Digital Library Work Report
February and March 2016

Prepared for the April 6, 2016 Commission meeting
by Evan Hammer, Digital Library Administrator

This report represents accomplishments of Digital Library staff: Troy Blandford, Keith Blount, Meghan Burns, Gerry Daumiller, Maya Daurio, Karen Dimmitt, Michael Fashoway, Jo Genzlinger, Evan Hammer, Bob Holliday, Jim Kammerer, Duane Lund, Alana Mueller-Brunckhorst and Diane Papineau.

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 with be an update CadNSDI dataset that includes these corrected features and that is scheduled for delivery in early 2016.
(Originally reported 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 trips 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.
(Originally reported February 2016) After completing the ~1,400 new ground control points based on the corner recordation survey documents, additional aerial imagery-based pseudo-control was added as needed for the adjustment process. Quality assessment/quality control of the points is just finishing, with the actual township adjustments to follow. The process had been challenging due to software issues, but we have been working through that with both the software company and our project partner. We are in the process of extending the project end date from January 31, 2016 to March 31, 2016.

(Update: April 2016) From the work done in January, staff was able to perform an adjustment in early February making an extension to the project end date was unnecessary.

Project tasks outlined in the contract with Fairview Industries have been completed. The Land Information group within the Digital Library is currently evaluating the success of this project to determine how to move forward with future CadNSDI adjustment projects and how to best leverage the ESRI parcel fabric tools.

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.
(Originally reported 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.
(Originally reported February 2016) Aerial photo collection as part of the 2015 NAIP has stopped for the year due to snow. As you can see from the link above, there are still substantial holes in the coverage over western Montana. We have received all of the available 2015 imagery from the USDA/APFO via the Natural Resources Conservation Service (NRCS) and we are currently working on a storage and distribution strategy. We are aware that the USDA/APFO is considering continuing data collection in the spring to complete statewide coverage.

(Update: April 2016) MSL has received a copy of the available NAIP 2015 data through our partnership with the NRCS. Also working in partnership we have been able to develop statewide compressed datasets in .sid format for distribution via the web - http://geoinfo.msl.mt.gov/data/Aerial_Photos/NAIP_2015. Patrons may request copies of the 2015 data through FTP (for small areas) or by sending in a hard drive (for a complete copy of the statewide dataset). We hope to have a 2015 NAIP web service available by the end of April, 2016. We are still waiting to hear from the USDA/APFO about any plans to fly any areas of the state that did not get completed in 2015.

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 (DNRC) 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 United States Geological Survey (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.

(Originally reported 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.

(Originally reported February 2016) USGS grant work has been focused on reviewing edits received from Glacier National Park to make sure the edits are ready to be imported into the hydrography dataset using USGS geoconflation tools. Significant revisions were made to flow direction and additional attention is needed to fix snapping issues. Progress was also made identifying workflow for deriving flowlines from LiDAR data in the Musselshell. The work tasks identified in the USGS grant and the DNRC agreement were presented to the Montana Hydrography Working Group, Dec. 17. There was good discussion and good support for the projects, particularly the effort with DNRC to develop a prototype demonstrating the value of the hydrography dataset and the long term vision for the water information system

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 years. 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
There are also a number of collection development projects that will be collaborative efforts between the user services and information management teams.

(Originally reported 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.

(Originally reported February 2016) In early January, MSL in partnership with the NRCS released the new Snow and Water Supply website:

http://mslapps.mt.gov/Geographic_Information/Maps/watersupply/Default

This new website provides improved maps compared to what was provided in past years and also adds new products, including precipitation and reservoir storage. Each month 49 maps will be updated and published to the website.

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.

(Originally reported 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.

(Originally reported February 2016) MSL staff developed a spreadsheet to assist the USGS Water Center with the reduction of their library and met with the director and other staff. The USGS is now proceeding by having an MSU student intern organize the material. The intern has been focused on organizing the library room in the warehouse and has organized nearly all of the shelves and co-located similar publications. The intern will soon begin transferring the card catalog of USGS publications pertaining to Montana and adjacent states to a spreadsheet. MSL will review the inventory once complete in case there are materials to supplement the MSL collection.

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).

(Update: April 2016) MSL has received a copy of the available NAIP 2015 data through our partnership with the NRCS. Also working in partnership we have been able to develop statewide compressed datasets in .sid format for distribution via the web - http://geoinfo.msl.mt.gov/data/Aerial_Photos/NAIP_2015. Patrons may request copies of the 2015 data through FTP (for small areas) or by sending in a hard drive (for a complete copy of the statewide dataset). We hope to have a 2015 NAIP web service available by the end of April, 2016. We are still waiting to hear from the USDA/APFO about any plans to fly any areas of the state that did not get completed in 2015.

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.

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 addressed 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.

(Originally reported 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.

(Originally reported February 2016) The last of the initial series of cross training sessions took place on January 18. In the coming weeks we will be identifying additional cross training needs in order to plan future trainings.

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.

(Originally reported February 2016) No qualified temporary staff was identified to perform original cataloging so MSL conducted a limited solicitation of three bids and chose Backstage Library Works to do original cataloging of 200 state publications with the option of additional cataloging depending on resources and time once the initial project is completed. Work will begin immediately and will continue through the spring.

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-MSC 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.

(Originally reported February 2016) The information products team has put together a project proposal using the draft MSL project proposal template. This proposal will be reviewed

by the management team for guidance before moving forward. Additionally, we have recently become aware of a new cadastral application that the Department of Revenue has developed. We will be reviewing that application to determine if it will impact our application update plans.

(Update: April 2016) MSL met with Department of Revenue staff in March 2016 to discuss plans for updating the Montana Cadastral Application. The primary purpose of the meeting was to let DOR know we are planning an update in the near future and to solicit engagement from appropriate DOR staff and they seemed interested in being involved.

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.

(Originally reported 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.

(Originally reported February 2016) We have resolved a number of issues with the cadastral application that arose with the initial cutover to managed services and our users seem much happier. We are working with the ESRI Managed Services team to get regular, service based usage reporting that will allow us to compare the usage of our services now to the usage when they were hosted at SITSD.

(Update: April 2016) With the transition to ESRI Managed services complete, future updates on Managed Services will be reported under section 5.2.

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.

(Update: April 2016) In building the distribution page for the 2015 NAIP, Information Products staff integrated an ArcGIS Online interface to allow users to access a dynamic map for finding and downloading the compressed imagery - http://geoinfo.msl.mt.gov/data/Aerial_Photos/NAIP_2015. This was successful, and the same model has since been applied to the distribution pages for all of the Montana NAIP imagery accessible from MSL - http://geoinfo.msl.mt.gov/data/aerial_photographs_of_montana

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.
(Originally reported February 2016) We are currently re-evaluating our use of ArcGIS online to determine what type of internal training is needed to administer and support the existing ArcGIS Online subscription. Once this process has been completed we will be in a better position to explore training options for other agencies.

(Update: April 2016) This work has continued through March 2016 and included an on-site training/consultation visit from an ESRI ArcGIS Online specialist. Current project tasks include identifying needed staff resources and getting them any training needed to be able to support our planned use of ArcGIS online within MSL. Once we have our plan in place we will be in a better position to understand how we can better assist other agencies.

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.

(Originally reported 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.

(Originally reported February 2016) MSL staff have been participants in an NG9-1-1 Working Group, created by MACo to provide recommendations to the Energy and Telecommunications Interim Committee. In the January working group meeting MSL presented information about the role of GIS in NG9-1-1. MSL has also been given a seat on the 9-1-1 Advisory Council and has participated in their meetings since October 2015.

(Update: April 2016) Thanks in part to MSL involvement on the ETIC Working group and the 9-1-1 Advisory Council we are happy to report that the working group recommendations to ETIC included a request for $80,000 to fund a statewide NG9-1-1 GIS data assessment. While it is still early, ETIC did take action to draft a NG9-1-1 bill that includes the GIS assessment funding recommendation.

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.

(Originally reported February 2016) An initial ESRI Enterprise License Agreement (ELA) renewal meeting took place in early in December which included the State Librarian and the Digital Library Administrator as well as the DNRC CIO and the primary ELA contact for ESRI, Nathalie Smith. The meeting was generally focused on what the different parties need to begin the process. ESRI needs updates software deployment information that is currently being gathered by SITSD. The state needs to determine what type of procurement process needs to take place and we are pursuing the as a sole source procurement and are currently in the process of completing the justification forms needed for that.

(Update: April 2016) MSL has compiled the documentation needed for a sole source procurement. SITSD has provided ESRI with a software deployment report though it may need a few updates. The GIS Managers have an initial ELA discussion on the calendar for late March.

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.

(Update: April 2016) Better integration of the MSDL Work Plan and the Land Plan was a key consideration in the development of the new MLIA Land Plan timeline - http://docs.msl.mt.gov/Central_Services/Commission_Councils/Montana_Land_Information_Advisory_Council/Archive/2016/03/land_plan_timeline.pdf - that was proposed to the council at their March 2016 meeting. This generated some good discussion among council members and we will be updating the timeline in anticipation that the council will take action in their May meeting. We have also asked council members to provide feedback on the MSDI work plan and its integration into the MSDI framework pages as we begin the process of updating the plan and pages for the coming year.

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.

(Originally reported 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.

(Originally reported February 2016) Information Products staff have been working with ESRI to understand the proper procedures for making updates to web services. We are currently coordinating with agencies to ensure they understand these procedures to ensure monthly updates occur regularly, on schedule, and without issues. New services described previously are not in production yet due to some data transfer issues, but we still hope to have those up in the coming months.

We are evaluating the possibility of making all production MSDI web services available via the Open GIS Consortium (OGC) Web Map Service (WMS) protocol. The has always been an option but we have resisted in the past because of uncertainty about the consequences of enabling this format. We have heard from some users of older or different GIS tools recently that they are unable to access some of our web services, and it appears that they can access them if we enable OGC WMS support.

(Update: April 2016) We have been working with the ESRI managed services team to resolve some performance issue that were initially observed in late January. The ESRI response to date has been disappointingly slow and disorganized. They have put into place some temporary measures to resolve performance issues and provided a somewhat helpful after incident report. We are currently working to identify a sustainable long term solution to the performance issues. While existing services continue to be available as we work through this, it has delayed several new services from going into production for a couple of months now.

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.

(Update: APRIL 2016) – We are behind schedule in getting this group together. I still hope that we can get a meeting on the schedule before the end of the fiscal year, but I want to try to include the new GIS Coordinator in this process if possible since that position will have a big role in NRIS moving forward. In the interim, I will be working with our partner agencies to extend the FY14/15 Data Partner MOU through the FY16/17 biennium. The primary focus of the NRIS Advisory during the current (FY16/17) biennium will be to develop an updated Data Partner MOU that will go into effect in the FY18/19 biennium.

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. **(Originally reported February 2016)** DNRC engages with the MSL about hydrography dataset needs and the water information system through the Hydrography Working Group. A review of the Water Information System was presented to the Legislative Water Policy Interim Committee on January 11 - http://montanalegislature.granicus.com/MediaPlayer.php?view_id=67&clip_id=18597&meta_id=139266

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. **(Originally reported 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.

(Originally reported December 2015) With Stu retiring ahead of schedule we are still trying to get caught up on this. 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.

(Originally reported February 2016) The 2017 Land Information Plan approved by the MSL Commission on schedule in December and the Montana Land Information Act Grant application package was posted and announced on January 15, also on schedule. Over the coming weeks we will be working to spread awareness of this grant opportunity in hopes of encouraging a large number of applications. Applications are due February 15.

(Update: April 2016) The FY17 grant application process was a huge success. We received 26 grant applications requesting more than $850,000 in funding. We are working with MLIAC to form an application review subcommittee to score grants and provide recommendations for funding at the May 2016 MLIAC meeting.

We hope to have the GIS Coordinator position posted by the end of March with the goal of filling it within four to six weeks of posting.

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

(Update: April 2016) MSDL Leads had an initial discussion of training planning in January. The reorganization has presented some challenges both on a funding and staffing front for the current fiscal year, but we will meet again in late March or early April to plan for the final quarter of FY16 as well as to ensure we are in a good positon planning-wise heading into FY17.

6.6. We need a process for identifying, documenting, and evaluating emerging opportunities to improve out 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.