



## FY 2016 Digital Library Work Plan *October 2016*

Prepared for the *October 13, 2015* Commission meeting  
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### **Goal One—Content**

1. MSL acquires and manages relevant quality content that meets the needs of Montana Library users.

The information management team will be working on several projects that will add to or otherwise enhance the existing MSL Collection.

1.1. Land Information staff have already begun a project to gather information needed to develop a revised version of the state boundary in Northeast Montana and correct townships currently impacted by the misrepresentation of this boundary. The final product of this process will be an updated CadNSDI dataset that includes these corrected features and that is scheduled for delivery in early 2016.

**(UPDATE: December 2015)** In late September four GIS analysts visited three counties in Northeast Montana (Daniels, Sheridan, Roosevelt) to gather corner recordation survey documents. As a result of this trip and a July visit to Wibaux and Richland County, we are in the process of creating over 1,400 new ground control points that will be used to adjust approximately 200 townships in NE Montana.

1.2. The USDA Aerial Photography Field Office (APFO) is in the process of collecting 1m statewide imagery for Montana through the 2015 National Aerial Imagery Program (NAIP). MSL will work with the APFO to acquire a copy of this dataset, likely in late 2015. Digital library staff will develop a plan for adding this data to the MSL collection, identify what information products need to be developed to make this data accessible to users, and develop a communication plan to ensure stakeholders know that this dataset is available and how to access it. This will be the fifth year of statewide NAIP imagery data in the MSL collection which currently includes imagery from 2005, 2009, 2011, and 2013.

**(UPDATE: December 2015)** The 2015 NAIP collection was significantly impacted by the amount of fire activity in western Montana that went well into the fall. Originally scheduled to be completed by mid-August, there are still areas in western Montana that

had not been flown as of November 20. The most current status is available on this status map maintained by the USDA - <http://arcg.is/1TbH2kk>. We are still hopeful that the remaining areas of the state will be collected and we are working with our partners to ensure we receive the data as quickly as possible once the full state is complete and available.

1.3. Water information staff are working on multiple projects to improve the quality of the data in the Montana Hydrography Dataset. The Department of Natural Resources and Conservation is working with the Water Information System to improve workflows for revising the Hydrography Dataset as well as to enhance it by integrating features in from the Water Rights database. Work is also underway through a grant from the USGS to develop bulk data loading procedures that will allow more efficient integration of data from existing sources such as the water rights database and the wetlands and riparian dataset managed by the Montana Natural Heritage Program. Both of these projects will run through the end of FY16.

**(UPDATE: December 2015)** The USGS grant and DNRC contract are both in place. Preliminary work on the USGS grant started in July and we are currently ordering equipment – a desktop machine for hydro editing and processing tasks and a hard drive for data transfer – have been ordered and we expect delivery in the coming weeks. While not directly tied to these two projects, we have also received funding from the Army Corps of Engineers to continue work on the Yellowstone River Corridor Clearinghouse that has been developed with support from the Yellowstone River Conservation District Council for many years. The Yellowstone Clearinghouse is another potential data source for the Montana Hydrography Dataset if we can develop a manageable workflow for performing bulk data uploads through work with the USGS and DNRC.

1.4. MSL continues to partner with the NRCS to develop mutually beneficial data products. In the coming year the NRCS will be seeking additional support with the stewardship of the Watershed Boundary Dataset. The NRCS is also interested in expanding on the monthly water supply products that the library has assisted with the development of for more than 20 year. The current collection of water supply maps including monthly Surface Water Supply Index maps dating back to 1992 is available at: [http://mslapps.mt.gov/Geographic\\_Information/Maps/watersupply/Default.aspx](http://mslapps.mt.gov/Geographic_Information/Maps/watersupply/Default.aspx) There are also a number of collection development projects that will be collaborative efforts between the user services and information management teams.

**(UPDATE: December 2015)** We have secured an extension to our current NRCS partnership agreement that provides an additional \$40,000 to perform GIS support tasks for the Montana NRCS through the end of September 2016. In a recent planning

meeting with our NRCS liaison we began developing a work plan for the coming year which will include ongoing Ecological Site Development work, updated to the SSURGO Soils dataset, collaboration on Watershed Boundary Dataset updates and the continuation of our long term water supply mapping partnership. With the posting of the October 2015 water supply maps MSL and the NRCS have completed 23 years of Surface Water Supply Index (SWSI) maps. Originally created for the months of February through August, since 2002 these maps have been created each year for the months of January through October.

1.5. State publications will work with user services to identify opportunities to make existing tools and resources more usable for patrons. An example from last year was the development of a web interface to submit a request for web sites to be archived. This received positive response from users and also improves our ability to capture and archive sites at critical moments that may otherwise be missed.

1.6. User services has identified a need to develop a process for the regular evaluation of electronic resources. This should include creating electronic resources workflow documents that focus on ERMs (electronic resources management) particularly on the life cycle/renewal of an e-resource and the purchasing decision (acquisition) of a new e-resource

1.7. There are efforts underway to work with the Helena USGS office to consolidate and streamline their internal library through collaboration with the water information staff and engagement with our user services group. Possible outcomes may include the identification of materials to supplement the MSL collection and the development of a partnership with a key group of potential Water Information stakeholders.

**(UPDATE: December 2015)** A group of staff made up of Library and GIS Professionals were able to visit the Helena USGS Office in October and get a tour of the existing library. Additional work on this project has been delayed by the ongoing Digital Library reorganization.

1.8. The Montana Department of Health and Human Services has approached MSL staff about opportunities to collaborate to make a number of their GIS data products more publicly accessible via the MSL Map Gallery (AGOL). Finally, with the transition to a new organizational structure there is a need to develop workflows and processes for regular review of the MSL collection development policy and a process for evaluating new projects and the proposed products of those projects against the existing collection development policy. A successful outcome would be the development of guidelines for regular evaluation of the collection development policy as well as some process for evaluating ongoing efforts to follow that policy.

## **Goal Two—Access**

2. MSL provides libraries, agencies, and its partners and patrons with convenient, high quality, and cost-effective access to library content and services.

2.1. With the recent changes in the Digital Library there is a need to work with the MSL Marketing Coordinator to develop a plan for communicating these changes with our partners and patrons. Part of this effort will be exploring existing branding that we may or may not want to continue to promote as well as developing a strategy for the structure and organization of Digital Library web pages. Specifically identified needs include the development of a plan for promoting the recently updated Digital Atlas as well as a need to evaluate potential enhancements to [research.msl.mt.gov](http://research.msl.mt.gov).

2.2. Cross training for the new user services group is needed to ensure they are prepared to handle requests for information from across the different library program areas. A plan for cross training staff and the development of a coverage calendar will allow for the different support phone numbers and email addresses to be redirected to the user services group. There is also a need for broader cross training across the Digital Library to help staff be more comfortable and work more efficiently together. **(UPDATE: December 2015)** User services staff have begun a series of bi-weekly cross training sessions scheduled to run into the beginning of 2016. To date these have been primarily focused on providing the Library professionals with some basic GIS background and providing familiarity with the existing GIS data discovery tools.

2.3. The information products team will identify or develop a new reference request management/tracking tool to replace the existing request tracker. From a management perspective it is critical that all digital library reference requests are tracked through a common system to allow for a better understanding of patron needs and to ensure we are making the most of our limited resources.

2.4. There is a library-wide need for more consistent collection of resource use information and tools that simplify the reporting of that information to encourage and feed a process of continuous improvement of the services we make available.

2.5. In an effort to make more of the existing collection accessible the state publications lead will be hiring a temporary cataloger to catalog the remaining historic print state publications needing MARC records. This will also provide an opportunity for evaluating the feasibility of relying on temporary staff to perform future cataloging needs.

2.6. Work with OCLC to edit the tags of 22,000+ catalog records for print resources in order to derive 22,000+ new bibliographic catalog records for electronic content. Completion of this project will allow MSL. There is also a need to create, document, and implement procedures for providing non-MSL libraries with MARC files for digitized state publications.

2.7. The Montana Cadastral Application was developed by and is currently hosted at SITSD but there is a growing list of enhancement requests from our users. Efficient, ongoing support of this tool will likely require it to be re-written in the near future.

Digital Library staff will plan a scoping process for a new Cadastral application and work with IT staff to get the development of a new application on the calendar for 2016.

2.8. MSL is in the process of moving web map services off SITSD hosted services and on to ESRI cloud hosted hardware. This transition will be complete by November 2, 2015. Information products staff are actively working to identify updates that need to occur to ensure tools and applications do not break as a result of this change and a change management plan has been developed to make this transition as smooth as possible for our partners and patrons that use the MSDI web map services.

**(UPDATE: December 2015)** Hosted managed services went into production in October and the old services at SITSD were taken offline on November 2. An exhaustive effort was made during the month of October to notify the various user communities of the planned changes and this seems to have been effective since we have had very few calls specific to the service changes. This changeover did result in a number of unanticipated issues with the cadastral application that GIS and IT staff have been working hard to resolve through the month of November. At this point we believe that we finally have a solid stable application in place pointing to the new managed services and we are primarily dealing with educating users in how to refresh their browsers to ensure cached data is not impacting their user experience.

2.9. MSL provides access to tiled aerial imagery and topographic map data via the Montana Geographic Information Clearinghouse website. Currently users discover and download image data by clicking on a series of image maps. DNRC has developed ArcGIS Online applications that make it easier to discover what data are available for a given area and download it (for example, all NAIP years are in one application). Their applications are currently pointing users at MSL data. We should make users aware of these tools and evaluate them to see if there are opportunities to improve the tools we make available.

2.10. MSL would like to pilot a project to develop a Corner Recordation Application to provide better access to corner recordation surveys. This could be a simple ArcGIS Online application (similar to Ravalli County's) and use corner recordation documents obtained during the NE Montana adjustment project. Before the end of FY16 the information product team will initiate a scoping project to identify the needs of and opportunities offered by such a tool and what resources would be needed for its development.

2.11. There has been an enormous amount of climate data generated by the MSDI Climate theme steward. While accessible through web pages, this data isn't available

through the bundler yet. We will work with the stewards to identify the best way to get this data into the bundler.

### **Goal Three—Training**

3. MSL provides appropriate trainings and training resources so that the best use can be made of the resources offered.

3.1. Efforts to lead the development of ArcGIS Online training for state agencies started in FY15 and we need to continue to push for this training to happen in FY16.

3.2. The Users Services team will continue to develop content for State of Montana new employee orientation but this effort will be broadened to include content from across the digital library.

3.3. User Services will lead the development of outreach priorities, an outreach calendar, and a process for adding or removing items from the outreach calendar through an annual review process that includes the MSL Marketing Specialist.

### **Goal Four—Consultation and Leadership**

4. MSL provides consultation and leadership to enable users to set and reach their goals.

4.1. With an increasing recognition of the importance of GIS data in the development and implementation of Next Generation 9-1-1 we have been pushing for MSL to be included on the state 9-1-1 advisory council. We will continue to push for that to happen and if we are successful Digital Library staff will be available to support the State Librarian in that role. Outside of the 9-1-1 Advisory Council, MSL has been raising awareness of NG9-1-1 in the GIS community and reaching out to the 9-1-1 community in Montana by distributing information on GIS and NG9-1-1 to PSAP managers. MSL has also been working with some local governments to begin the process of planning for NG 9-1-1.

**(UPDATE: December 2015)** The GIS Coordinator and the Land Information lead were invited to present at the first meeting of the Energy and Telecommunication Interim Committee. They presented information about the role of GIS in NG 9-1-1 and provided additional information on the basic workflow for NG 9-1-1 GIS data development as well as information about NG 9-1-1 planning efforts in other states. Since that time MSL has participate in two additional meetings of a NG 9-1-1 working group tasked with developing a NG 9-1-1 implementation plan to present to the interim committee at their March 2016 meeting.

4.2. User services needs to provide the Land Information Advisory Council with a recommendation for how to proceed with the MSDI Elevation Theme. Elevation has been without a steward for many years and with the recent loss of our long term USGS

contact there seems to be little ongoing interest from the USGS is continuing to support that theme.

4.3. With SITSD retracting from involvement in GIS, User Services and Information Products staff will need to develop a model for supporting agencies needing ELA and ArcGIS Online support. The State Librarian and the Digital Library Administrator will begin discussing a 2017 ELA renewal with ESRI in the coming months.

### **Goal Five—Collaboration**

5. MSL promotes partnerships and encourages collaboration among its users

5.1. As the user services team works on the next MSDI Work Plan consideration should be given to how the MSDI work plan integrate with Land Plan and MSDL Work Plan.

5.2. As we transition to ESRI managed services as a replacement for SITSD hosting of web map services there is a need to work with existing and prospective state agency users to develop ESRI Managed Services Partnership that identifies how available service “slots” will be allocated and also addresses any future enhancements to the platform will be paid for.

**(UPDATE: December 2015)** We have had a managed services kick off meeting with other partner agencies. This meeting was led by information products staff and focused on getting other agency administrators information about how to update their hosted managed services. We also used this meeting to identify agency needs for the remaining service slots available through the managed services contract. Knowing that there are several available slots, we have been able to significantly expand our service offerings including the addition of both State Plane and Web Mercator versions of most of our MSDI Framework Services. Information Products staff are currently working on setting up a number of additional support services including USGS Topo Maps, Elevation and Hillshade, 1990s Digital Orthophoto Quarter Quadrangles, and possibly a Montana Highway Map service similar to what we have made available through the Montana Place Names application.

5.3. The NRIS Advisory committee needs to be re-formed (many members are currently vacant) and a meeting will be scheduled before the end of 2015. Agenda items for that meeting will include an update on the MSDL organization changes, discussion of the ongoing role of the NRIS Advisory Committee, and updates to the Data Partner MOUs.

5.4. The State Water Plan identified a number of recommendations specific to making water information available through the MSL Water Information System. We need to

engage DNRC to identify how we can help ensure these recommendations are implemented effectively.

## **Goal Six—Sustainable Success**

6. MSL is efficient and effective (measured against partner and patron outcomes) and is engaged in fulfilling its mission.

6.1. Digital Library staff will use the information gathered through the Patron Survey to develop an action plan for improving the services we make available through the Digital Library.

6.2. Through our User Services team we need to continue to expand the use of social media to engage patrons. In the coming year we need to expand this effort across the digital library.

6.3. The Digital Library Administrator will continue to work with the leads to identify and work through issues that come up during the transition to the new organization structure.

**(UPDATE: December 2015)** Since early October we have been able to schedule at least one meeting of each of the full working groups and we have also had multiple leads meetings. Weekly “stand-up” meetings with the Information Products team and the Information Management leads are now on the calendar and something similar for user services will be scheduled soon.

6.4. The User Services team needs to begin planning for the retirement of the State GIS Coordinator with the understanding that this position will likely be open for several months before it is filled

**(UPDATE: December 2015)** With Stu retiring ahead of schedule we are still trying to get caught up. Fortunately, Stu did a great deal of work to prepare his staff to take on some of his regular tasks and he left thorough documentation behind to assist with this. Several staff have stepped up to help out in his absence. On the MLIAC side, the land plan subcommittee went out of their way to produce a land plan on schedule to ensure we would not have to delay the MLIAC granting cycle.

6.5. MSDL Leads will need to work together to identify training priorities and plan for the use of the MSDL training budget.

6.6. We need a process for identifying, documenting, and evaluating emerging opportunities to improve our collection, access tools, trainings, and other outreach and engagement. The need here is to ensure we are making active decisions about what we provide and how we provide it rather than simply acting on what we can in the

moment without considering broader needs and goals. If done properly, this should improve the process for developing this work plan in the future.

6.7. We need a process for the ongoing evaluation of our access tools to ensure that they continue to serve the needs of our users. The need here is to avoid situations like we had with the Digital Atlas and Topofinder where we were forced to act quickly and in a manner that was disruptive to our users because these tools had not been updated in the past to keep up with current technology.