agreement. Although, under the new policy, members of the general public are not eligible for MSL library cards, any Montanan, and users around the world, continue to have free access to our online information resources or they can obtain access to print resources through their local libraries.

LIS staff worked with our in-house partner from the Natural Resources Conservation Service (NRCS) to digitize our historic collection of "Summary of Snow Survey Measurements for Montana" which spans the years from 1922 to 1974. LIS coordinated the dissemination of this collection through Facebook and linked the collection to current Montana water supply data.





Information Technology Updates

Web Updates

For the past year MSL has been migrating to a new web Content Management System (CMS). MSL had previously used the WordPress CMS managed by Pressable. While this solution was a good option at that time, the State Information Technology Services Division (SITSD) has since begun offering a robust CMS service on the state enterprise web platform. Utilizing this platform provides additional security measures and better opportunities for integration between our web resources and other IT resources. We have worked with SITSD since their initial testing of the system in October 2013, and since that time the entire library program web pages have been migrated from WordPress to the state supported CMS. In addition to added security and efficiency, moving to SITSD's DNN environment comes at no cost, saving MSL \$135 per month in hosting charges.

Server Virtualization

MSL has been migrating to a virtual server environment. Several factors prompted this move including: efficient server management, reduced downtime due to server maintenance, server portability to allow for an eventual move to the State of Montana Data Center (SMDC), and expanded disaster recovery options. At present, our virtual server environment consists of 10 host servers that support 27 virtual servers. There are just 5 physical servers remaining in our server room and we have replacement virtual servers in production for all of those physical servers. We are in the process of moving the final items from these remaining physical servers to their replacement virtual servers. This process should be completed by July 2015.

Wetland Mapping

The Montana Natural Heritage Program (MTNHP) manages the Montana Wetland and Riparian Mapping Center. Its goal is to create a statewide digital wetland and riparian map layer as a resource for management, planning, and restoration efforts. This map layer is one of 15 Montana Framework themes within the Montana Spatial Data Infrastructure (MSDI). As of this year, the program has mapped 2,009 USGS 24K Quads for a total of 2,729,963 acres. These acres include 2,125,476 of wetlands and 604,485 of riparian acres. The downloadable data and Web Map Service are available at the MSL Geographic Information web site.



PO Box 201800 1515 East 6th Avenue Helena, Montana 59620 (406) 444-3115

msl.mt.gov

