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**Montana State Library Commission  
Wednesday, December 14, 2016  
9:30 a.m.  
Montana State Library Grizzly Conference Room**

AGENDA

**Lunch break is tentatively scheduled from 12 to 1.**

The State Library Commission is committed to providing access to its proceedings in accordance with MCA Title 2, Ch. 3 Part 2 Open Meetings. All meetings of the Commission will be streamed and recorded via an online meeting platform.

The State Library Commission welcomes public comment. The Chair will ask for public comment on agenda items throughout the meeting from persons attending the meeting in person and those attending the meeting through the online meeting platform.

All comments received, including those received through the online meeting platform, become part of the official public record of the State Library Commission proceedings in accordance with MCA 2-3-212.

Members of the public who wish to join the virtual meeting should contact Marlys Stark at 406-444-3384 by 5:00 pm on Monday, December 12, 2016.

*The Commission will move through the agenda as needed.*

9:30 a.m. Call to Order and introductions

- New staff introductions
- Staff longevity pins

Approval of Minutes – **Action**

- October 12, 2016

State Librarian's report – Stapp

Governor's Office legislative agenda– Siri Smilie, Governor's Education Policy Advisor

Montana Library Association legislative agenda - John Finn & Nanette Gilbertson, Montana Library Association

LAWS (Legislative Look up Bills Information) primer – Sonia Gavin, Legislative Reference Librarian

2019 Governor's Executive Budget reduction plan – Stapp – **Action**

Network Advisory Council Report – Cook

- Remaining FY '16 LSTA funds

Policy review – Schmitz, Hammer

- Telework Policy
- Drug & Alcohol Free Workplace Policy
- Code of Conduct

FY '18/'19 Montana Land Plan – Hammer – **Action**

- 10 Years of the Montana Land Information Act

Montana Land Information Act Legislative Report – Hammer - **Action**

Montana State Library Strategic Framework – Commission – **Action**

- Discussion of next steps
  - Funding strategy
  - Reporting
  - Continual framework review

Commission Goals and Objectives – Commission

- 2017 meeting dates - **Action**
- FY '17 Commission work plan discussion
- Commission Calendar
- To see all library events, please visit the MSL event calendar at <https://app.mt.gov/cal/html/event?eventCollectionCode=msl>.

Public Comment on any matter not contained in this agenda and that is within the jurisdiction of the State Library Commission.

Other Business & Announcements

Adjournment

Commission Work Session (No action will be taken)

- Analyzing and communicating public value presentation from Samantha Becker, University of Washington iSchool – Cook
- Communicating with legislators - Eissinger

# FINAL

**MONTANA STATE LIBRARY (MSL) COMMISSION MEETING  
9:00 A.M., AUGUST 10, 2016  
CUT BANK, MONTANA  
OR GOTOMEETING**

**ATTENDEES:**

Commissioners: Chairman Colet Bartow, Connie Eissinger, Anne Kish online, Aaron LaFromboise, Bruce Newell.

Staff: Tracy Cook, Erin Fashoway, Jo Flick online, Sara Groves, Evan Hammer, Pam Henley online, Cara Orban online, Kris Schmitz, Jennie Stapp and Marlys Stark.

Visitors: Lorette Carter, Jamie Greco and Bess Hjartarson.

**Chairman Bartow called the meeting to order at 9:00 a.m.**

Jennie introduced Tracy Cook, Director of Statewide Library Resources; Sara Groves who will fill the new Lifelong Learning position; and Erin Fashoway is the new State GIS Coordinator.

Kris Schmitz presented Marlys Stark with a fifteen-year longevity pin.

**APPROVAL OF MINUTES:**

**Motion was made by Commissioner Eissinger and seconded by Commissioner LaFromboise to approve the May 25, 2016 minutes as presented and the motion passed with Commission Newell abstaining.**

**Motion was made by Commissioner Newell and seconded by Commissioner Kish to approve the June 8, 2016 minutes as presented. Commissioner Eissinger noted two corrections on page six. The first was to change the work force investment board to system. The second was to correct the spelling of Scobey. Motion was made by Commissioner Kish and seconded by Commissioner Eissinger to approve as amended and the motion passed.**

**Motion was made by Commissioner Newell and seconded by Commissioner LaFromboise to approve the June 8, 2016 Executive Session minutes and the motion passed.**

**STATE LIBRARIAN'S REPORT:**

There are no policy updates this meeting but that will be an ongoing project as staff time allows.

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The financial audit is in the materials. MSL received a recommendation regarding Montana Land Information Act (MLIA) funds to reconcile the revenue collection report to the SABHRS report and that process has been done back to when MSL began managing the funds. The process has been added to MSL's internal controls. State Librarian Jennie Stapp gave kudos and great appreciation to Kris Schmitz for her work which provides such smooth audits. At the audit committee meeting, Senator Dee Brown asked what has been done to communicate the circumstances regarding the coal severance tax (CST) and the resulting decisions. The question provided a good opportunity to express what has been done through the history of CST. The archived video of the audit hearing is online and Jennie's response has been clipped out in order to be available for others to view and use.

The complete FY 16 MLIA collection report is not available. Collections are projected to be about \$795,000 which is about \$16,500 more than the land plan had budgeted for but \$100,000 less than good years. This raises the question of strategizing priorities in the face of volatile funding. The members of the Montana Land Information Advisory Council (MLIAC) discussed what to do with future additional funding. More discussion is warranted regarding how to prioritize funding for grants and for Montana Spatial Data Infrastructure development.

MSL will be launching the Library Services Technology Act (LSTA) five-year evaluation. Dr. Anthony Chow was selected through a limited solicitation. In his proposal he included a great mix of qualitative and quantitative evaluation using inputs, outputs, impacts. Staff are excited about using the evaluation as a learning process to improve our planning and evaluation processes. A commissioner will be chosen later in the meeting to be involved in the September evaluation meeting with Dr. Chow. The draft evaluation will be provided to the commission in December and the final version will be available in February. The evaluation ties into the next LSTA five-year plan.

The Network Advisory Council (NAC) retreat in July was postponed in order to get Tracy up to date. Samantha Becker from the University of Washington iSchool has been invited to that meeting to lead a training for NAC members and staff the use of data in planning and evaluation. She is one of the Impact Survey authors which is used to help libraries evaluate services. She also is part of both the Research Institute for Public Libraries (RIPL) conference and Schools, Health & Libraries Broadband Coalition (SHLB).

MSL has chosen to take a different approach to fall workshops this year. Staff has wanted to take the workshops out to libraries more so will now have fall and spring workshops, first in the west and then the east with similar agendas. The first fall session is September 13 and 14 in Polson. The evening of the 13<sup>th</sup> is targeted to trustees with the next full day for librarians.

The school librarians retreat was last week and Jennie and Colet both attended. They had an hour and a half long presentation which went very well. The goal was to inform the librarians of all the programs MSL supports. Maker kits were on the retreat agenda in the morning and the presenter mentioned the MSL support which was a great segue.

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The hackathon will be held August 16 in the afternoon. This will be a method to brainstorm and collect different free, online resources and programs that can be used to replace or provide better resources than the databases that have lost funding.

Executive Planning Process (EPP) responses or updates will likely be received around the end of August.

MSL has participated in broadband conversations with the Governor's office and staff of the Education Super Highway. It is unknown at this time whether any legislation will come out of those sessions.

SHLB has released a connecting anchor institutions policy document which is a broadband action plan. It is online and would be a good packet item for legislators.

Suzanne Reymer and Jennie will attend the upcoming Montana Telecommunications Association annual meeting. In conjunction with that meeting the National Telecommunications & Information Administration workshop at the end which they will attend. Commission Wall will attend also.

Joe Tosoni has been hired as the new database analyst and will be introduced in October. Offers have been made for the two vacant digital library positions, the Outreach and Electronic Resources Librarian and the Information Products Lead. The Marketing and Communications Position was posted yesterday with the goal of having that filled by October 1.

The Human Resources (HR) system is being tied to network security and is scheduled to go live September 1. To prepare to go live, MSL staff have had to add contractors including Natural Heritage Program Staff, and volunteers to the HR system. This change requires a new onboarding workflow for new staff. This is a process that staff is currently learning.

The orientation process for new employees is helpful and having a checklist to manage those is also beneficial. Staff, and especially Marlys, have had their plate full with so many new hires. Marlys has done a great job of keeping the recruitment process well organized.

The Governor's Award for Excellence for MSL this year was given to the water information team which worked with NRCS to revise and improve data management work flows. The team now produces 51 new maps on a monthly basis compared to five or six previously. The MSL participants in that team were Stacy Bruhn, Troy Blandford, Meghan Burns and Duane Lund.

## **FY'16 MONTANA STATE LIBRARY CLOSING FINANCIAL REPORT:**

An agency's personal services budget is based on the biannual snapshot of filled positions rather than on expenditures. If a position is vacant at the time of the snapshot,

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it gets funded at entry level. MSL rarely hires new employees at entry (80% of market) so vacant positions at the time of the snapshot may result in budget shortfalls in the personal services budget. Fixed cost appropriations are zero based each session. MSL saw a telephone service savings with a dramatic drop in the costs since it is not used as much. The appropriation approved by the Legislature for Library Services Technology Act funds is an estimate each year. MSL submits budget changes documents to the Governor's Office for approval to expend actual LSTA dollars along with other funds not appropriated by the Legislature including MLIA funds not in House Bill 2 and other grants and contracts. These monies will be reflected on the first quarter financial report. The MSL trust account amount is different from the actual amount because some funding is designated for certain items. The commission budget was up because FY 16 monies were accrued to complete the contract for strategic planning.

MLIA funds were saved in personal services due to the number of contracts MSL supported. Unspent MLIA funds remain in the MLIA account and are not reverted to the general fund. The ending fund balance for MLIA funds shows some slight growth.

The MSC funds in their proprietary account are less than they have been historically and they are advised to keep their cash balance about \$40,000 for the future. Any exceptional MSC expenditures go through the executive commission and they have very highly audited accounts and good internal controls. There won't be server expenses in the future. With a new director there has been a good chance to really break out the expense reviews.

**Motion was made by Commissioner Newell and seconded by Commissioner Eissinger to accept the report as presented and the motion passed.**

## **FY'17 MONTANA STATE LIBRARY OPENING BUDGET:**

This is the base budget, the opening budget approved by the legislature with just a couple of changes. This is the second year of the biennium and CST funding dropped and LSTA fund balances will be carried over in the first quarter report. The MLIA funds show as appropriated but changes will be made such as bringing down the approved amounts to reflect the amounts approved by the Council and Commission in the 2017 Land Plan. The FTE funding for modified positions (those not fund in House Bill 2) will be added. This base budget has a lot of detail but future reports won't go to this level of detail. This base budget will be the start of the next biennium budget which the legislature will work with. Future considerations will include whether the FY'16 savings in fixed costs for telephone will continue.

**Motion was made by Commissioner LaFromboise and seconded by Commissioner Newell to approve the report as presented and the motion passed.**

## **MONTANA STATE LIBRARY TRUST REQUEST:**

The first request is for funding for the second Talking Book Library Recording Booth as discussed before. National Library Service staff will come help in the installation and

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contingency funds are added in the figures. The hope is to have the booth installed in September.

**Motion was made by Commissioner Eissinger and seconded by Commissioner LaFromboise to approve the request and the motion passed.**

The second request is for funding for the annual volunteer appreciate event. TBL relies on its volunteers and this event recognized their contribution once a year. Commissioners are invited to attend on October 13. It is always scheduled around the commission meeting in order to allow a better opportunity for commission attendance.

**Motion was made by Commissioner Newell and seconded by Commissioner Eissinger to approve the request and the motion passed.**

## **MONTANA LAND INFORMATION ACT GRANT PRESENTATION:**

Lorette Carter, the community development director from Shelby is the person that writes grants and administers small programs but is not the person that did the work for the MLIA grants received. Shelby actually were granted two grants with the first being in 2013 which was a water and sewage mapping project pilot for ten blocks. That project allowed them to have solid amounts to ask for funding to do the entire system. Lorette was very enthusiastic about the benefits of the program and gave a great presentation about what Shelby was able to do with their grant.

## **EARLY LITERACY AND MONTANA LIBRARIES:**

Sara Groves spoke on the Ready2Read project including its eleven-year history which began as a marketing campaign of posters and bookmarks which didn't work and after a survey evolved to handing out materials and providing training. Over the years the program has evolved to include the ready2read rendezvous, the wildlife trunk program, videos, blocks, texting program and so on. It is a successful program because it is based on research and aligns with early learning standards. Montana was one of five states to participate in the super charged story time program.

Jamie Greco and Bess Hjartarson from the Glacier County Library talked about the early literacy program in their library. They went from having no program to attending the rendezvous and their program grew from there. They received the blocks, wrote and were awarded grants to revamp their space, brought in literacy kits and much more. They completed their grant in 2016 and have been chosen as a best practices library. They gave a great presentation on their remodel and the benefits of it for their program. A tour of the library will be conducted after the meeting is over so the commissioners and guests can see the results in person.

## **ELECTION OF COMMISSION OFFICERS:**

**Commissioner Bartow nominated Commissioner Newell as chair and nominations were closed. Commissioner Newell will be chair.**



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**Commissioner Bartow nominated Commissioner Kish as vice-chair and nominations were closed. Commissioner Kish will be vice-chair.**

## **COMMISSION GOALS AND OBJECTIVES:**

Strategic planning follow up will include a meeting with staff. Commissioner Bartow will attend that session. Documentation from the preceding meetings will be forthcoming. Commissioner Eissinger commented that this has been a very good experience and different from any other she had been involved with. Commissioner Kish would like to have Ned Cooney come back in on year for an evaluation of the results and readjustments if necessary.

The LSTA evaluation discussion will be held September 6 and 7 and a commissioner will need to attend. The commissioners are invited to attend the MSL workshops, the first of which is in Polson. With Brent Roberts resigning from the commissioner, a new commission designee needs to be chosen to attend the RIPL conference the end of September. Commissioners Eissinger and Newell both expressed interest. Commissioner Wall will attend the NSGIC meeting in October along with Erin Fashoway and other staff.

The commission discussed attendance at the Fall Federation meetings. The date of the Golden Plain meeting hasn't been determined yet but Commissioner Eissinger would attend depending on the schedule. Perhaps the new commissioner could attend the South Central meeting. Commissioner Kish will attend the Broad Valleys and Commissioner Wall might attend the Tamarack. Commissioner LaFromboise will attend Pathfinder and Commissioner Eissinger will attend Sagebrush.

Program reporting will be tied into the strategic plan in the future so continuing on with the current reports for now. Commissioner Bartow worked with State Librarian Stapp to complete her performance appraisal process. Commissioners would like to have a story mapping presentation in the future.

Kudos to Commissioner LaFromboise for earning her MLS degree.

## **OTHER BUSINESS/ANNOUNCEMENTS:**

There was none reported.

## **PUBLIC COMMENT:**

There was none received.

## **ADJOURNMENT:**

**The meeting adjourned at 12:37 p.m.**

# DRAFT

**MONTANA STATE LIBRARY (MSL) COMMISSION MEETING  
9:30 A.M., OCTOBER 12, 2016  
HELENA, MONTANA  
OR GOTOMEETING**

**ATTENDEES:**

Commissioners: Chairman Bruce Newell, Kenning Arlitsch, Colet Bartow, Connie Eissinger, Anne Kish, Aaron LaFromboise online, and Ken Wall

Staff: Dan Bachen, Eve Byron, Tracy Cook, Jessica Edwards, Evan Hammer, Kenny Ketner, Bryce Maxell, Tom Marino, Cara Orban online, Kris Schmitz, Jennie Stapp, Marlys Stark and Joe Tosoni.

Visitors: Honore Bray online, Pamela Benjamin online, Janeen Brookie, John Finn, Nancy Schmidt online and Debbie Wellman.

**Chairman Newell called the meeting to order at 9:31 a.m.**

The longevity pin award agenda item will be moved to next meeting.

Kenning Arlitsch, the new commissioner, was introduced. New staff Eve Byron, Dan Bachen, Joe Tosoni, Jessica Edwards, and Kenny Ketner were all introduced.

**APPROVAL OF MINUTES:**

**One correction was identified. Under the Election of Commission Officers agenda item, it should read that Commissioner Newell rather than Bartow will be chair. Motion was made by Commissioner Eissinger and seconded by Commissioner Kish to approve the minutes as corrected and the motion passed with Commissioners Wall and Arlitsch abstaining.**

**STATE LIBRARIAN'S REPORT:**

There are no further information regarding the Executive Planning Process (EPP) requests although staff has been told that the proposed budget will likely be a status quo budget. State Librarian Stapp outlined the four budget requests for Commissioner Arlitsch. There will be legislative session training and information during the December meeting.

Library Legislative Day will be held January 18 at 5:30.

The Data Center migration is mostly complete with only the Montana Shared Catalog (MSC) servers still to be moved. Staff migrated our virtual server environment to one hosted by the State Information Technology Services Division (SITSD) at the State of

Montana Data Center. Staff is now working to migrate the physical MSC server to the floor of the data center. Staff will continue to analyze if virtual or physical or hosted methods will be better in the future for MSC. MSL has procured 80 terabytes of storage capacity in the new data center architecture. The website performance has improved for data heavy web pages with the new environment. MSL might receive some credit back for the machinery and might surplus some to make available to Helena College. The physical space will be used as Cindy's staging area and the generator will probably not be maintained. Staff are starting to explore sharing data with other agencies.

The physical space re-evaluation is constantly ongoing. Fish Wildlife and Parks (FWP) are moving out after the first of the year and the physical collection continues to shrink. After November 1, the photo interpreters space will be utilized by legislative services for a few months but discussion with the budget office on how the rent will be managed have not been finalized.

Government Printing Office members were here for the 50<sup>th</sup> anniversary of the federal document depository at MSL. MSL received a plaque for our service.

ESRI managed services costs continue to go down but some of the saving will go to offset migrating fees that weren't planned. MSL negotiated a contract involving 20 agencies and SITSD included those charges in cost projections to the Governor's Office for the coming biennium.

## **FY'17 FIRST QUARTER FISCAL REPORT:**

In August, the Commission was presented with the startup budget. The first quarter report brings in roll over grant and funds and includes all the other changes and adaptations necessary for the many funds that MSL manages.

**Motion was made by Commissioner Wall and seconded by Commissioner Bartow to approve the report as presented and the motion passed.**

## **FEDERATION FY'16 ANNUAL REPORTS:**

John Finn for Broad Valleys, Janeen Brookie for Golden Plains, Debbie Wellman for Pathfinder and Honore Bray online for Tamarack were all available to point out highlights of their reports and to answer questions. Tracy Cook represented Nancy Schmidt from South Central and Sonja Woods from Sagebrush.

Commissioners requested that perhaps the reports could be compiled to show the spending across the federations as well as multi type comparisons. They would also like to know what additional funding would be used for.

Janeen Brookie expressed special appreciation for the work Mike Price does.

**Motion was made by Commissioner Bartow and seconded by Commissioner Eissinger to approve the reports as presented and the motion passed.**

**Meeting was recessed for lunch at 11:55 a.m. Reconvened at 12:16 p.m.**

## **MONTANA NATURAL HERITAGE PROGRAM (NHP) MAPVIEWER OVERVIEW:**

Bryce Maxell gave an overview of the updated MapViewer web application found at <http://mtnhp.org/mapviewer/>.

## **STRATEGIC PLANNING PROCESS DISCUSSION & FY '17 COMMISSION WORK PLAN REVIEW:**

The LSTA 5-year evaluation is being conducted by Dr. Anthony Chow who was here in September for his internal visit. He will return for an external visit and will also be conducting a survey.

Tracy Cook, Cara Orban, and Bruce Newell all spoke briefly about the Research Institute for Public Libraries (RIPL) conference they attended. Tracy spoke on Samantha Becker's presentation of a triangle of goals focused on library values and some of the ways Tracy intends to use her model to move forward with MSL projects. Cara said it was very exciting and great timing for some of the things MSL is working on. Bruce commented that he got some ideas that helped in working on the strategic planning and heading into the legislative session. He would like a work session with the commission and strategic staff to discuss setting up strategic plan goals and directions.

The commissioners discussed where they are at with the strategic planning process and where they would like to move from here. Setting up task forces for reporting and funding will be tabled until the strategic plan itself is finalized. After the work session with the staff and as many commissioner as can come, the plan will be submitted to the broader library community and staff for comment and should be back as a final draft to the commission in December.

**The work session will be held at 1:00 p.m. October 17.**

## **COMMISSION CALENDAR:**

Commissioner Kish attended Broad Valleys phone meeting. Tracy Cook and Jennie Stapp went to South Central. Commissioner Wall will attend the National State Geographic Information Council conference. Commissioner LaFromboise will attend the Network Advisory Council meeting as well as Commissioner Bartow who is the OPI representative to that meeting. Commissioner Newell will attend the Montana Land Information Advisory Council meeting. Tamarack Federation meeting will have Commissioner Wall attending. Commissioner LaFromboise will attend Pathfinder. Commissioner Newell and Jennie Stapp and Tracy Cook will attend Sagebrush.

## **OTHER BUSINESS/ANNOUNCEMENTS:**

The Montana Association of Geographic Information Professionals is having their fall meeting in Billings and Commissioner Wall will attend. The Montana Association of Counties midwinter meeting is held the middle of February.

DRAFT

**PUBLIC COMMENT:**

There was none received.

**ADJOURNMENT:**

**The meeting adjourned at 2:15 p.m.**

DRAFT



## **Central Services & State Librarian's Office Report October and November 2016**

Prepared for the December 14, 2016 Commission meeting  
by Jennie Stapp, State Librarian

This report represents accomplishments of Central Services staff: Stacy Bruhn, Eve Byron, Carol Churchill, Colleen Hamer, Tom Marino, Cindy Phillips, Kris Schmitz, Jennie Stapp, Marlys Stark and Joe Tosoni.

The State Librarian and the Central Services staff at the Montana State Library (MSL) provide services and support to all MSL programs to ensure that all staff can efficiently conduct their work because they have access to technology, human resource management, financial expertise, promotional services and administrative leadership. To be effective, it is essential that the State Librarian and Central Services staff work with library programs to provide policy, technology and communication solutions that balance program needs with the larger library need for fair and ethical policies, transparent and accountable financial systems, integrated, secure, sustainable library technology designed to adapt to the constant, rapid pace of technology change, communication strategies that effectively engage stakeholders while making the best use of the limited staff time and financial resources available and overall administrative leadership that is collaborative, thoughtful, creative, well communicated and forward thinking.

Central Services staff includes the following employees:

- State Librarian, Jennie Stapp
- Central Services Manager, Kris Schmitz
- Accounting Tech, Carol Churchill
- Administrative Assistant, Marlys Stark
- Data Coordinator, Colleen Hamer
- Web Manager and IT Lead, Tom Marino
- GIS Web Developer, Stacy Bruhn
- GIS Database Administrator, Joe Tosoni
- Network Administrator, Cindy Phillips
- Communications and Marketing Coordinator, Eve Byron

This work plan is built around the core goals contained in the 2012 through 2022 MSL Long Range Plan. By completing the tasks set forth within this work plan we intend to efficiently and effectively fulfill the mission of the Montana State Library.

## **Goal One—Content**

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

1.1. Improve the quality of the public library statistics we collect.

The reliability and consistent quality of the data and statistics we collect annually from public libraries tell a compelling story about public library services around the state. In order to continue to improve the quality and usefulness of these data, and to ensure that libraries and State Library staff are best able to articulate these stories in a way that is transparent and authoritative, the State Data Coordinator will work with the Statewide Library Resources Manager, the Statewide Library Consultants, the State Librarian and the Public Library Statistics Task Force to more clearly define the statistics we collect, to simply reporting tools to minimize the possibility for errors, better educate librarians about how they can collect and report the necessary data, and to improve the process of quality control through staff collaboration.

### Highlights

MSL, with the support of Colleen Hamer, State Data Coordinator, successfully completed the collection of the FY 16 public library statistics. This work included providing webinars and drop in sessions to answer questions from libraries about the definitions and nature of certain statistics we collect. In particular, Hamer and other fielded questions about changes made to statistics about local library funding. Changes were made that will help us to better understand and respond to questions about the amount and nature of local funding for libraries. This information will help us be better prepared for the upcoming legislative session when we will likely receive questions related to the impact of state funding through State Aid and when we may need to respond to questions about the impact of legislation that could restrict dedicated levies for local services as we say in 2015.

## **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.

### Highlights

New Marketing & Communications Coordinator, Eve Byron is launching MSL more fully into world of social media. In addition to our Facebook pages, MSL now has a twitter handle @MTStateLibrary where Eve tweets frequently, and we have begun to make use of the

hashtag #mtlibraries to generate discussions and to collect twitter discussions from libraries across Montana. Eve has already seen positive results from twitter followers, including those in Montana's news media, who have reached out to MSL with reference questions.

The 2017 Legislative Snapshot is currently in production. It has long been a goal to make the Snapshot a tool that we can update more frequently during the session to keep legislators better informed and to continue to market MSL services. The previous booklet format did not readily support this goal. This year we are taking a folio approach through which Legislators will receive regular snapshots of important topics in the form of briefing sheets. Legislators will receive customized folios at the beginning of the session with select briefings of importance. Then they will receive one to two briefings per week at least through transmittal. Briefings can more easily be updated throughout the session. Topics that we will cover include library state aid, next generation 911, broadband access for libraries, state infrastructure, the state water plan, etc. We will also welcome topics from Legislators and patrons. This work is being led by Hamer and Byron as well as Kenney Ketner, the new Digital Library Information Products Lead. It is a major undertaking for these new staff to lead this effort and it is proving to be a great learning opportunity for them as they become more familiar with the information resources and services that MSL provides.

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

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

4.1. Broadband planning

##### Highlights

At the November board meeting on the Schools Health and Libraries Broadband Coalition, State Librarian Stapp concluded her second term as board chair. She will continue to serve on the executive committee as past chair.

Recognizing the diverse needs and opportunities to support broadband deployment and digital literacy across the country, as chair of the Networking Committee for the Chief Officer of State Library Agencies (COSLA), Stapp is working with COSLA staff and chiefs to conduct a Broadband needs assessment to help COSLA focus their efforts in this important area. Additionally, Stapp was elected to serve on the COSLA board of directors at their fall meeting in Minneapolis.

#### **Goal Six—Sustainable Success**



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

### 6.3. Biannual Executive Planning Process

#### Highlights

The Governor released his budget on November 15. Due to declining revenue projections, the Governor is proposing 5% reductions to the operating budgets for most agencies. For MSL, this means about a \$160,000 cut. None of MSL's EPP requests were approved. New this year, the Governor's Budget Office has also issued what is being referred to as Volume 10. The volume gives an overview of agencies' Information Technology (IT) expenditures. Stapp and Central Services Manager, Kris Schmitz, prepared a narrative overview of MSL's IT priorities and a breakdown of expenditures according to select expenditure codes. This information is meant to create a comprehensive and consistent picture of the State's IT spending. Though similar to information that appears in the Governor's Budget, this volume is for informational purposes only and does not require approval of the Legislature.

Following the election Representative Frank Garner, a Republican from the Flathead Valley, formally submitted the State Aid Legislation for drafting. That Legislation can be tracked on the Legislative LAWS site under LC0824. Staff will prepare a legislative packet of information about the legislation including frequently asked questions to help his as he sponsors the legislation.

With support from John Finn and Nanette Gilbertson from the Montana Library Association, Byron and Hamer created a template using an online tool called Canva that libraries can use to quickly and easily create attention grabbing handouts that highlight the impact of their state aid funds. Staff hosted a webinar to introduce libraries to the tool and Hamer and Byron are also preparing custom handouts for libraries using state aid stories that libraries submit via the Library Directory. These handouts are a key tool in our advocacy effort to support the passage of our state aid legislation. We are encouraging librarians to send them to their legislators now, ahead of the session, and to share them with library patrons and other stakeholders that can help librarians communicate the importance of this funding to their legislators.

### 6.6. Systems and Hardware Updates

#### Planning a move to the State Data Center

In order to maintain our current IP range for the Montana Shared Catalog, the MSC servers, which are currently physical servers, were migrated to the State of Montana Data Center earlier than anticipated. We had originally planned to make such a move a year from now, if

necessary, after the MSC had time to evaluate platform options included hosted options. The migration happened without incident and now the production and development servers are housed in a dedicated rack at the data center.

The MSC is currently evaluating options for a new architecture. SITSD does not host an IBM AIX environment so making use of a virtual environment hosted by SITSD is not an option. MSC vendor Sirsi Dynix offers a cloud solution which the MSC may be able to make use of at little if any additional cost after migration. The other option that the catalog is evaluating is replacing the current production server with a new server when that server reaches end of life next year. The MSC staff hope to make a decision about which option to propose to the membership during the first quarter of 2017 in order to include any necessary costs in the FY 18 MSC budget.

## 6.8. Policies reviews

### Highlights

Schmitz continues to research how other agencies and the Department of Administration enact policies that fall under the purview of the Commission in order to inform any necessary updates to those policies, many of which haven't been reviewed in several years. Examples include the telework and drug and alcohol policies brought to the Commission to review in December. Through her research she has found that there is little consistency among agencies in what policies look like and how they are implemented so Schmitz and Stapp carefully consider policy implications when preparing recommendations for the Commission.

## 6.10. MSL-wide strategic planning

### Highlights

Following the October Commission meeting, staff led Commission members in a process to more fully articulate the impact of the visions that the Commission had previously identified through the strategic planning process. In a process referred to as the "so that" exercise or the theory of change, the Commission was able to state more definitively the desired impact for stakeholders that would be achieved through the successful work outlined in the MSL Strategic Framework. Staff continued to solicit feedback from a wide variety of stakeholders including all six library federations, the Network Advisory Council and the Montana Land Information Advisory Council.

## **Digital Library Work Report October and November 2016**

Prepared for the December 14, 2016 MSL 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, Jessica Edwards, Michael Fashoway, Jo Genzlinger, Evan Hammer, Bob Holliday, Jim Kammerer, Kenny Ketner, Duane Lund and Diane Papineau.

- I reported that the digital library was fully staffed in the October report so I'm not sure there is much more to say on that.
- I also reported on the ELA in October and there hasn't been substantive change on that (still waiting for signatures)
- I could provide a Land Plan update but this might wait until the next meeting since it hasn't been approved yet.
- We are placing added emphasis on the outreach aspect of the GIS Coordinator position and the need for Coordinator and members of the Montana Land Information Advisory Council to be more engaged not just with the Montana GIS Community, but with GIS activities in other states as well. To help make this happen we increased the Montana Land Information Advisory Council budget from about \$3,500 in FY16 to \$10,000 in FY17 and encouraged council members to use this funding to participate in outreach activities such as the National States Geographic Information Council's annual meeting. Three MSL employees, two MLIAC members, and 1 MSL Commissioner attended the meeting in Indianapolis in October and had the opportunity to hear about the types of plans states are putting in place for things such as Next Generation 9-1-1, the 3-D Elevation Program, and the growing availability and shrinking cost of high resolution aerial imagery. It was great to have a large leadership presence at the meeting and we believe that it will lead to a more active and engaged council. We hope to be able to also take at least one Council member to the NSGIC Midyear conference in Annapolis, MD in February.
- Seven people were appointed to open positions on the Montana Land Information Advisory Council. While many of these are returning members, we are excited to have them back on the council in an official capacity. More information about the appointments can be found here - <http://www.abcfoxmontana.com/story/33748268/governor-bullock-announces-council-appointments>

- The Department of Revenue established rules outlining a procedure for the nondisclosure of property record information. Because this impacts the data that MSL makes available through the Montana Cadastral Mapping Website (<http://gis.mt.gov>) MSL worked closely with the Department of Revenue to ensure that the rules met the intended purpose of protecting members of the public that may be at risk of physical harm without having unintentionally limiting open access to property record information and causing an unintended work burden for MSL staff supporting the cadastral application. We are supportive of the final version of the rules that were implemented and feel that they strike a necessary balance between privacy and information access. The complete rule as it was adopted can be found at - [MAR 42-2-958adp](#)
- As we move into the second year of the Managed Services environment, an emphasis has been placed on making as many of the 15 MSDI datasets as possible available to the general public as open access web map services. There are currently 26 MSDI services available covering 11 of the 15 MSDI datasets and we hope to be adding services for an additional dataset, Climate, in the near future. The only remaining themes without services will be Geology, Elevation, and Soils. We have also added services for commonly used non-MSDI datasets including a Montana Mask, a statewide coverage of 1:24k, 1:100K and 1:250K Topographic Quadrangles, and a collection of Digital Orthophoto Quarter Quads (DOQQs) collected by the USGS over several years in the later 1990s and early 2000s.
- The [Yellowstone Clearinghouse website](#) revamp is complete. Before, the website was essentially one long list of GIS data, reports, and maps. It was hard to find what one needed. Now it is better organized by topic and includes additional GIS data and final reports, an online map viewer, and two story maps that highlight information (physical features by reach) gathered during the Yellowstone Cumulative Effects Analysis. The website and story maps were presented at the Montana Association of Conservation Districts Annual Convention and there were good questions asked about how a similar approach to information management might be taken in other river basins. There is potential for the Yellowstone Clearinghouse map viewer and story maps to assist conservation districts with administering 310 permits.
- We continue to receive updated hydrography data from Glacier National Park. They recently sent us revised flowlines and waterbodies for the Belly River 8-digit HUC within the Park boundary. We are on track to complete stream, river, and waterbody updates for all subbasins within the Park by approximately this time next year. It has been mentioned in past commission reports but it is worth noting again: To date, Glacier National Park is our only hydrography dataset sub steward – directly assisting with editing. This is an important first step in developing a support structure that leverages the work of partner agencies acting as sub stewards to assist with the overall maintenance of the Montana Hydrography Dataset.
- We worked with the DNRC State Drought Coordinator to revise the monthly [drought status map](#). The new map is cleaner and better aligned with categories used by the US Drought Monitor. We will continue to coordinate with the DNRC on the [drought.mt.gov](http://drought.mt.gov)

website and how to make content more relevant at the basin-level and to watershed groups. Through the Water Information System Manager MSL has been involved in discussions to update the State Drought Management Plan.

# MSL Progress Report for Statement of Work

## Report for 3<sup>rd</sup> and 4<sup>th</sup> Quarters FY16

The tables below come from Appendix 1, the Scope of Work for Operation of the Montana Natural Heritage Program, and Appendix 2, the Scope of Work for FY16 Wetlands and Land Cover MSDI Framework Services under the Contract for Services between the Montana State Library and the University of Montana for state fiscal years 2016 and 2017 (award number 20150731). The right column describes the status and progress during the reporting period. The status is generally summarized as in progress, completed, or not active, but also may include annotations.

Tasks in the left column of the tables list **Administrative, Information Services, Botany, Ecology, and Zoology** services from Appendix 1 and **Wetlands and Land Cover MSDI Framework Services** from Appendix 2.

The tables list four categories of tasks and services:

- 1) **Core Services:** Essential tasks and services that will be delivered principally with Core funding provided by this contract.
- 2) **Supplemental Core Services:** Essential tasks and services for which there is not sufficient Core funding but which will be delivered dependent on acquiring discretionary funding support from partner agencies.
- 3) **Project Supported Services:** Additional tasks and services that augment the essential core tasks and services that may be provided pending the availability of project funding.
- 4) **MSDI Core Services:** Wetland, Riparian, and Land Cover data development and coordination services for the Montana Spatial Data Infrastructure delivered primarily with Montana Land Information Act funds.

<b>Core Administrative Services</b>		
	<b>1<sup>st</sup> &amp; 2<sup>nd</sup> Quarter FY 16</b> (July 1, 2015 – December 31, 2015)	<b>3<sup>rd</sup> &amp; 4<sup>th</sup> Quarter FY 16</b> (January 1, 2016 – June 30, 2016)
1. Coordinate all program activities with Partners and program areas	Ongoing - The annual MTNHP Partners Committee meeting was held December 7, 2015 at Montana Wild in Helena and was attended by over 40 partners. A meeting summary and links to powerpoints is posted on the MTNHP website at: <a href="http://mtnhp.org/about/announce.asp#PartnersMtg2015">http://mtnhp.org/about/announce.asp#PartnersMtg2015</a> - Expanded an existing task tracking document in One-Note for coordination of activities across program areas within	Ongoing - Maintained weekly coordination meetings with Information Services staff, biweekly coordination meetings with database and web programming staff, approximately monthly program manager’s meetings, and quarterly all staff meetings. Continued to track meeting discussions in MS One-Note for task tracking and to promote communication between staff.

	<p>MTNHP, between MTNHP and MSL, and between MTNHP and key partners.</p> <ul style="list-style-type: none"> <li>- Established weekly coordination meetings with Information Services staff and biweekly coordination meetings with database and web programming staff, and approximately monthly program manager's meetings. All staff meetings will be held approximately quarterly.</li> <li>- Numerous meetings were held with staff at FWP, BLM, USFS, DEQ, NRCS, UM, TNC, MT Audubon, Department of Commerce, Land Trusts, NatureServe, Malmstrom Air Force Base, and MSL.</li> </ul>	<ul style="list-style-type: none"> <li>- Numerous meetings were held with staff at FWP, BLM, USFS, DEQ, Dept. of Agriculture, NRCS, UM, MT Audubon, Land Trusts, NatureServe, librarians across Montana, and MSL, Plant Conservation Conference attendees, Montana Chapter of the Wildlife Society attendees, Intermountain GIS Conference attendees, Governor's Invasive Species Summit attendees, Montana Wetland Council meeting attendees, and Montana Watershed Coordination Council members.</li> </ul>
2. Administer contracts and grants	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- MTNHP managed approximately 60 agreements during the reporting period</li> <li>- New project agreements initiated during the reporting period include, Howellia Survey and Monitoring Data with the Swan Ecosystem, Data Service Support for the USFS, Tepee Macroinvertebrate identification for the USFS, Data Service Support for the NRCS, Harlequin Duck, Amphibian, and Bat Monitoring for the USFS, Statewide Wetland Mapping for DEQ and MLIA, 2016 Wetland Plant Identification class support from DEQ, National Wetland Condition Assessment field sampling in 2016 for DEQ, and Information to Support Weed Management for the Department of Agriculture</li> </ul>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- MTNHP managed approximately 60 agreements during the reporting period</li> <li>- New project agreements initiated during the reporting period included: data service support for the Bonneville Power Administration, national wetland condition assessment field sampling support for the Department of Environmental Quality, wetland mapping for the USFS, Northern Long-eared bat surveys for the Custer-Gallatin National Forest, Howell's Gumweed genetic diversity monitoring for the Lolo National Forest, Greater Sage-Grouse modeling for the Beaverhead-Deerlodge National Forest, weed trust fund data support for the Department of Agriculture, plant conservation status reviews for the Department of Agriculture, bat acoustic monitoring on coal mines for the Department of Environmental Quality, data sharing for BLM through NatureServe, and moss and lichen inventory on the Milton Ranch from the Montana Native Plant Society.</li> </ul>
3. Promote use of Heritage data resources through outreach and training sessions	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- MTNHP information resource trainings were provided to the Montana Education Association and Montana Federation of Teachers, the Department of Commerce, Malmstrom Air Force Base environmental planning staff, and NRCS.</li> </ul>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- MTNHP information resource trainings were provided to Montana Audubon staff, the Montana Invasive Species Advisory Council, librarians across Montana, Montana Plant Conservation Conference attendees, Montana Chapter of the Wildlife Society meetings attendees, the Noxious Weed Trust Fund Grant Committee, nongame staff at FWP, Intermountain GIS conference attendees, Montana Wetland Council meeting attendees, NatureServe's Biodiversity without Boundaries conference attendees, Montana Land Trusts, Montana Department of Agriculture personnel, Natural Resources Conservation Service personnel, USFS Region 1 Wildlife Biology personnel, Beaverhead-Deerlodge Forest Service resource planning personnel, Montana Watershed Coordination Council members, and a delegation of natural resource managers from Russia.</li> </ul>

		- Four posters on MTNHP information resources were displayed at the Governors Summit on Invasive species on April 12 <sup>th</sup> and 13 <sup>th</sup> .
4. Collaborate with Library staff to effectively represent the mandate, activities, and products of MTNHP through publications, reports, brochures, posters, maps, fact sheets, social media, etc.	Ongoing <ul style="list-style-type: none"> <li>- Held biweekly coordination meetings with State Librarian &amp; Digital Information Manager / CIO</li> <li>- Participated in regular MSDL Managers meetings</li> <li>- Provided an information overview and MTNHP contacts list to allow MSDL staff to answer patron questions directly.</li> <li>- Printed additional MTNHP information services pamphlets</li> </ul>	Ongoing <ul style="list-style-type: none"> <li>- Held biweekly coordination meetings with State Librarian &amp; Digital Information Manager / CIO</li> <li>- Participated in regular MSDL Managers meetings</li> <li>- Provided an information overview and MTNHP contacts list to allow MSDL staff to answer patron questions directly.</li> <li>- Printed additional MTNHP information services pamphlets</li> </ul>
5. Participate in regional and national network coordination meetings and conference calls to help ensure continued compatibility and to take advantage of opportunities and advocate for initiatives that would benefit Montana.	Ongoing <ul style="list-style-type: none"> <li>- Participated in NatureServe Network Member Program coordinators calls, spatial methodology review team calls, and predictive distribution modeling team calls.</li> </ul>	Ongoing <ul style="list-style-type: none"> <li>- Participated in monthly NatureServe Network Member Program coordinators calls, monthly U.S. Section Council calls, monthly spatial methodology review team calls, and quarterly predictive distribution modeling team calls.</li> <li>- Created, distributed, analyzed, and presented results of a survey to NatureServe network member programs that assessed the housing, funding, staffing capacity, guiding statutes, unique assets, and critical challenges faced by individual programs with the goal of strengthening the network and leveraging network assets.</li> </ul>
6. Finish an updated revision of the FY15-20 MTNHP 5-year Strategic Plan	<b>Completed</b> <ul style="list-style-type: none"> <li>- The FY16-FY20 strategic plan was finalized in mid-December after review by MTNHP program managers and feedback from MTNHP partners at the 2015 annual partners meeting.</li> </ul>	<b>Completed previous quarter.</b>

### Core Information Services Program Services

	1 <sup>st</sup> & 2 <sup>nd</sup> Quarter FY 16 (July 1, 2015 – December 31, 2015)	3 <sup>rd</sup> & 4 <sup>th</sup> Quarter FY 16 (January 1, 2016 – June 30, 2016)
1. Respond to requests for MTNHP information used in Environmental Assessments, Environmental Impact Statements, and other planning and resource management activities	Ongoing <ul style="list-style-type: none"> <li>- Responded to 325 requests involving SOC reviews for environmental assessments.</li> </ul>	Ongoing <ul style="list-style-type: none"> <li>- Responded to 410 requests involving SOC reviews for environmental assessments.</li> </ul>
2. Work with NatureServe to develop procedures and methods to conduct regular data exchanges.	On hold <ul style="list-style-type: none"> <li>- This task is pending completion of task 3 below to ensure that element occurrence information has all of the appropriately associated element information.</li> </ul>	On hold <ul style="list-style-type: none"> <li>- This task is pending completion of task 3 below to ensure that element occurrence information has all of the appropriately associated element information.</li> </ul>
3. Develop procedures and methods to upload state element data to and	On hold	On hold



download global element data from the BIOTICS 5 database	<ul style="list-style-type: none"> <li>- We are currently waiting on NatureServe to develop their portions of the exchange process for element information. This has been targeted for the fall of 2016 by NatureServe.</li> </ul>	<ul style="list-style-type: none"> <li>- We are currently waiting on NatureServe to develop their portions of the exchange process for element information. This has been targeted for the fall of 2016 by NatureServe.</li> </ul>
<p>4. Administer databases for editing and storage of MTNHP data including:</p> <ol style="list-style-type: none"> <li>Coordinate overall MTNHP server architecture and development with MSL</li> <li>Design and maintain appropriate relational databases for botany, zoology, and ecology data.</li> <li>Administer MTNHP databases on internal server including database security and routine backup to prevent catastrophic loss</li> <li>Develop and maintain procedures and methods to disseminate information to web-facing servers external to the firewall</li> <li>Develop and maintain data processing and QC procedures for core databases</li> </ol>	<p>In Progress</p> <ul style="list-style-type: none"> <li>- We continue to coordinate server architecture with MSL.</li> <li>- See task 7 below for update on botany database.</li> <li>- MTNHP databases are now all being administered on SQLPROD. Most MTNHP information is backed up off site regularly to the SITSD data center in Helena. Additionally, all MTNHP information is backed up using a raided 25 TB Drobo Drive array system that is stored off site at the Program Coordinator's house.</li> <li>- MTNHP staff continually work with MSL staff to manage nightly jobs that migrate information over to SQLWEB to serve information up on MTNHP websites.</li> <li>- Data processing and QC standards are in the progress of being updated in order to deal with larger and larger data exchanges. For example, we just received a 1.2 million bird observation records from the Ebird database which will need to be collapsed into seasonal representations for individual species, compared with existing records to prevent duplication, and evaluated for appropriate spatial and temporal presence. Automated routines are being developed to ensure QA/QC of this information</li> </ul>	<p>In Progress</p> <ul style="list-style-type: none"> <li>- We continue to coordinate server architecture, nightly mirror jobs between production and web servers, and backups to prevent catastrophic loss with MSL.</li> <li>- Data processing and QC standards are in the process of being updated in order to deal with larger and larger data exchanges. We are using a 1.2 million bird observation record data set from the Ebird database to develop automated QA/QC procedures.</li> <li>- See #7 below regarding development of a new relational database for botany observation survey data.</li> </ul>
<p>5. Migrate all MTNHP databases from SQLINT to SQLPROD</p>	<p><b>Completed</b></p> <ul style="list-style-type: none"> <li>- The following databases were migrated from SQLINT to SQLPROD by November: Biotics01, NHP, NHPBat, NHPBotany, NHPEcology, NHPGen, NHPLandMan, NHPLayerData, NHPLayerGrids, NHPReference, NHPSpecies, NHPTools, NHPWeb, NHPZoology, Stewardship, NHPThumbsPlus, WetlandRiparian</li> </ul>	<p><b>Completed previous quarter.</b></p>
<p>6. Maintain a core photo database on SQLPROD</p>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- We use Thumbs Plus photo management software linked to a SQL database, NHPThumbsPlus, on SQLPROD to manage information on a growing photodatabase that currently includes over 88,000 photos. Many fields in this photodatabase are underpopulated and thus many of these photos cannot be shared on MTNHP websites. We are working on getting more and more photos attributed so that they can be shared on our websites.</li> </ul>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- 4,750 photos were added to the NHPThumbsPlus photo database on SQLPROD and there are now 92,750 photos of animal and plant species, habitats, and survey locations across Montana in this database.</li> <li>- Temporary employees were utilized to work on some of the backlog of photo attributing so that photos can be shared on MTNHP websites. A total of 3,553 photos were fully attributed with 3,344 photos added to species accounts on the Montana Field Guide. 1,167 species now have photos showing on the Montana Field Guide that previously had no photos. Large numbers of photos were added for grass, moss, moth, butterfly, and grasshopper species.</li> </ul>

<p>7. Work with Botanist to design and implement a revised and updated Botany database for observations and species occurrences</p>	<p>In Progress</p> <ul style="list-style-type: none"> <li>- A new relational database for botany data is under construction that will track plant observations and plant surveys. Where possible the architecture of this database is being aligned with the zoology database in order to take advantage of data management scripts and web programming that has been developed for animals.</li> </ul>	<p>Completed</p> <ul style="list-style-type: none"> <li>- A new relational database for botany has been completed. Where possible the architecture of the botany database was aligned with the zoology database and this also necessitated a few updates to the zoology database. Overall this will streamline management of observation and survey data and code that is used to display information on MTNHP websites as well as construct predictive distribution models.</li> <li>- Observation and survey location data from the old database has been ported to the new database and associated plant species information from the old database has been appended to the new observation database. Coding for species occurrences processing still needs some minor updates finalize the overall effort.</li> <li>- Porting the data from the old database to the new database uncovered a number of observation and survey records that need additional hand review.</li> </ul>
<p>8. Continue to work with Digital Library Division staff to enhance discovery of biological information in the MSL geographic information web and other MSL web sites.</p>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- We continue to work with MSL on discovery of MTNHP information.</li> </ul>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- We continue to work with MSL on discovery of MTNHP information through the MSL GIS Data List and MSDI Infrastructure web pages.</li> </ul>
<p>9. Provide regular updates on the website, social media, and through emails as new resources become available (including reports, web tools, MapViewer, Species SnapShot, and Montana Field Guide enhancements, etc.).</p>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- Announcements of important MTNHP developments and releases of new reports continue to be posted on the MTNHP homepage.</li> <li>- A plan is being developed to use Instagram to post Montana Species, Wetland, and Ecological Systems photos to users in order to direct web traffic to the accounts on the Montana Field Guide.</li> <li>- Facebook posts have not been initiated in recent months pending a redesign of the MTNHP Facebook page which is scheduled for late spring of 2016.</li> </ul>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- Announcements of important MTNHP developments and releases of new reports continue to be posted on the MTNHP homepage.</li> <li>- No information postings were made on Facebook, Instagram, or Twitter during this reporting period due to lack of time by the Program Coordinator as a result of covering duties associated with the Senior Zoologist position and hiring and training the new Senior Zoologist.</li> </ul>
<p>10. Continue to maintain and improve the functionality and ease of use of Natural Heritage Program web pages</p>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- See task 15 below.</li> </ul>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- See task 15 below.</li> </ul>
<p>11. Finish the conversion of the MTNHP web site to conform to the Montana web standard including mobile device compatibility</p>	<p>In Progress</p> <ul style="list-style-type: none"> <li>- Work continues on updates to mobile compatibility and we are using this opportunity to clean up a variety of underlying coding. The Montana Field Guide now performs well on mobile devices.</li> </ul>	<p>On hold</p> <ul style="list-style-type: none"> <li>- This task is on hold while staff time is focused on completion of a new Environmental Assessment tool in Map Viewer (see task 13 below).</li> </ul>
<p>12. Collaborate with the Digital Library Division User Services Team in the design and implementation of a</p>	<p>In Progress</p> <ul style="list-style-type: none"> <li>- MTNHP developed a simple Request Tracking tool using a SQL database as the backend and Microsoft Access tables</li> </ul>	<p>In Progress</p>

<p>Division wide process for tracking, managing, fulfilling and reporting mediated requests and user support.</p> <ol style="list-style-type: none"> <li>Participate in a Digital Library Division planning team for the implementation of a division wide request management system</li> <li>Participate in cross-training of the User Services Team in MTNHP services and resources.</li> </ol>	<p>as the front end for entry of requests. Request tracking for requests other than standard environmental assessment Species of Concern reports, which will continue to be tracked in the old NRIS Request Router, were initiated on January 4, 2016. This simple request tracking tool can be imported by MSL-DLD when ready.</p> <ul style="list-style-type: none"> <li>We have participated in MSL-DLD planning team meetings and look forward to additional opportunities to train MSL-DLD staff on MTNHP information resources.</li> </ul>	<ul style="list-style-type: none"> <li>MTNHP continues to track standard environmental review requests via the NRIS Request Router and other requests made of individual staff via our new simple Request Tracking tool.</li> <li>MTNHP continues to participate in MSL-DLD planning team meetings and we look forward to additional opportunities to train MSL-DLD staff on MTNHP information resources.</li> </ul>
<p>13. Develop "Harold" type self-serve SOC search and review functionality for partners with certain privileges and for in-house data requests</p>	<p>In Progress</p> <ul style="list-style-type: none"> <li>Programming on a new Environmental Assessment Summary tool has been initiated. This tool will allow users to digitize boundaries for a polygon of interest and the resulting polygon will then be intersected with a grid of hexagons that contain pre-generated summaries of documented species, potential species, land cover, wetland and riparian mapping, land management, biological reports and custom field guides. The application will then do on-the-fly summaries of attributes across the selected hexagons and deliver the overall summaries to the user.</li> </ul>	<p>In Progress</p> <ul style="list-style-type: none"> <li>Programming on a new Environmental Assessment Summary tool is approximately three quarters complete and we expect to release the first version of the tool to agency-level users in MapViewer in September. The tool currently provides summaries of documented species, structured surveys, land cover, wetland and riparian mapping, land management, and biological reports for a user defined project area. Programming continues on providing summaries of species potentially present in the project area based on evidence of within range polygon, predicted distribution model output, and presence of appropriate habitats.</li> </ul>
<p>14. Continue to develop, maintain , improve, and collaborate on easy-to-use methods for data contributors to submit animal, plant, and habitat information, including observations, submitted directly to MTNHP, observations submitted to partners (e.g. iNaturalist and Ebird), plot data, and photographs</p>	<p>No progress during this reporting period.</p>	<p>In Progress</p> <ul style="list-style-type: none"> <li>A new plant observation reporting spreadsheet was developed and has been posted on the Observation Forms and Tools web page and passed on to members of the Montana Native Plant Society to encourage them to submit plant observations and photographs.</li> </ul>
<p>15. Continue to maintain and improve the functionality and ease of use of the MTNHP core web apps including Montana Field Guide, MapViewer, Species SnapShot, and Species of Concern web reports</p>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>The Montana Field Guide, Species of Concern Report, Species Snapshot, and MapViewer were updated to show status ranks under the new 2015 State Wildlife Action Plan rather than its predecessor that was released in 2005.</li> <li>Mile markers on highways and railroads were added to the MapViewer application in response to a request from MDT.</li> <li>The Discover It search was added to the list of web search engines for articles on individual species or ecological systems.</li> <li>Worldcat and PDF links in the field guide species accounts were discontinued after it was discovered that many of the</li> </ul>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>The Species Snapshot web application was updated to include an Excel output for those individuals just interested in lists of species instead of custom field guides.</li> <li>The Species Snapshot was also updated to include spatial filters for County, Town, Township, USGS 1:24,000 scale quadrangle maps, areas east and west of the Continental Divide, mountain ranges, soil and watershed Conservation Districts, National Parks, Major Land Resource Areas, Forest Service Forest and District boundaries, BLM Field Office boundaries, Landscape Conservation Cooperative boundaries, FWP Region, hunting districts, Wildlife Management Areas, Fishing Access Sites, state parks, State Wildlife Action Plan</li> </ul>

	<p>PDFs required purchase and WorldCat identifier links were not stable.</p> <ul style="list-style-type: none"> <li>- A new tool to deliver custom field guides generated from users spatial and status filter selections has been released on the Species Snapshot web page. This has proven to be so popular with users that additional spatial filters are being added for Major Land Resource Areas, Forest Service Districts, Fishing Access Sites, Wildlife Management Areas, National Parks, National Wildlife Refuges, Bird Conservation Regions, Watersheds, Important Bird Areas, Important Plant Areas, and Conservation Districts. Furthermore, we are working on implementing these same filters in the Advanced Search option of the Montana Field Guide.</li> </ul>	<p>focal areas, state House and Senate Districts, watersheds, Bird Conservation Regions, Important Bird Areas, latilong, quarter-latilong, and quarter-quarter latilong blocks, Important Plant Areas, Bailey's Ecoregions, Omernik's Ecoregions, and tribal boundaries. Furthermore, we are working on implementing these same filters in the Advanced Search option of the Montana Field Guide.</p> <ul style="list-style-type: none"> <li>- The Montana Field Guide was updated to make the pages compatible with viewing on mobile devices.</li> <li>- The Montana Field Guide was updated to provide options for custom field guide pdfs or a panel of images of all the species belonging to various taxonomic groupings (e.g., Class, Order, Family) in order to facilitate comparisons between species and identification of species people are seeing.</li> <li>- See progress on new Environmental Summary Tool in Map Viewer in #13 above.</li> </ul>
16. Continue to work with the MSL Digital Library Division staff to effectively cross reference and integrate new MTNHP information and data with the MSL catalogue, search methods, and reference services.	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- We provided 12 MTNHP reports to the State Publications Librarian that we completed in the past few years that need to be placed in the MSL catalogue.</li> </ul>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- We provided 4 recently completed MTNHP reports to the State Publications Librarian that need to be placed in the MSL catalogue.</li> <li>- Ten reports previously provided to the State Publications Librarian have been added to the internet archive.</li> </ul>
17. Maintain the Natural Heritage Program's reference system for literature on the plants, animals, and habitats of Montana	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- 301 literature references on Montana plant and animal species and biological communities were added to the MTNHP reference system. Many of these were made available to users via accounts in the Montana Field Guide.</li> <li>- Approximately 90% of the hard copy zoology files have been scanned into digital .pdf documents so that all files can be managed digitally moving forward and to allow for offsite backups to protect against catastrophic loss.</li> </ul>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- Added 2,063 literature references on Montana plant and animal species and biological communities to the MTNHP reference system and turned on 18,147 reference associations for 5,113 species in the Montana Field Guide. Many of these were made available to users via accounts in the Montana Field Guide.</li> <li>- Approximately 50% of the hard copy botany element files were scanned into digital .pdf documents so that all files can be managed digitally moving forward and to allow for offsite backups to protect against catastrophic loss.</li> </ul>

### Supplemental Core Information Services Program Services

	1 <sup>st</sup> & 2 <sup>nd</sup> Quarter FY 16 (July 1, 2015 – December 31, 2015)	3 <sup>rd</sup> & 4 <sup>th</sup> Quarter FY 16 (January 1, 2016 – June 30, 2016)
1. Create and maintain secure map services for MTNHP data that Partners can consume in their GIS or web applications, including species	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- A Species of Concern ARC-IMS map service continues to be delivered to MDT, BLM, and USFS. In collaboration with MSL-DLD staff we are investigating practicalities of upgrading this to an ARC-GIS feature service that would</li> </ul>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- A Species of Concern ARC-IMS map service continues to be delivered to MDT, BLM, and USFS. In collaboration with MSL-DLD staff we investigated using ARC-GIS feature services to deliver live species occurrence, point observation,</li> </ul>

<p>occurrences and animal/plant point observation data</p>	<p>allow those agency users to select and analyze data. Alternatively, we are considering regular exchanges of File Geodatabases with these agencies to allow them to do the same thing free of any constraints posed by firewalls etc. on map or feature services.</p> <ul style="list-style-type: none"> <li>- The MSDI Land Cover and Wetland map services continue run and can be consumed in local GIS environments by anyone.</li> </ul>	<p>and structured survey data. Unfortunately, these services fail on our full data sets due to large numbers of points or vertices. We have begun to explore use of Web Feature Services to accomplish live delivery of this information.</p> <ul style="list-style-type: none"> <li>- Updates were made to the MSDI Land Cover and Wetland Riparian mapping data and this updated information is available via map services that can be consumed in anyone's local GIS environment.</li> </ul>
<p>2. Provide support to train and inform agency Partners in effectively using technical resources, services, and applications, through webinars, PowerPoint presentations at professional meetings, or agency groups</p>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- MTNHP information resource trainings were provided to the Montana Education Association and Montana Federation of Teachers on October 15, Malmstrom Air Force Base environmental planning staff on November 3<sup>rd</sup>, NRCS on November 9<sup>th</sup>, and Department of Commerce on December 1<sup>st</sup>.</li> <li>- Future MTNHP information resource trainings were scheduled with MSL for librarians statewide, Land Trusts, the Invasive Species Advisory Council, NRCS, and attendees of the Montana Wetland Council Meeting.</li> </ul>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- MTNHP information resource trainings were provided to Montana Audubon staff on January 7<sup>th</sup>, the Montana Invasive Species Advisory Council on January 20<sup>th</sup>, librarians across Montana via webinar on January 26<sup>th</sup>, Montana Plant Conservation Conference attendees on February 10<sup>th</sup>, Montana Chapter of the Wildlife Society meetings attendees on February 26<sup>th</sup>, Noxious Weed Trust Fund Grant Committee on March 2<sup>nd</sup>, nongame staff at FWP on April 5<sup>th</sup>, Intermountain GIS conference attendees on April 6<sup>th</sup>, Montana Wetland Council meeting attendees on April 14<sup>th</sup>, NatureServe's Biodiversity without Boundaries conference on April 18<sup>th</sup>, Montana Land Trusts via webinar on April 26<sup>th</sup>, Montana Department of Agriculture personnel on May 6<sup>th</sup>, Natural Resources Conservation Service personnel on May 9<sup>th</sup>, USFS Region 1 Wildlife Biology personnel on May 11<sup>th</sup>, Beaverhead-Deerlodge Forest Service resource planning personnel on May 12<sup>th</sup>, Montana Watershed Coordination Council members via webinar on May 26<sup>th</sup>, and a delegation of natural resource managers from Russia on June 8<sup>th</sup>.</li> <li>- Four posters on MTNHP information resources were displayed at the Governors Summit on Invasive species on April 12<sup>th</sup> and 13<sup>th</sup>.</li> </ul>
<p>3. Gather information from users about user information needs, format/access preferences, and the effectiveness of our delivery systems and tools</p>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- Partner feedback is provided during various MTNHP information resource trainings and meetings attended by MTNHP staff.</li> <li>- We also received feedback from MTNHP partners at the annual MTNHP partners meeting on December 7<sup>th</sup>: see the meeting summary posted at: <a href="http://mtnhp.org/about/announce.asp#PartnersMtg2015">http://mtnhp.org/about/announce.asp#PartnersMtg2015</a></li> <li>- In preparation for a future training to land trusts, feedback from land trusts was provided in response to an MTNHP generated survey.</li> </ul>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- Received partner feedback during all MTNHP information resource trainings listed in #2 above as well as additional meetings attended by MTNHP staff.</li> </ul>
<p>4. Evaluate ArcGIS on-line capabilities and develop strategy</p>	<p>In Progress</p> <ul style="list-style-type: none"> <li>- We evaluated ArcGIS on-line during the course of working on Species of Concern polygons for the USFWS's</li> </ul>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- We have determined that the easiest way to provide partners direct access to the latest predicted distribution models is to</li> </ul>

	<p>Information for Planning and Conservation website in order to get feedback from a variety of data partners. We plan to use ArcGIS on-line in the future to share datasets in a dynamic and interactive manner as needed. We plan to re-evaluate ArcGIS on-line capabilities to deliver information to our partners more broadly at some point in the next biennium.</p> <ul style="list-style-type: none"> <li>- We also plan to investigate the potential of AppStudio for ArcGIS to allow partners to view predictive distribution models and other information via Apps on their smart phones, Survey123 for ArcGIS to allow partners to collect animal and plant observations via Apps on their smart phones, and Collector for ArcGIS to allow MTNHP staff and agency partners to gather animal and plant observations.</li> </ul>	<p>generalize 90-meter pixel output into hexagon vectors that are 1 square mile in area. This will allow us to show predictive distribution models with observation, survey, and range map information in the Single Species Overview task in Map Viewer. We should be able to show predictive distribution models for animal Species of Concern in Map Viewer in the next quarter.</p>
5. Examine the feasibility of developing techniques and tools for mobile data collection for staff and citizen scientist's	<p>No Progress</p> <ul style="list-style-type: none"> <li>- We plan to evaluate Collector for ArcGIS and iNaturalist for mobile data collection by agency partners and the general public, respectively, in 2016.</li> </ul>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- We received feedback from other Heritage Programs that they found the use of iNaturalist and Survey 123 for ArcGIS to be the most valuable methods for data collection from the public and their staff, respectively. We are exploring the potential use of these applications in Montana.</li> </ul>
6. Continue to participate in a work group with MSL Geographic Information to develop a new workflow for land information data creation, maintenance, and dissemination that includes the managed areas, conservation easements, public lands and private conservation lands data.	<p>In Progress</p> <ul style="list-style-type: none"> <li>- We continue to consult with the MSL-DLD GIS Programmer/Analyst lead on the land management data in order to make sure that all map features represented in the past are properly considered for current and future display.</li> </ul>	<p>In Progress</p> <ul style="list-style-type: none"> <li>- We continue to consult with the MSL-DLD GIS Programmer/Analyst lead on the land management data in order to make sure that all map features represented in the past are properly considered for current and future display.</li> </ul>
7. Continue to maintain and update a statewide Land Management GIS database in collaboration with MSL Geo Info program	<p>In Progress See Task 6 above.</p>	<p>In Progress See Task 6 above.</p>

### Project Supported Information Services Program Services

	1 <sup>st</sup> & 2 <sup>nd</sup> Quarter FY 16 (July 1, 2015 – December 31, 2015)	3 <sup>rd</sup> & 4 <sup>th</sup> Quarter FY 16 (January 1, 2016 – June 30, 2016)
1. Design, develop, and deploy a “Mid-level” functional access to MTNHP Species of Concern (SOC), habitat, and species list information in the Natural Heritage MapViewer to	<p>In Progress</p> <ul style="list-style-type: none"> <li>- See Task 13 under the Information Program Services Core Services above. It is our intent that this new Environmental Assessment Summary tool will be made available to project</li> </ul>	<p>In Progress</p> <ul style="list-style-type: none"> <li>- See Task 13 under the Information Program Services Core Services above. It is our intent that this new Environmental Assessment Summary tool will be made available to project partners and consultants after they receive training on its use.</li> </ul>

support planning and resource management activities of local government, private consultants, and conservation organizations	partners and consultants after they receive training on its use.	
2. Work with MSL to identify, catalog, and make accessible via the Internet Archive gray literature and other unpublished reports and documents related to the flora, fauna, and ecological systems of Montana	Ongoing - We provided 12 MTNHP reports to the State Publications Librarian that MTNHP staff completed in the past few years which need to be placed in the MSL catalogue and made accessible via the Internet Archive.	Ongoing - We provided 4 recently completed MTNHP reports to the State Publications Librarian that need to be placed in the MSL catalogue. - Ten reports previously provided to the State Publications Librarian have been added to the internet archive.
3. Work with Zoology staff to design and implement a website to display bat acoustic and associated data in a dynamic manner that allows patrons to analyze bat activity patterns over time across the state.	No progress - pending time availability of web programmer.	No progress - pending time availability of web programmer.

Core Botany Program Services		
	1 <sup>st</sup> & 2 <sup>nd</sup> Quarter FY 16 (July 1, 2015 – December 31, 2015)	3 <sup>rd</sup> & 4 <sup>th</sup> Quarter FY 16 (January 1, 2016 – June 30, 2016)
1. Maintain a comprehensive database and taxonomic list of vascular plants occurring in Montana.	Ongoing - Researching to determine the presence/absence of two plants reported for Montana that are categorized as Status Under Review. - Acquiring and reviewing data on new species for the State: <i>Castilleja kerryana</i> and <i>Anelsonia eurycarpa</i> . - Reviewing feedback that two species occurring in Montana were mis-identified, and may need to be removed from the Montana Vascular Plant Checklist & Field Guide.	Ongoing - Researching to determine the presence/absence of six plants reported for Montana. - Researching and reviewing the state rank for 42 species categorized as Status Under Review. - Cataloguing changes to the nomenclature, presence/absence, and/or origin of species listed in the 2013 Vascular Plant Checklist. Changes will be made in the next version of the checklist.
2. Collect, evaluate, and manage observation data for vascular plants, including integrating regional databases of herbarium specimens.	Ongoing - Verified identification of numerous plant observations submitted by people (from all affiliations) for entry into database. - Verified identification of numerous observations on about 20 vascular plants categorized as “Status Under Review” for entry into database.	Ongoing - Constantly receiving observation data from public and partnering organization. Conducted quality control measures, and have it ready for data entry. - Conducting some quality control measures on data from the Consortium of Pacific Northwest Herbaria; entering in observation data as time allows. - Requested observation information and photographs on Status Under Review plants from attendees at the Montana Plant Conservation Conference.
3. Work with Information Services staff to design and implement a revised and updated Botany database for observations and species occurrences	Ongoing - Worked with Database Manager and Program Coordinator to determine the changes needed in the botany database. New database is under construction.	Ongoing - Worked with Database Manager to re-construct the botany database. We streamlined the fields and created some auto-

		<p>entry capabilities to reduce the back-log in entering plant observation data.</p> <ul style="list-style-type: none"> <li>- Corrected problems associated with at least 50 vascular plant observations. Most observations are now in the Botany database or have been archived in the deleted database.</li> </ul>
<p>4. Create species' occurrences for vascular plant, bryophyte and lichen Species of Concern.</p>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- Corrected all data associated with a particular moss SOC after receiving verification on its true identification. Work was conducted in response to updating the Montana Moss Checklist.</li> <li>- Corrected the location of two lichen SOC's after receiving better information. Work was completed in response to a request by an MDT Biologist.</li> <li>- Created 14 SOs for vascular plant Species of Concern.</li> </ul>	<p>On-going</p> <ul style="list-style-type: none"> <li>- Created 3,169 Species Occurrences for vascular plant Species of Concern; 2054 of these were for Whitebark Pine (<i>Pinus albicaulis</i>)</li> </ul>
<p>5. Review the status of vascular plants, assign state ranks and, where appropriate, assign global ranks, and document these status ranks</p>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- Under a Noxious Weed Trust Fund grant from the Department of Agriculture, we are researching and obtaining information (taxonomy, distribution, ecology, population, threats) on 45 vascular plants categorized as Status Under Review. State Ranks will be assigned in 2016.</li> <li>- Compared State rank results and methodology using the MTNHP Rank Calculator and NatureServe Rank Calculator and did some preliminary ranking.</li> <li>- Supervised former MTNHP Botanist who conducted a review of and completed the state ranking process for <i>Anelsonia eurycarpa</i> – S2 State Rank.</li> </ul>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- Under a Noxious Weed Trust Fund grant from the Department of Agriculture, the process to review the status or Stake Rank of 45 vascular plants categorized as Status Under Review has begun and will be completed by September 2016.</li> </ul>
<p>6. Respond to requests for information on the identification, biology, ecology, conservation status, management, and appropriate survey methods for vascular plants, bryophytes and lichens.</p>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- Responded to requests for information on vascular plants: 2 for TE plants, 1 SOC, and 5 for common species.</li> <li>- Responded to 1 request on a particular moss plant.</li> <li>- Responded to 1 request on a particular lichen SOC.</li> <li>- Responded to 1 request on a particular fungus.</li> </ul>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- Responded to requests for information on vascular plants: 2 TE plants, 3 SOC, and 10 common species.</li> <li>- Corresponded with various authors of the Flora of North America to obtain taxonomic and observation data on at least 8 species of moss.</li> <li>- Assisted Missoula City Parks and UM Researcher to distribute a survey on the exotic <i>Rhamnus carthartica</i> in order to better map its distribution in Montana.</li> </ul>
<p>7. Work with other Heritage staff to regularly exchange information with NatureServe.</p>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- Worked with NatureServe Botanists and a Data Assistant to inform them and get feedback on our process for reviewing the Montana moss and lichen checklists.</li> </ul>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- Updated the origin classification of about 10 vascular plants in NatureServes' Biotics database.</li> <li>- Updated the presence classification of 1 lichen and 1 moss in Biotics.</li> <li>- Sought information from the NatureServe database as Montana updates its lichen and moss checklists.</li> </ul>



<p>8. Work with other Heritage staff to maintain and improve content and delivery of botanical information on MTNHP websites, including Field Guide, SOC Report and MapViewer.</p>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- Botany Assistant and Botanist worked with the Web Programmer and Database Manager to fix numerous issues with Vitalis (literature database) and Thumbs-Plus (photo database).</li> </ul>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- Temporary assistant attributed photos so that 226 species, mostly grasses, that previously had no photos showing on the Montana Field Guide, now have photos.</li> </ul>
<p>9. Present information on MTNHP botanical services and data products, and Montana's plant resources at professional and public meetings.</p>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- Presented the 2015 botany program tasks / accomplishments and some 2016 objectives at the 2015 MTNHP Partner's Meeting.</li> </ul>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- Presented to about 50 natural resource experts at the Montana Plant Conservation Conference. Informed audience of updates on the website, sought feedback on how to provide observation data to MTNHP, and provided information on the products, services, and organizational structure of MTNHP.</li> </ul>
<p>10. Create and maintain information on vascular plants related to their taxonomy, biology, ecology, status, identification and management.</p>	<p>Ongoing</p> <p>See #12 under Core Botany Program Services.</p>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- Obtained at least 15 scientific papers and 5 books through interlibrary loan to gain knowledge, and trace the origin of, particular plants in Montana, etc.</li> <li>- Identified 3 MTNHP botany reports and various scientific papers that are not in Vitalis; Found hardcopies, scanned reports, and entered into Vitalis.</li> <li>- Botany Assistant created or expanded profiles on the Field Guide for about 18 "Status Under Review" vascular plants.</li> </ul>
<p>11. Compile photographic images of vascular plants, bryophytes and lichens.</p>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- Trained Botany Assistant in organizing, annotating, captioning, and posting photos on the Field Guide and using Thumb's Plus Photo Database. Compiled and captioned multiple photos for each of 58 moss species and 10 "Status Under Review" vascular plants.</li> <li>- Receiving and verifying vascular plant photos from numerous sources and adding them to Thumb's-Plus photo database for future posting.</li> </ul>	<p>Ongoing with most work completed using supplemental core funding from partners:</p> <ul style="list-style-type: none"> <li>- Temporary Assistant and Botany Data Assistant added 1,664 new photos to the Thumbs Plus photo database and attributed 1,705 photos for display on the Montana Field Guide.</li> <li>- Botany Assistant posted and annotated photos on the Field Guide for at least 25 moss species, 1 liverwort, 2 lichens, and 19 "Status Under Review" vascular plants.</li> <li>- Temporary Assistant posted photographs for approximately 180 vascular plants (majority being grasses) on the Field Guide which previously had no photos.</li> <li>- Worked to reduce the backlog of botany photographs, while receiving new photographs, examining new photos for accuracy and quality, and organizing them for future posting.</li> </ul>
<p>12. Compile literature on vascular plants, bryophytes and lichens.</p>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- Through Interlibrary Loan actively acquiring numerous articles and books on vascular plant, moss, and lichen taxonomy, ecology, and management.</li> <li>- Through the "botany network" received and read many peer-reviewed articles on particular vascular plants from agency and consulting botanists</li> </ul>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- Added 213 plant literature references to the MTNHP reference system and turned on approximately 5,217 reference associations for more than 3,555 plant species accounts in the Montana Field Guide.</li> <li>- Obtained at least 20 articles on lichens, biological soil crusts, and mosses through interlibrary loan for use in</li> </ul>

	- Acquired the Grass and Sedge Family treatments by Flora of North America to be used in developing 2017 classes and specimen verification.	developing proposals and for developing knowledge-base on these species. - Acquired the Mosses of California publication.
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1. Create associations between vascular plant Species of Concern and the Ecological Systems/habitats in which they occur.	On hold pending funding and staff time.	On hold pending funding and staff time.
2. Create associations between vascular plant Species of Concern and the National Wetland and Riparian wetland and riparian map classes in which they occur.	On hold pending funding and staff time.	On hold pending funding and staff time.
3. Compile and maintain a database of bryophyte and lichen taxa occurring in Montana.	Ongoing <ul style="list-style-type: none"> <li>- Working with Dr. Joe Elliott to revise the 1993 Montana Moss Checklist and to find moss specimen data for future acquisition.</li> <li>- Met with Dr. Bruce McCune and MTNHP volunteer to develop a process and timeline to update the Montana Lichen List based on McCune's 2014 Montana Lichens: An Annotated List.</li> </ul>	Ongoing <ul style="list-style-type: none"> <li>- Joe Elliott and Andrea Pipp finalized the revision to the 1993 Montana Moss Checklist; although small changes will continue until it can get posted on the MTNHP website.</li> <li>- MTNHP volunteer revised lichen checklist based on McCune's 2014 Montana Lichens: An Annotated List. Volunteer updated common names and resolved some issues with nomenclature.</li> </ul> <p>On hold pending staff time:</p> <ul style="list-style-type: none"> <li>- Staff time is needed to change the nomenclature in the lichen database, species tables, and Field Guide, and update Biotics.</li> <li>- Staff time is needed to change the nomenclature in the moss database, species tables, and Field Guide, and update Biotics.</li> </ul>
4. Review the status of bryophytes and lichens, assign state ranks and, where appropriate, assign global ranks, and document these status ranks	On hold pending funding and staff time. <ul style="list-style-type: none"> <li>- One exception was to get an SOC moss verified by Dr. Dale Vitt. The identification led to the removal of this species from the SOC list and revised the listing in the State Checklist.</li> </ul>	On hold pending funding and staff time. <ul style="list-style-type: none"> <li>- Status reviews will not occur until the revised moss and lichen checklists are completed, posted on the website, and reflected in the databases.</li> </ul>
5. Collect, evaluate, and manage observation data for bryophytes and lichens.	Ongoing <ul style="list-style-type: none"> <li>- Revised the locations of two lichen SOC species.</li> <li>- Added a few moss observations to the database.</li> <li>- Added a few lichen observations to the database.</li> </ul>	Ongoing <ul style="list-style-type: none"> <li>- Added at least 25 moss species observations to the database.</li> <li>- Obtained over 2,500 observations of mosses in Montana from Dr. Bruce McCune.</li> <li>- Obtained at least 600 observations of mosses and liverworts in Montana from the Consortium of Pacific Northwest Herbaria.</li> </ul>

		<ul style="list-style-type: none"> <li>- Botany Assistant has completed profiles for about 30 moss species in the Field Guide.</li> </ul> <p>On hold pending staff time, completion of the new Botany Database, and revision to the Lichen &amp; Moss Checklists:</p> <ul style="list-style-type: none"> <li>- Data entry of the approximate 2,500 moss observations obtained from Dr. McCune and liverwort and moss data from the Consortium of Pacific Northwest Herbaria.</li> <li>- Identified sources of lichen data at herbaria and the Lichen and Moss Consortium databases.</li> </ul>
6. Create and maintain information on bryophytes and lichens related to their taxonomy, biology, ecology, status, identification, and management.	See #12 under Core Botany Program Service	See #12 under Core Botany Program Service
7. Maintain a subject guide of authoritative web resources relevant to vascular plants, bryophytes, and lichens.	See #12 under Core Botany Program Service	See #12 under Core Botany Program Service
8. Develop and maintain a geodatabase of unique habitats such as fens that are of special importance for Montana's botanical resources.	Ongoing <ul style="list-style-type: none"> <li>- Database is populated, but no new data entries have occurred.</li> </ul>	Ongoing <ul style="list-style-type: none"> <li>- Database is populated, but no new data entries have occurred.</li> </ul>

Project Supported Botany Program Services		
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1. Conduct training sessions on the identification and ecology of Montana's vascular plants, bryophytes, and lichens.	Not Active due to lack of funding.	Completed <ul style="list-style-type: none"> <li>- Completed 3 wetland plant identification trainings for DEQ to 43 participants affiliated with government, non-profits, academics, and private sectors. Taught 1-day classes in Sheridan, Lewistown, and Ovando.</li> </ul>
2. Monitor populations of ESA-listed and globally rare vascular plants.	Ongoing Spalding's Catchfly ( <i>Silene spaldingii</i> ) for USFWS <ul style="list-style-type: none"> <li>- Monitoring: Collected Year-1 data from 10 transects on the Confederated Salish Kootenai Tribe's (CKST) land. The pilot study served to test the design for collecting demographic data. Demographic studies track individual plants through time and collect data on presence/absence (dormancy rate), plant height, reproductive characteristics, herbivory, and habitat cover (vascular, rock, bare soil, non-vascular), and disturbance (animal, weeds, physical).</li> <li>- Surveys: Visited 11 known SOs (sub-populations) on CSKT land to get updated information.</li> </ul>	Ongoing <ul style="list-style-type: none"> <li>- USFWS did not provide funding to collect Year 2 monitoring data for Spalding's Catchfly. Currently working with the CSKT and USFWS to pursue funding possibilities through Small Grants for Plants and Tribal Wildlife Grants.</li> <li>- Assisted the National Park Service in their 7<sup>th</sup> year of monitoring Lemhi Penstemon at the Big Hole Battlefield, Wisdom.</li> </ul>

	<p>Water Howellia (<i>Howellia aquatilis</i>) for USFWS</p> <ul style="list-style-type: none"> <li>- Monitoring: Surveyed 3 SOs that had burned and 3 unburned SOs to determine plant's status. Collected data using the USFS Monitoring protocol.</li> </ul> <p>Ute Ladies'-tresses for MDT</p> <ul style="list-style-type: none"> <li>- Verified species and surveyed project area for an MDT highway re-alignment project with MDT District Biologist and the consultant. Also re-visited two SOs to determine current status.</li> </ul>	
<p>3. Conduct field surveys for vascular plants, bryophytes and lichens, focusing on Species of Concern and under-surveyed geographic areas.</p>	<p>Ongoing</p> <p>BLM Sensitive Species Surveys</p> <ul style="list-style-type: none"> <li>- Re-visited several SOs of known BLM Sensitive plants to collect updated information.</li> <li>- Trained BLM Botanist and Range Technician how to find and identify Idaho Sedge (<i>Carex idahoensis</i>) in the field</li> <li>- Shoshonea (<i>Shoshonea pulvinata</i>). Collected Year-7 data on a study spanning 25-years. Collected demographic data on 3 permanent transects installed in 1991.</li> </ul> <p>Italian Peaks Survey for USFS</p> <ul style="list-style-type: none"> <li>- Assisted expert Botanist and USFS in surveying a portion of the Italian Peaks to map 8 vascular plant SOCs and 1 potential vascular plant SOC. One of these species was the first known occurrence for Montana.</li> </ul>	<p>On-going</p> <ul style="list-style-type: none"> <li>- Developing protocols to assist the Lolo National Forest in a genetic study of <i>Grindelia howellia</i> (Howell's gumweed), an SOC/Forest Sensitive plant.</li> </ul>
<p>4. Develop reports and peer-reviewed publications on the distribution, taxonomy, biology, ecology, status, identification and management of Montana's vascular plants, bryophytes and lichens.</p>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- Completed Spalding's Catchfly report which summarized monitoring and survey data for CSKT and USFWS.</li> <li>- Working on Water Howellia report to Swan Eco Center to summarize and analyze monitoring data-sets collected by 2 USFS, 1 TNC, and 1 MTNHP studies. Also analyzing timber prescription, landowner, and climate data-sets relative to Water Howellia populations.</li> <li>- Working on Shoshonea report to BLM to statistically summarize and analyze all data collected from 1991-2015.</li> <li>- Reviewed draft survey report for the Italian Peaks rare plant survey.</li> </ul>	<p>Completed</p> <ul style="list-style-type: none"> <li>- Completed data analysis and graphical/tabular summaries on 220 Species Occurrences (SO) of Water Howellia from 1978-2015. Analysis and summaries were provided to the Flathead National Forest and Swan Ecosystem Center. The analysis summarized USFS monitoring studies; relationship between presence/absence of plant, air temperature, and precipitation; presence/absence of plant versus timber prescriptions, grazing, roads, and fire; summary of each pond (SO) and their 300-foot buffer relative to land ownership, tree species/size/density, lifeform, and disturbance regime (timber, fire, road, and grazing); and much more.</li> <li>- Finalized the 1991-2015 demographic monitoring study on <i>Shoshonea pulvinata</i> (Shoshonea). The report to the BLM summarized population data on plants tracked during 7 years over a 25-year period. The report included data on impacts from wild horses and potential oil &amp; gas projects. Also summarized 2015 data on SOC populations visited while conducting the Shoshonea monitoring.</li> </ul>

5. Create predicted distribution maps for vascular plant, bryophyte and lichen Species of Concern.	Ongoing <ul style="list-style-type: none"> <li>- Reviewed draft maps and variables used to predict distribution for federally-threatened plants (Spalding's catchfly, Water Howellia, and Ute ladies'-tresses) for the USFWS IPAC effort.</li> </ul>	On hold pending checklist revisions, funding, and staff time <ul style="list-style-type: none"> <li>- The moss and lichen checklists must get updated in the database and data brought in prior to creating predicted distribution maps for mosses and lichens.</li> <li>- Approximately \$25,000 of funding is needed to complete predicted distribution maps for SOC vascular plants.</li> </ul>
6. Compile and maintain data on other taxonomic groups: Fungi, Algae, Diatoms.	Ongoing <ul style="list-style-type: none"> <li>- Obtained MTDEQ database on diatoms (150,000 observations identified by diatom experts).</li> <li>- Obtained database on <i>Didymosphenia</i> diatom that has been developed by MFWP and university researchers.</li> </ul>	On hold pending staff time and funding <ul style="list-style-type: none"> <li>- A potential Fungi expert for Montana has been identified, but staff time is needed to make the contact.</li> <li>- Data on diatoms is on hold while the Botany database is under construction.</li> </ul>

<b>Core Ecology Program Services</b>		
	<b>1<sup>st</sup> &amp; 2<sup>nd</sup> Quarter FY 16</b> (July 1, 2015 – December 31, 2015)	<b>3<sup>rd</sup> &amp; 4<sup>th</sup> Quarter FY 16</b> (January 1, 2016 – June 30, 2016)
1. Respond to user requests for information on the distribution, composition, successional dynamics, conservation status, management, and appropriate survey methods for terrestrial and wetland communities	Ongoing <ul style="list-style-type: none"> <li>- Respond to ~ 10 requests per month for vegetation community information, esp. wetlands, sagebrush, whitebark pine, and Russian olive</li> <li>- Respond to ~ 1 request per month about wetland survey methods</li> </ul>	Ongoing <ul style="list-style-type: none"> <li>- Responded to ~ 15 requests per month for vegetation community information, esp. wetlands, sagebrush, whitebark pine, and Russian Olive</li> <li>- Responded to ~ 1 request per month about wetland survey methods</li> </ul>
2. Respond to user requests for assistance using or interpreting wetland and land cover map products	Ongoing <ul style="list-style-type: none"> <li>- Respond to ~ 2 requests per month for updated Land Cover mapping</li> <li>- Respond to ~ 6 requests per month for clipped or provisional wetland mapping</li> <li>- Respond to ~ 4 requests per month for help interpreting wetland mapping</li> </ul>	Ongoing <ul style="list-style-type: none"> <li>- Responded to ~ 4 requests per month for updated Land Cover mapping</li> <li>- Responded to ~ 6 requests per month for clipped or provisional wetland mapping</li> <li>- Responded to ~ 4 requests per month for help interpreting wetland mapping</li> </ul>
3. Compile photographic images of wetland and terrestrial habitats representative of those found in Montana and make them available on MTNHP websites	Ongoing <ul style="list-style-type: none"> <li>- Photographs from 2015 whitebark pine surveys entered into Thumbs Plus</li> <li>- Photographs from 2015 forested wetland ecosystems compiled and ready for entry into Thumbs plus</li> </ul>	Ongoing <ul style="list-style-type: none"> <li>- Loaded photographs from 2013 and 2014 grassland surveys into Thumbs Plus</li> <li>- Made photos from grassland surveys available through Map Viewer</li> </ul>
4. Create and maintain accounts for terrestrial and wetland land cover classes and/or ecological systems in the Montana Field Guide that describe the composition, distribution, status, successional dynamics, and management/restoration needs of each.	Ongoing <ul style="list-style-type: none"> <li>- All forested ecosystem descriptions have been updated with new information on disturbance and dynamics; new references to support info all entered into Vitalis</li> <li>- In process of updating National Vegetation Classification (NVC) crosswalks in Ecological Systems Database so that updated ecosystem descriptions can be added to field guide.</li> </ul>	Ongoing <ul style="list-style-type: none"> <li>- Continue to update National Vegetation Classification (NVC) crosswalks in Ecological Systems Database so that updated ecosystem descriptions can be added to field guide.</li> </ul>

	<ul style="list-style-type: none"> <li>- Have developed new Ecological System description for Intermontane Prairie Potholes, a previously undescribed system in Montana</li> </ul>	
5. Work with Information Services staff to maintain and improve content of ecological information on Heritage websites, including wetland mapping and assessments, land cover mapping, ecological community accounts, and georeferenced photos.	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- Worked with Info Services staff to identify changes required to databases before assessment data can be integrated into MapViewer</li> <li>- Worked with Information Services staff to update wetland mapping status map</li> </ul>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- Continue to work on changes to existing databases that will allow assessment data to be integrated into Map Viewer. Amount of work will require outside funding to complete.</li> </ul>
6. Collaborate with other Heritage Program and NatureServe ecologists from the Rocky Mountain Region to ensure compatibility of ecological mapping and classification systems	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- Continue to work with NatureServe to update the NVC.</li> <li>- Reviewed all NVC groups for Montana for next iteration of NVC</li> </ul>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- Reviewed final version of NVC to identify new groups for Montana</li> <li>- Working with Natureserve on continental-scale mapping and assessment of grassland systems</li> </ul>
7. Update information on ecological communities and systems to reflect the 2015 National Vegetation Classification Standard mandated for use by all agencies receiving federal funds for vegetation classification activities.	<p>In Progress</p> <ul style="list-style-type: none"> <li>- See number 4, second bullet point, and number 6 above.</li> </ul>	<p>In Progress</p> <ul style="list-style-type: none"> <li>- See number 4, second bullet point, and number 6 above.</li> </ul>
8. Maintain a subject guide of authoritative web resources relevant to terrestrial and wetland communities	On hold pending staff time.	On hold pending staff time.

<b>Supplemental Core Ecology Program Services</b>		
	<b>1<sup>st</sup> &amp; 2<sup>nd</sup> Quarter FY 16</b> (July 1, 2015 – December 31, 2015)	<b>3<sup>rd</sup> &amp; 4<sup>th</sup> Quarter FY 16</b> (January 1, 2016 – June 30, 2016)
1. Assess the status of terrestrial and wetland communities and ecosystems, assign state ranks, and document the justification behind status ranks	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- Have developed the databases necessary to assign status rankings to individual wetlands</li> <li>- Continue to work with National Assessment and Monitoring workgroups to refine wetland assessment methods and create cross-state compatibility</li> </ul>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- Work with EPA and other states on National Wetland Condition Assessment Protocols</li> </ul>
2. Identify ecological sites of particular conservation concern that should be included in MTNHP information provided for environmental assessments	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- Creating new value-added wetland mapping geodatabase intended to support identification of “Wetlands of Special Significance”</li> </ul>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- Completed value-added wetland mapping geodatabase and developed methodology to assign “wetlands of Special Significance status” to wetland polygons</li> </ul>

3. Compile literature on terrestrial, and wetland communities with emphasis on those of conservation concern	Ongoing <ul style="list-style-type: none"> <li>- References on forested ecosystem disturbance and dynamics were added to Vitalis</li> <li>- Current focus is on forested wetlands</li> </ul>	Ongoing <ul style="list-style-type: none"> <li>- A handful of wetland assessment references were added to the MTNHP reference system.</li> </ul>
4. Maintain crosswalks between different vegetation classification schemes to facilitate use of MTNHP products and products created by others	Ongoing <ul style="list-style-type: none"> <li>- Have completed NVC-Ecological system crosswalk for wetlands</li> </ul>	Ongoing <ul style="list-style-type: none"> <li>- Have completed NVC-Ecological system crosswalk for forested ecosystems</li> </ul>
5. Work with Information Services to make wetland assessments available on the MTNHP website	On-Hold <ul style="list-style-type: none"> <li>- Pending database revision to address incompatibly between different project databases</li> </ul>	On hold pending outside funding
6. Compile vegetation data collected by others to support current and future vegetation classification and mapping efforts	Ongoing <ul style="list-style-type: none"> <li>- Integrated forest service survey data into whitebark pine mapping</li> <li>- Worked with partners to prepare Landsat 8 imagery from 2014 and 2015 for further analysis</li> </ul>	Ongoing <ul style="list-style-type: none"> <li>- Worked with USFS to develop methodology for classifying relative abundance of whitebark pine, and completed work on Gallatin-Custer, Helena, and Lolo National forests</li> </ul>
7. Present results of surveys or status assessments of terrestrial and wetland communities at professional and public meetings	Ongoing <ul style="list-style-type: none"> <li>- Presented results of surveys and status assessments of Headwater wetlands at Montana Wetland Council October 29, 2015</li> </ul>	Ongoing <ul style="list-style-type: none"> <li>- Presented new value-added wetland mapping attributes to over 80 state and federal partners in EPA regions 10 and 8;</li> <li>- Presented new value-added wetland mapping attributes at Intermountain GIS Conference</li> </ul>

<b>Project Supported Ecology Program Services</b>		
	<b>1<sup>st</sup> &amp; 2<sup>nd</sup> Quarter FY 16</b> (July 1, 2015 – December 31, 2015)	<b>3<sup>rd</sup> &amp; 4<sup>th</sup> Quarter FY 16</b> (January 1, 2016 – June 30, 2016)
1. Conduct field surveys for underrepresented or uncommon ecological communities in under-surveyed geographic areas	Ongoing <ul style="list-style-type: none"> <li>- Continuing to map the distribution and extent of whitebark pine with 2015 surveys on the Bitterroot and Lolo NFs for the USFS</li> <li>- Surveyed and assessed the condition of 9 uncommon forested wetlands in northwestern Montana</li> </ul>	Ongoing <ul style="list-style-type: none"> <li>- Work continues as part of 2016 National Wetlands Condition Assessment for DEQ/EPA, which began in June.</li> </ul>
2. Develop reports and peer-reviewed publications on the composition, distribution, and status of Montana's wetland and terrestrial communities.	Ongoing <ul style="list-style-type: none"> <li>- Completed reports on Headwater wetlands in the Missouri Headwaters HUC and on results of assessments in the Blackfoot-Swan area</li> </ul>	Ongoing <ul style="list-style-type: none"> <li>- Completed chapter on use of LLWW attributes for forthcoming book on wetland landscape assessment</li> <li>- Completed report on Wetland Prioritization Geodatabase for MTDEQ</li> </ul>
3. Evaluate the status of wetland and terrestrial communities with field surveys	Ongoing <ul style="list-style-type: none"> <li>- Continued whitebark pine and forested wetland ecosystem surveys</li> </ul>	Ongoing <ul style="list-style-type: none"> <li>- Wetland surveys began in June for DEQ/EPA.</li> <li>- Whitebark pine surveys are on hold until snow melts at higher elevations.</li> </ul>

4. Collaborate with partner agencies to develop ecological site descriptions when funding allows	Not Active - No current funding for this activity	Not Active - No current funding for this activity
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Core Zoology Program Services		
	1 <sup>st</sup> & 2 <sup>nd</sup> Quarter FY 16 (July 1, 2015 – December 31, 2015)	3 <sup>rd</sup> & 4 <sup>th</sup> Quarter FY 16 (January 1, 2016 – June 30, 2016)
1. Respond to requests for information on the identification, biology, ecology, conservation status, management, and appropriate survey methods for vertebrate and invertebrate species.	Ongoing <ul style="list-style-type: none"> <li>- Responded to just over four hundred requests from federal, state, and tribal personnel as well as consultants and members of the public.</li> </ul>	Ongoing <ul style="list-style-type: none"> <li>- Responded to approximately 450 requests from federal, state, and tribal personnel as well as consultants and members of the public.</li> </ul>
2. Continue to gather, manage, and review animal point observation data in a statewide point observation database (POD) for all animal species.	Ongoing <ul style="list-style-type: none"> <li>- 20,359 observations were added to the animal point observation database for 474 animal species. 23,670 observation records for 414 species were reviewed for final acceptance into the point observation database with a focus on Montana Species of Concern.</li> <li>- 1,331 structured survey locations for 12 different formal animal survey protocols were added to the structured survey database.</li> <li>- An additional 277,000 observation records (16% of all records in the database) still need to be reviewed for final acceptance into the database.</li> </ul>	Ongoing <ul style="list-style-type: none"> <li>- 9,548 observations were added to the animal point observation database for 489 animal species. 4,283 observation records for 267 species were reviewed for final acceptance into the point observation database with a focus on Montana Species of Concern.</li> <li>- 4,929 structured survey locations for 12 different formal animal survey protocols were added to the structured survey database.</li> <li>- An additional 282,265 observation records (17% of all records in the database) still need to be reviewed for final acceptance into the database.</li> </ul>
3. Work with Information Services staff to maintain and improve content of zoological information on Heritage websites.	Ongoing <ul style="list-style-type: none"> <li>- Reviewed range maps shown on the Montana Field Guide and MapViewer web pages relative to observation data for 309 Montana SOC and PSOC and updated or created range maps where necessary for 63 species.</li> <li>- Worked with information services staff to revise the charts and data sections of the MapViewer web application.</li> <li>- Worked with information services staff to create additional spatial filters for display on the Species Snapshot web application so that custom Field Guides can be created for a variety of spatial boundaries across the state.</li> </ul>	Ongoing <ul style="list-style-type: none"> <li>- See Supplemental Core Zoology Program Services Task 3 below.</li> </ul>
4. Collect and manage observational data on animal SOC that has been gathered by others.	Ongoing <ul style="list-style-type: none"> <li>- 3,740 observations were added to the animal point observation databases for 109 Montana Animal Species of Concern and Potential Species of Concern.</li> </ul>	Ongoing <ul style="list-style-type: none"> <li>- 1,998 observations were added to the animal point observation databases for 81 vertebrate and 1 invertebrate</li> </ul>



		Montana Animal Species of Concern and Potential Species of Concern.
5. Maintain animal species occurrences for existing SOC species from high value observations of animal SOC that can be used in environmental assessments.	Ongoing <ul style="list-style-type: none"> <li>- Reviewed and/or updated 28,500+ observation records for animal Species of Concern in preparation for constructing species occurrences. All Species of Concern observation data that was pending a final review was reviewed.</li> <li>- Updated 9,500 species occurrences and created &gt;700 new species occurrences for 37 vertebrate and 31 invertebrate species.</li> </ul>	Ongoing <ul style="list-style-type: none"> <li>- Created 1,386 new species occurrences for 49 vertebrate and 9 invertebrate species. Reviewed all Species of Concern observation data that was pending a final review in the process of doing this.</li> </ul>
6. Maintain a complete taxonomic list of vertebrate animal species for Montana.	Ongoing <ul style="list-style-type: none"> <li>- Updated taxonomy and four-codes for birds to correspond with the changes made in the American Ornithologists' Union 56<sup>th</sup> supplement to the Check-list of North American Birds.</li> <li>- Updated taxonomy for mammals to correspond with the Revised Checklist of North American Mammals North of Mexico, 2014.</li> </ul>	Ongoing <ul style="list-style-type: none"> <li>- Added 239 species to the MTNHP Species database table, including 6 beetles, 11 bumble bees, 10 butterflies, 1 moth, 105 grasshoppers, katydids, or crickets, and 106 spiders.</li> <li>- Began compiling information on additional moth and earthworm species that are known to be present in Montana.</li> </ul>
7. Work with other Heritage staff to regularly exchange information with NatureServe.	Not Active <ul style="list-style-type: none"> <li>- Scheduled for fall of 2016.</li> </ul>	Not Active <ul style="list-style-type: none"> <li>- Scheduled for fall of 2016.</li> </ul>

<b>Supplemental Core Zoology Program Services</b>		
	<b>1<sup>st</sup> &amp; 2<sup>nd</sup> Quarter FY 16</b> (July 1, 2015 – December 31, 2015)	<b>3<sup>rd</sup> &amp; 4<sup>th</sup> Quarter FY 16</b> (January 1, 2016 – June 30, 2016)
1. Review the status of vertebrate and invertebrate animal taxa, assign state ranks, assist NatureServe with assigning global ranks when appropriate, and document these status ranks.	Ongoing <ul style="list-style-type: none"> <li>- Reviewed the inventory and monitoring status of winter-breeding owls and Harlequin Ducks in conjunction with the Montana Animal Species of Concern Committee and removed Eastern Screech-Owl, Short-eared Owl, Great Horned Owl, Long-eared Owl, Northern Saw-whet Owl, and Harlequin Duck from the list of Species of Greatest Inventory Needs.</li> </ul>	Not active due to lack of funding and/or staff time.
2. Create animal species occurrences for newly designated SOC species from high value observations of animal SOC that can be used in environmental assessments.	Not Active <ul style="list-style-type: none"> <li>- No species were newly designated as Species of Concern during the reporting period.</li> </ul>	Not Active <ul style="list-style-type: none"> <li>- No species were newly designated as Species of Concern during the reporting period.</li> </ul>
3. Maintain species accounts, including state and Western Hemisphere range maps and observational maps, in the	Ongoing <ul style="list-style-type: none"> <li>- See Core Zoology Program Services Task 3 above</li> <li>- Added literature to references section of the Montana Field Guide for Harlequin Duck, Evening Grosbeak, Sage</li> </ul>	<ul style="list-style-type: none"> <li>- Created range maps for 180 species including 1 terrestrial mollusk, 1 millipede, 19 bumble bee species, 51 beetle species, 9 butterfly species, and 101 grasshopper, katydid, and cricket species.</li> </ul>

Montana Field Guide for all animal SOC.	Thrasher, Long-billed Curlew, Brewer's Sparrow, and Sage Sparrow.	<ul style="list-style-type: none"> <li>- Updated 203 range map polygons for 28 vertebrate species and 49 terrestrial mollusk species for display on the Montana Field Guide and use in predictive distribution models.</li> <li>- Added 1,639 photos to the Montana Field Guide, including photos for 941 invertebrate species (moths, butterflies, grasshoppers, katydids, crickets, and bumble bees) that previously had no photos.</li> <li>- Improved the format of more than 750 references that were appearing on the Montana Field Guide.</li> <li>- Reviewed all non-SOC species in the Montana Field Guide to make sure that literature cited in the species accounts was appropriately in the reference sections of the species accounts.</li> <li>- Added species account information from the Hendricks (2012) Guide to the Land Snails and Slugs of Montana to 83 terrestrial mollusk species accounts on the Montana Field Guide.</li> </ul>
4. Create predicted distribution models for animal SOC.	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- Examined potential to use coding to run models for numerous species at once. We think we can do this sometime in 2016, but it is likely to take the equivalent of one month of one staff members time to get this up and running.</li> </ul>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- Established python and other coding to mostly automate creation of inductively and deductively based predicted distribution models and generate associated report output. This reduces staff time in creating and evaluating the models from a minimum of eight hours per species to approximately one hour per species, thus reducing costs of updating predictive distribution models by a factor of eight.</li> <li>- Will begin updating predictive distribution models for all Montana Animal Species of Concern in the next quarter.</li> </ul>
5. Work toward a complete taxonomic list of invertebrate animal species for Montana.	Not active due to lack of funding and/or staff time.	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- See Core Zoology Program Services Task 6 above.</li> </ul>
6. Create and maintain species accounts, including state and Western Hemisphere range maps and observational maps, in the Montana Field Guide for animal species that are not SOC.	<p>In Progress</p> <ul style="list-style-type: none"> <li>- See Core Zoology Program Services Task 3 above</li> </ul>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- See Supplemental Core Zoology Program Services Task 3 above. The conservation status of these species has not been evaluated, but the vast majority of them are unlikely to be classified as SOC.</li> </ul>
7. Maintain a subject guide of authoritative web resources relevant to vertebrates and invertebrates.	Not active due to lack of funding and/or staff time.	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- Added links to web resources for bumble bees and butterflies at the bottom of all insect pages on the Montana Field Guide to support federal initiatives on pollinators.</li> </ul>
8. Create predicted distribution models for animal species that are not SOC.	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- Examined potential to use coding to run models for numerous species at once. We think we can do this sometime in 2016, but it is likely to take the equivalent of</li> </ul>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- Established python and other coding to mostly automate creation of inductively and deductively based predicted distribution models and generate associated report output.</li> </ul>

	one month of one staff members time to get this up and running.	This reduces staff time in creating and evaluating the models from a minimum of eight hours per species to approximately one hour per species, thus reducing costs of updating predictive distribution models by a factor of eight. - We believe we can create predictive distribution models for all vertebrate, and many invertebrate, non-SOC in the next quarter.
9. Create associations between animal SOC and the Ecological Systems in which they are known to occur.	Not active due to lack of funding and/or staff time.	Not active due to lack of funding and/or staff time.
10. Create associations between animal species that are not Species of Concern and the Ecological Systems in which they are known to occur.	Not active due to lack of funding and/or staff time.	Not active due to lack of funding and/or staff time.
11. Create associations between animal SOC and the National Wetland and Riparian wetland and riparian map classes in which they occur.	Not active due to lack of funding and/or staff time.	Not active due to lack of funding and/or staff time.
12. Create associations between animals that are not SOC and the National Wetland and Riparian wetland and riparian map classes in which they occur.	Not active due to lack of funding and/or staff time.	Not active due to lack of funding and/or staff time.
13. Compile literature on vertebrate and invertebrate animal species with an emphasis on SOC and use it to update references and content in the Montana Field Guide.	Ongoing - See Supplemental Core Zoology Program Services Task 3 above - Compiled over 750 articles on Montana bat species which have not yet been added to the References section of the Montana Field Guide	Ongoing - Added 1,853 literature references on bats, birds, and a variety of invertebrate groups to the MTNHP reference system and turned on approximately 12,930 reference associations for more than 1,558 animal species accounts in the Montana Field Guide. - Combined pdf scans of hard copy literature in MTNHP element files with literature originally obtained in a digital format to create a single common digital filing system for zoology literature. - Began cross walk of literature in the recently published Marks et al. (2016) Birds of Montana book with references currently in the MTNHP reference system.
14. Compile photographic images of vertebrate and invertebrate animal species and locations where animal surveys have been conducted for Montana SOC.	Ongoing - Loaded bat acoustic survey, mist net survey, and roost survey photos from MTNHP, FWP, USFS, and BLM surveys conducted in 2015 into the Thumbs Plus photo database. - Loaded Harlequin Duck survey photos from 2015 into the Thumbs Plus photo database.	Ongoing - Loaded bat roost survey photos from MTNHP surveys conducted in winter of 2016 into the Thumbs Plus photo database. - Loaded Breeding Bird Survey (BBS) route photos contributed by BBS volunteers into the Thumbs Plus photo database

15. Compile photographic images of vertebrate and invertebrate animal species and locations where animal surveys have been conducted for Montana non-SOC.	Ongoing - Loaded bat acoustic survey, mist-net survey, and roost survey photos from MTNHP, FWP, USFS, and BLM surveys conducted in 2015 to the Thumbs Plus photo database.	Ongoing - Loaded bat roost survey photos from MTNHP surveys conducted in winter of 2016 into the Thumbs Plus photo database. - Loaded Breeding Bird Survey (BBS) route photos contributed by BBS volunteers into the Thumbs Plus photo database
16. Scan animal species element files into optical character recognized PDF files so that they can be more readily shared with patrons, digitally archived, and serve as the basis for moving forward with a digital element file system; prioritize animal SOC over non animal SOC and prioritize field observation forms and notes over published articles. NHP staff will consult with MSL staff before providing the public access to copyrighted material.	Ongoing - While optical character recognized scans proved to be impossible, approximately 90% of the hard copy zoology files have been scanned into digital .pdf documents so that all files can be managed digitally moving forward and to allow for offsite backups to protect against catastrophic loss.	Ongoing - Combined pdf scans of hard copy literature in MTNHP element files with literature originally obtained in a digital format to create a single common digital filing system for zoology literature. - Approximately 10% of zoology element files and 100% of zoology survey forms remain to be scanned.
17. Work with Information Services staff to build the element reference files through automated literature database searches for individual species; prioritize animal SOC over non animal SOC.	Not active due to lack of funding and/or staff time.	Not active due to lack of funding and/or staff time.

<b>Project Supported Zoology Program Services</b>		
	<b>1<sup>st</sup> &amp; 2<sup>nd</sup> Quarter FY 16</b> (July 1, 2015 – December 31, 2015)	<b>3<sup>rd</sup> &amp; 4<sup>th</sup> Quarter FY 16</b> (January 1, 2016 – June 30, 2016)
1. Conduct field surveys for vertebrate and invertebrate species with a focus on SOC and under-surveyed geographic areas and habitats.	Ongoing - Conducted acoustic and mist net surveys for bats in conjunction with USFS, BLM, and FWP across Montana and on USFS lands in the western Dakotas. - Conducted Harlequin Duck surveys across western Montana in conjunction with FWP and the USFS.	Ongoing - Conducted winter roost surveys for bats in conjunction with USFS, BLM, and FWP across Montana and on USFS lands in the western Dakotas. - Continued to decommission our regional network of ultrasonic bat acoustic detector stations in order to focus on analyzing and summarizing existing data. - Conducted call playback surveys for Northern Goshawks on the Ashland and Sioux Districts of the Custer-Gallatin National Forest. - Conducted surveys of Western Toad ( <i>Bufo boreas</i> ) breeding sites across the species' known range in western Montana in

		<p>conjunction with FWP to evaluate the species conservation status.</p> <ul style="list-style-type: none"> <li>- Conducted amphibian call surveys across Montana in conjunction with FWP, USFS, and BLM partners.</li> </ul>
<p>2. Develop reports, posters, books, web pages and peer-reviewed publications on the distribution, status, biology of, and human impacts on Montana's animal species.</p>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- Developed PowerPoint summaries of some of the bat acoustic and roost surveys for USFS, BLM, FWP, and Northwestern Energy</li> </ul>	<p>Ongoing</p> <ul style="list-style-type: none"> <li>- Developed PowerPoint summaries of the latest bat acoustic and roost surveys for USFS, BLM, FWP, and Northwestern Energy.</li> <li>- Created the following final bat acoustic monitoring reports: Maxell, B.A., S. Hilty, B. Burkholder, and S. Blum. 2016. Long-term acoustic assessment of bats at Maiden Rock on the lower Big Hole River in the Pioneer Mountains of southwestern Montana and management recommendations for bats. Report to Beaverhead-Deerlodge National Forest and Dillon Field Office of the Bureau of Land Management. Montana Natural Heritage Program, Helena, Montana. 57 pp. plus appendices. Maxell, B.A., B. Burkholder, S. Hilty and S. Blum. 2016. Long-term acoustic assessment of bats on Big Sheep Creek in the Tendoy Mountains of southwest Montana and management recommendations for bats. Prepared for Beaverhead-Deerlodge National Forest and Dillon Field Office of the Bureau of Land Management. Montana Natural Heritage Program. Helena, MT. 49 pp plus appendices.</li> </ul>
<p>3. Present results of surveys or status assessments of animals at professional and public meetings.</p>	<p>Ongoing - Gave the following presentations:</p> <ul style="list-style-type: none"> <li>- Approximately 25 teachers at the Montana Education Association and Montana Federation of Teachers annual meeting on Amphibians, Reptiles, and Bats: an overview, in Billings on October 15<sup>th</sup>.</li> <li>- A general update on the Zoology Program to MTNHP partners at the annual MTNHP partners meeting in Helena on December 7<sup>th</sup>.</li> <li>- BLM, USFWS, FWP, MDT, USFS and Northern Rocky Mountain Grotto representatives on the status of bat and White-Nose Syndrome surveillance efforts in Montana via webinar on December 15<sup>th</sup>.</li> </ul>	<p>Ongoing - Gave the following presentations:</p> <ul style="list-style-type: none"> <li>- Approximately 10 members of the wind energy industry and representatives from the Natural Heritage Network on Montana's bat and white-nose syndrome surveillance efforts at the 2016 Biodiversity without Boundaries conference in San Juan, Puerto Rico on April 20<sup>th</sup>.</li> <li>- Approximately 40 members of the Northern Rocky Mountain Grotto and representatives of the USFS and FWP on the status of bat and White-Nose Syndrome surveillance efforts in Montana at Lewis and Clark Caverns on April 9<sup>th</sup>.</li> <li>- Approximately 50 professional biologists at the Montana Chapter of the Wildlife Society Meetings on Montana's bat acoustic surveillance efforts in Missoula on February 29<sup>th</sup>.</li> <li>- To the Spion Kop wind energy facilities technical advisory committee on bat acoustic surveillance results at that facility so far at Montana Wild in Helena on January 21<sup>st</sup>.</li> </ul>

**APPENDIX 2: SCOPE OF WORK  
For FY16  
Wetlands and Land Cover MSDI Framework Services**

<b>Core Wetlands and Land Cover Services</b>		
	<b>1<sup>st</sup> &amp; 2<sup>nd</sup> Quarter FY 16</b> (July 1, 2015 – December 31, 2015)	<b>3<sup>rd</sup> &amp; 4<sup>th</sup> Quarter FY 16</b> (January 1, 2016 – June 30, 2016)
1. Provide coordination and stewardship of the Wetlands MSDI GIS database if funding is available	Ongoing <ul style="list-style-type: none"> <li>- Updated status maps and partners' maps for web page</li> <li>- Acquired additional "historic" NWI mapping for review</li> </ul>	Ongoing <ul style="list-style-type: none"> <li>- Worked with NWI and other partners to determine status of "historic and scaleable mapping"</li> <li>- Added detailed information and examples of different mapping categories to MTNHP wetland web page</li> <li>- Revised MSDI database to include current, "outdated" and "incomplete" mapping, which is just short of a statewide mapping layer</li> </ul>
2. Participate in a work group with NRIS to develop a new workflow for hydrologic data creation, maintenance, and dissemination that includes the wetlands/riparian database	Ongoing <ul style="list-style-type: none"> <li>- Attended meetings of the Hydrology workgroup</li> </ul>	Ongoing <ul style="list-style-type: none"> <li>- Attended meetings of the Hydrology workgroup</li> </ul>
3. Provide coordination and stewardship of the MSDI Land Cover GIS database if funding is available	Ongoing <ul style="list-style-type: none"> <li>- Added updates to structures and agriculture</li> <li>- "Burned in" Russian olive mapping completed in a different project</li> </ul>	Ongoing <ul style="list-style-type: none"> <li>- Little funding for this task, but were able to use temporary project funding to provide basic coordination and stewardship of the MSDI Land Cover GIS database</li> </ul>
4. Working with NRIS, provide data and assist with maintaining map services and metadata for Wetlands and Land Cover data sets as part of the MSDI map services, and GIS Portal downloads	Ongoing <ul style="list-style-type: none"> <li>- Worked with MSL to archive earlier wetland GDBs</li> <li>- Updated metadata and added current wetland mapping GDB to MSDI web services</li> </ul>	Ongoing <ul style="list-style-type: none"> <li>- Worked with MSL to archive earlier wetland GDBs</li> <li>- Updated metadata and added current wetland mapping and Land Cover GDB to MSDI web services</li> </ul>
5. If funding is available from MLIAC and other sources, maintain and update the 2013 statewide Land Cover data set based on the annual work plan included in the overall Land Information Plan submitted to MLIAC	Ongoing <ul style="list-style-type: none"> <li>- Provided a partially updated Land Cover data set, without full metadata, to partners on request</li> <li>- Reviewed and provided input to MSDI Land Plan</li> </ul>	Ongoing <ul style="list-style-type: none"> <li>- Used project funding and some core funding to produce and publish a 2016 Land Cover GIS database</li> <li>- Revised metadata for Land Cover to make changes easier to track</li> </ul>
6. Revise, add and delete map classification units as necessary to improve map usability, if funding is available	Ongoing <ul style="list-style-type: none"> <li>- Reviewed ecological systems classification to determine whether it can be cross walked to NVC</li> </ul>	No funding for this task

<b>Project Supported Wetlands and Land Cover Services</b>		
	<b>1<sup>st</sup> &amp; 2<sup>nd</sup> Quarter FY 16</b> (July 1, 2015 – December 31, 2015)	<b>3<sup>rd</sup> &amp; 4<sup>th</sup> Quarter FY 16</b> (January 1, 2016 – June 30, 2016)
1. With outside project funding, develop a statewide data layer of wetland and riparian mapping information from NAIP imagery. Interpret and map wetlands and riparian areas for approximately 100 USGS Quads	Ongoing <ul style="list-style-type: none"> <li>- Initiated discussions with tribal partners (Crow and Blackfeet) about additional wetland mapping</li> <li>- Continued to map wetlands with outside funding, completing ~ 50 quads</li> </ul>	Ongoing <ul style="list-style-type: none"> <li>- Submitted proposal to EPA on behalf of Blackfeet to map reservation (not funded)</li> <li>- Prepared proposal to map Crow reservation and submitted to EPA (Pending)</li> <li>- Prepared proposal to map additional 13 Forest Service quads (funded)</li> <li>- Prepared proposal to map additional 5 quads in MT (DEQ, funded)</li> </ul>
2. With outside project funding, conduct field surveys to improve land cover classification accuracy	Ongoing <ul style="list-style-type: none"> <li>- Used EPA funding to evaluate forested ecosystems in NW Montana</li> <li>- Used Forest Service funding to map whitebark pine in Bitterroot and Lolo NFs</li> </ul>	Ongoing <ul style="list-style-type: none"> <li>- Using EPA funding to evaluate aspen-dominated springs and wetlands in SW Montana</li> <li>- Using NRCS funding to improve grassland classification accuracy</li> </ul>
3. With outside project funding, conduct field surveys to improve wetland mapping accuracy	Ongoing <ul style="list-style-type: none"> <li>- Used EPA funding to survey forested wetlands</li> </ul>	Ongoing <ul style="list-style-type: none"> <li>- Using EPA funding (NWCA) to survey wetlands statewide</li> </ul>
4. With outside project funding, add attributes to wetland mapping to improve usability and transferability	Ongoing <ul style="list-style-type: none"> <li>- With DEQ funding, began work on an “NWI++” product</li> </ul>	Ongoing/completed <ul style="list-style-type: none"> <li>- Used DEQ funding to complete first version of a Montana NWI++ project. EPA funding to advance work pending.</li> </ul>



## **Statewide Library Resources-Library Development Report October and November 2016**

Prepared for the December 14, 2016 Commission meeting by Tracy Cook,  
Director of Statewide Library Resources

This report represents accomplishments of Statewide Library Resources Library Development staff: Jennifer Birnel, Bobbi de Montigny, Jo Flick, Jessie Goodwin, Sara Groves, Jemma Hazen, Pam Henley, Amy Marchwick, Lauren McMullen, Cara Orban, Mike Price, and Suzanne Reymer.

### **Goal One—Content**

1.2. Work collaboratively toward developing, managing, presenting, and preserving Montana-relevant digital content.

#### HIGHLIGHTS:

- Montana Memory Project Director, Jennifer Birnel, continues her outreach efforts in order to encourage new content contributions and to publicize the Montana Memory Project. Specific examples of the type of outreach work she completed last month:
  - Birnel traveled to Ennis to visit with the new library director, Karen Ketchu, which may have sparked interest in contributing additional content by partnering with the local museum. Birnel also traveled to Bridger Canyon to visit with the Bridger Women’s club where she shared the MMP with 16 women of which 15 had never heard of the MMP. This was a stark reminder that the MMP is well known by library staff, but not nearly as well known by the general public.
- In an effort to better present, manage, and preserve content, the Montana State Library, Montana Historical Society, Montana State University, and University of Montana have collaborated to create the Big Sky Country Digital Network in order to become a hub of the Digital Public Library of America (DPLA). Their application was formally accepted by DPLA. Once DPLA has completed rewriting their data exchange agreements, the group can formalize the relationship. In the meantime, the group has been creating the necessary data transformations to upload content to the DPLA.



## **Goal Two—Access**

2.1. Improve the user interface of MSL’s Web sites and improve and expand online service to meet changing user needs.

2.5. Assist Montana libraries with ‘fulfillment’, that is, getting the right library content into patrons’ hands quickly, efficiently, and at prices that libraries can afford, regardless of whether the item is owned by the patron’s local library.

2.7. Support Montanans’ continued free access to the Internet provided through local public libraries.

### HIGHLIGHTS:

- To improve the web interface for librarians and create a more secure product with the latest programming language, the “library directory” is being updated. The goal is to go live in early 2017. Stacy Bruhn, Tracy Cook, and several other library development staff members have been attempting to create a product that makes it easier for librarians to submit requested data while also improving the librarian’s ability to learn more about other Montana libraries as well as projects of the State Library.
- In an effort to improve the Montana Courier Alliance and the ability for patrons to get content efficiently and quickly, Cara Orban is using the data driven model to identify outcomes for the courier project. She has been gathering feedback from the Statewide Consulting Librarians on why the project isn’t being used in certain areas and what (if anything) might encourage libraries to participate.
- The lack of dedicated funding state for broadband assistance is slowing down the possibility of regional, consortial contracts for more uniform broadband services and pricing within E-rate program. Other states who have funding for increased broadband speeds for libraries and schools have greater rates of success with libraries filing for e-rate discounts. Suzanne Reymer continues to work the Director of Statewide Library Resources to try and find a way to improve Internet access for Montanans.

## **Goal Three – Training**

3.1. Enhance Montana State Library's statewide training opportunities including all formats with client-learning as the Library's goal.

3.3. Develop and present appropriate library leadership training for Library Directors and Trustees.

3.4. Provide regular training opportunities for MSL programs and services.

#### HIGHLIGHTS:

- In an effort to improve client learning and the impact of MSL trainings, the Network Advisory Council worked with Jo Flick and Tracy Cook to develop outcomes and impacts for the 2017 Leadership Institute. Identified impacts are higher community literacy rates, library patrons get jobs, and libraries fulfill their mission. Flick will develop a Leadership Institute designed to reach these outcomes and will report back to the NAC on the results.
- Aligning with the Library Development Task Force Recommendation that Directors and Board Members better understand each other's roles, Pam Henley and Tracy Cook offered training at the South Central and Pathfinder Federation meetings. The training was designed to increase knowledge about the different roles and improve relations between library directors and board members.
- To increase knowledge of different governance models and the pros and cons of each, Lauren McMullen offered a workshop for the Bitterroot Public Library and the Darby Community Library. Her workshop walked the board members and directors through each of the governance models present in Montana and the pros and cons of each. The board members took advantage of the conversation to explore and analyze what was best for their respective libraries.
- Thinking of client needs, and attempting to provide regular training opportunities at the point of need, has been on the minds of the MSC staff for quite some time. This fall staff will implement a drop in learning program (Ask Me Anything) where MSC librarians will be able pop in to ask a quick question of staff. This drop-in training series is designed to be flexible and responsive to librarian needs. Staff is thinking about outcomes and data driven evaluation as they plan for this new service. Attendees will be asked to complete a popup survey at the end of each session that asks the following questions:
  - a. Did you ask any questions in the Ask me Anything Webinar? - Yes / No
  - b. If you asked a question, how did the answer help you? – Open Answer

- c. Tell us about something you learned, something you want to know more about or a skill you are going to improve because of this drop in session – Open Answer
- d. Will you share this information with your staff members and/or colleagues? - Yes/no
- e. Is it helpful to see us answer other peoples' questions? - Yes/No
- f. If sessions like this happened more often: - multiple Choice
  - I would use them frequently
  - I would drop in occasionally
  - I would only drop in if I was really stuck on a problem
  - I don't think I would use them

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

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

4.2. Advise Montana Library Directors and Trustees regarding administrative concerns, such as funding, budgeting, policies, and personnel.

4.3. Establish and maintain contact with Library Directors and Trustees, and other MSL partners, to remain cognizant of their needs and the challenges they face.

#### HIGHLIGHTS:

- Montana Shared Catalog Director, Jessie Goodwin, assisted the MSC Executive Board with developing a strategic plan. The plan is now complete and is available online: <http://docs.msl.mt.gov/pdfs/SharedCatalog/StratPlan2016-18.pdf>. The Executive Board is regularly updating their work plan in support of the Strategic Plan. An examination of the by-laws and cost sharing formula for FY2018 is underway. One notable change the Executive Board is examining is the possibility of changing the group's bylaws to allow for one online members meeting and one in-person members meeting annually rather than requiring two in-person gatherings.
- In an effort to continue to provide guidance and insight on library issues, Pam Henley, Lauren McMullen, and Suzanne Reymer have been regularly working with libraries on various issues including financing, local government relations, and board development. The three consultants work regularly with directors and trustees in order to stay

cognizant of their respective needs. They share this information with others in Library Development to provide insight on programs we are developing in Helena. Their work also assists libraries in creating a robust local library infrastructure that lays the groundwork for a library to participate in larger collaborative efforts.

## **Goal Five—Collaboration**

5.3. Assist users in developing collaborative relationships and cooperative projects with other state, regional, national, or international partners (libraries, schools, colleges, museums, archives, local and tribal governments, non-profit organizations, government agencies, the business community, et cetera).

5.5. Assist partners in developing web-accessible Montana-related digital content, and provide Montanans with access to digital collections and items relating to Montana’s cultural heritage.

5.7. Work toward regional cooperative efforts, programs, and products that bring additional information value to Montanans.

### HIGHLIGHTS

- In order to become more efficient and responsive, the MSC membership voted to streamline their policies. This was a multi-year effort that required a lot of hard work from MSC staff and the MSC libraries. The MSC reorganization is completed and all libraries are using the streamlined policies. A final removal of empty policies from the system is scheduled to occur in December, 2016.
- The Lifelong Learning Librarian position is beginning to take shape. A workgroup has been identified through the Network Advisory Council to help select priorities on which the lifelong learning librarian will focus in the coming year. The priorities were selected at an October 14 meeting. The top three priorities that were selected include early literacy, learning that spans a lifetime, and community engagement.

The NAC workgroup was asked to complete the “Theory of Change” exercise for each identified priority. That information was shared with Groves and Orban. Additionally, Groves completed a “Theory of Change” exercise for each identified priority. Examples of impacts from the developing program are: patrons can thrive, grow and contribute to the citizenry on local and national levels; A community of learners will enrich every aspect of a healthy community; and children will reach their full potential thereby fueling our society with functional, productive citizens that work together well and create

innovation / solve problems and make our society better functioning/healthier/ higher self-efficacy/satisfaction/contentment among citizens and will relieve the burden on safety nets and institutions (like law enforcement / corrections and mental health facilities).

Groves is now working on programming ideas, strategies, and partnerships to turn these three priorities into scalable programs that work to support the recommendations identified by the Library Development Study Task Force, the Montana State Library long-range plan, and priorities identified by the Institute of Museum and Library Services.

The Montana State Library purchased online access to the summer reading manual developed by the Collaborative Summer Library Program. 2016 is the first year those manuals have been made available online. Access to the manuals was made available on November 10. State Library staff will evaluate the use of the online only access at a later date.

Funding is currently being sought to support the statewide early literacy texting program. Outreach has been conducted with the Arthur Blank Family Foundation, the Office of Public Instruction, and the Montana Head Start Collaboration Office. Those potential partners are unable to support this project at this time.

## **Goal Six—Sustainable Success**

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

6.3. Evaluate new and continuing content and services against MSL's mission and long range plan.

6.8. Diversify MSL's staff knowledge, skills and abilities.

### **HIGHLIGHTS:**

- To fulfill the goal of being efficient and effective, Tracy Cook has begun using the data driven model with the Network Advisory Council and Library Development staff. As mentioned earlier, a NAC work group used this model for the lifelong learning librarian's priorities and the 2017 Leadership Institute. Additional NAC work groups will be using the data driven model to define outcomes for several of the Library Development Task Force Recommendations. Library Development staff will be meeting in early December to begin using the data driven process for selected projects. The goal is to create a

culture that identifies the public value our projects add, identifies outcomes for those projects, and then collect data to evaluate our progress in reaching those outcomes.

- Library Development staff have begun meeting regularly to improve training and web content. These drop-in meetings are a way for staff to share knowledge and improve their work processes in order to be more effective and efficient and to diversify their knowledge and skills.
- Extensive research has been completed on server location options for the MSC. Recommendations are being passed along to the MSC Executive Board and the State Librarian. The goal is to create a stable and affordable platform for the MSC.

**Montana Talking Book Library FY 2016 Work Plan  
October and November, 2016  
Accomplishments**

Prepared for the December 14, 2016 Commission meeting  
by Christie Briggs, MTBL Supervisor

This report represents accomplishments of the Talking Book Library staff:  
Erin Harris, Martin Landry, Jackie Crepeau, Bert Rinderle and G.G. Waldburger

The mission of the Montana State Library's Statewide Library Resources Division/ Montana Talking Book Library is: "Montana Talking Book Library offers the highest quality of free library services to Montanans who have blindness, low vision, a physical and/or reading disability".

This mission, although specific to Montanans who have a visual and/or physical disability, is within the realm of and applies to the overall agency's mission in the current MSL Long Range Plan for 2012-2022.

As part of the efforts to meet this mission, Montana Talking Book Library within SLR strives to help all Montana citizens who have a visual, physical or reading disability receive the information they need in order to improve and enhance their lives by:

- Providing Accessible reading services to individuals with visual, physical or reading disabilities and institutions serving these individuals, to include public and private schools, assisted, independent, and retirement facilities.
- Promoting cooperation and accessibility among all Montana libraries.

In cooperation with and as a regional library of the National Library Service (NLS), MTBL engages in cooperative planning, development, and implementation of projects and pilots for new and improved library services to eligible Montanans.

This work plan is developed based on the goals contained in the [MSL 2012-2022 Long Range Plan](#). Specific work objectives for FY16 are organized by the MSL six agency-wide Long Range Plan goals. Together, these objectives represent a collective approach to defining the highest priority tasks for MTBL for FY16.

**Goal One—Content**

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

## MTBL Objectives

- MTBL continues to seek ways to convert the local Montana Analog titles to digital in order to offer a higher quality content to patrons.  
**(Update: December 2016)** Governor Bullock's budget did not include funding for more funding for this project. Other avenues are being pursued by Briggs and Harris, including re-records of cassette titles and clean-up and editing of titles where the conversion was incomplete. As of Oct. 31<sup>st</sup>, circulation of newly recorded local books in digital mailed cartridges and BARD downloads totaled: 2,873. (See attached statistical graph.)

### Goal Two—Access

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

## MTBL Objectives

- Readers' Advisors offer patrons improved BARD customer service and access in training patrons how to successfully utilize the BARD Mobile APPS.  
**(Update: December 2016)** The BARD Android Mobile APP from the National Library Service is now available for many android devices, including Kindle Fire 6.7 and newer, making access easier for Talking Book Library patrons to download free BARD books. Readers' Advisors Landry, Crepeau and Waldburger have given one-on-one training to patrons who use the Android Mobile APP on their NLS approved devices.
- Distribute the Bits of Gold newsletter prior to the end of November, 2016.  
**(Update: December 2016)** The Bits of Gold newsletter (the online, digital and large print versions) were processed and completed by all staff and many volunteers, meeting the circulation goal of Nov. 10<sup>th</sup>.

### Goal Three – Training

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

## MTBL Objectives

- Complete training of Jackie Crepeau in the NLS Machine Lending Agency duties and responsibilities.



**(Update: December 2016)** Jackie Crepeau completed National Library Service (NLS) orientation and Machine Lending Agent training in October in Washington, D.C. She gained a wider understanding of NLS guidelines, operations and supervision of and responsibility for the NLS patron players and accessories. She will oversee a workshop for Telecom Pioneers in January, 2017

- Continue training of GG Waldburger, new Readers' Advisor as of June, 2016.  
**(Update: December 2016)** GG Waldburger completed four months of Readers' Advisory training, responded to nearly 31% of her total patrons and processed a total of 118 new patrons for all three Readers' Advisors, including 36 of her own. She developed and edited her first Bits of Gold newsletter for MTBL patrons. GG will be introduced at the December, 2016 Commission meeting.
- Complete training of Bert Rinderle as Circulation Manager.  
**(Update: December 2016)** Bert Rinderle has successfully completed his one-year anniversary as Circulation Manager of MTBL. He has exceeded expectations. Bert supervised a weekly group of 30 circulation volunteers to inspect, shelve, produce mail-cards and circulate 213,964 items. He also supervised volunteers to pull, tag, weed, card, bag and ship 156,000 recorded cassette books to the NLS recycling center. Bert successfully simplified the labeling of shelves for faster and easier book pulling by volunteers. He implemented a second daily batch mailing process for more efficient shipping of books to patrons which also supported better customer service by the Readers' Advisors. Bert successfully mastered trainings in back-up in these areas: machine processing, recording program troubleshooting and post-editing, monitoring, narrating and Readers' Advisory and administrative reporting.  
**\*Note:** Staff members Landry, Harris, Crepeau and Briggs were instrumental in training Bert Rinderle and GG Waldburger in their MTBL duties.

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

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

- Conduct outreach presentations and consultations with schools, facilities and other opportunities to offer leadership and education about MTBL.  
**(Update: December 2016)** Outreach activities included Briggs reporting MTBL activities and the NLS Three to Ten-year strategic plan to Library Director Stapp, SLR Director Cook, MTBL staff, and members of the two largest Montana Consumer groups: Montana Association for the Blind (MAB) and National Federation of the Blind- Montana (NFB-MT) in October. Other outreach efforts included residents in retirement facilities

and MAB chapters in Helena, Bozeman and Billings.

## **Goal Five—Collaboration**

5. MSL promotes partnerships and encourages collaboration among its users.

### **MTBL Specific Objectives:**

- Transition of the PIMMS (Patron Information and Machine Management System) in collaboration with Keystone Library Automated System (KLAS) and Data Management System through NLS. This new program automatically updates NLS on all patron and machine transactions made in the KLAS database system.  
**(Update: December 2016)** Successfully completed the PIMMS (Patron Information and Machine Management System) conversion in October and November.
- The Montana Voter Information Pamphlet recording was coordinated by Erin Harris in collaboration with the Secretary of State's office.  
**(Update: December 2016)** Volunteers Bob and Marie Vanisko recorded the Montana VIP. Harris posted the audio VIP on MTBL's Facebook account and sent it to the Secretary of State's office for the benefit of Montana voters.

## **Goal Six—Sustainable Success**

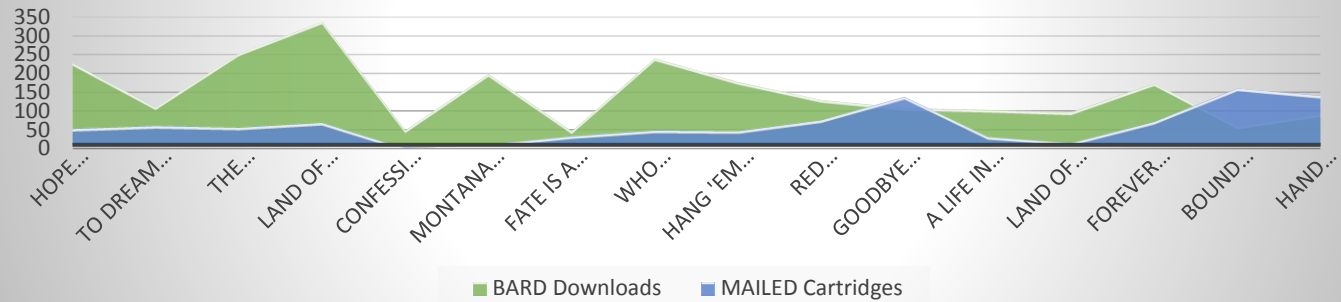
6. MSL is efficient and effective (measured against partner and patron outcomes) and is engaged in fulfilling its mission.

### **MTBL Objectives**

- Installation of a Second Sound Booth in Room 214 of MTBL.  
**(Update: December 2016)** Installation delays occurred due to changes in ADA wheelchair code requirements. Amendments for installation timeframe and expansion of the booth size to meet ADA requirements pushed the installation date out to January 28-30, 2017. A permanent wheelchair ramp will be installed by general services after the booth is installed.
- Show appreciation to all volunteers in the MSL/MTBL Volunteer Program by providing a catered Volunteer Appreciation Luncheon, held in Helena on October 13, 2016, which will include a keynote speaker and presentation of volunteer longevity and special awards.

**(Update: December 2016)** The Volunteer Appreciation Luncheon theme was “Volunteers Make a World of Difference”. It was successfully held at Spring Meadow Golf Club and attended by Commissioners Newell and Bartow along with 72 volunteers, guests and staff. Keynote speaker was author Craig Lancaster of Billings who wrote the Edward Stanton Trilogy. Mr. Lancaster gave a heartwarming talk about the importance of talking books in our patrons’ lives. Please see Bits of Gold Newsletter for volunteers who received awards: [http://docs.msl.mt.gov/tbl/newsletters/archive/Newsletter%20FALL%202016\\_FINAL.pdf](http://docs.msl.mt.gov/tbl/newsletters/archive/Newsletter%20FALL%202016_FINAL.pdf)

## Newest MT Audio Books circulated 2,873 copies (7-1-15 to 10-31-16)



### Circulation Details:

Title	Author	BARD Downloads	MAILED Cartridges
Hope Within	Peterson, Tracie	228	53
To Dream Anew	Peterson, Tracie	110	60
The Coming Storm	Peterson, Tracie	253	56
Land of My Heart	Peterson, Tracie	338	69
Confessions of a Camo Queen	Berube, Kristen	48	0
Montana Stirrups, Sage & Shenanigans	Berg, Francie etc	198	11
Fate is a Mountain	Parratt, Mark W.	46	33
Who Lost?	Sheldon, Dale	240	48
Hang 'em	Crosley, Donald E.	177	47
Red Corner	McDonald, Verlaine Stoner	129	76
Goodbye Wives and Daughters	Resnick, Susan Kushner	108	138
A Life in Time	Stone, Kaye	103	31
Land of Empty Houses	Moore, John L.	96	15
Forever Friends	Puhek, Lenore McKelvey	174	71
Bound Like Grass	McLaughlin, Ruth	59	160
Hand Raised Barns of Montana	Juisto, Chere	91	140
<b>Total Circulated Copies: 2,873</b>		<b>2,075</b>	<b>798</b>

# Memo

**To:** Montana State Library Commission

**From:** Jennie Stapp, State Librarian

**Date:** November 30, 2016

**Re: 2019 Executive Budget General Fund Operational Expenditures Reduction Plan**

The State Library recommends approval of the following General Fund operational expenditures reduction plan to account for the General Fund reductions proposed in the Governor’s 2019 Executive Budget for MSL.

	<u>General Fund Total</u>	<u>Total Funds</u>
FY 2018	(\$149,417)	(\$149,417)
FY 2019	(\$149,417)	(\$149,417)

**NP - 555 - Appropriation Rebase -**

The Executive Budget includes targeted budget reductions across most agencies. The Executive proposes the Montana State Library Appropriation Rebase totaling \$149,417 per year and was included in the agency reduction plan submitted in compliance with 17-7-111, MCA.

Suggested reductions in each fiscal year	<u>General Fund Total</u>
• OCLC Group Services*	(\$98,886)
• IT Budget	(\$20,000)
• Digital Library Budget*	(\$16,000)
• Supply Budget	(\$10,000)
• MTNHP Contract	(\$5,000)
<b>Total</b>	<b>(\$149,886)</b>

\*Represents a recommended funding switch from General Fund to Coal Severance Tax monies which is showing increased revenue compared to FY 17 (see NP – 9).

	<b><u>General Fund Total</u></b>	<b><u>Total Funds</u></b>
FY 2018	(\$9,023)	(\$16,000)**
FY 2019	(\$9,023)	(\$16,000)

**NP - 556 - IT Convergence Savings -**

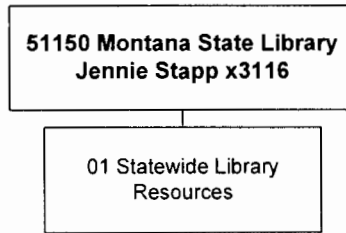
In accordance with Executive Order 09-2016, state agencies have migrated information technology assets to the state data center and taken advantage of other enterprise IT solutions. The estimated savings for the Montana State Library is \$16,000 per year.

Suggested reductions in each fiscal year**	<b><u>General Fund Total</u></b>
<ul style="list-style-type: none"> <li>• IT Budget***</li> </ul>	(\$9,023)

\*\* The remaining adjustment (\$6,977) is reflected in funds primarily from the Montana Land Information Account. This reduction in authority will be taken into account when planning for the FY 18 & FY 19 Land Plan.

\*\*\* Total recommended reduction in the IT budget is \$29,023.

## Montana State Library - 51150



**Mission Statement** - The Montana State Library is committed to strengthening libraries and information services for all Montanans through leadership, advocacy, and service.

**Statutory Authority** - Title 22, Chapter 1, MCA; Title 90, Chapter 15, MCA; and Title 90, Chapter 1, Part 4, MCA.

# Montana State Library - 51150

## Statewide Library Resources - 01

**Program Description** - The program provides: 1) information services to state government employees and officials; 2) assistance to all public libraries; 3) reading material for all blind and physically handicapped Montana residents; 4) direction to the six library federations, and 5) a centralized repository for land and natural resources information. This program also administers the state documents depository system, administers a granting process to implement a land plan, and coordinates the development of information resources and library information systems throughout the state. The program also manages the budgetary, personnel, and administrative functions of the State Library.

Program Proposed Budget						
Budget Item	Starting Point Fiscal 2017	Budget Adjustments Fiscal 2018	Total Exec. Budget Fiscal 2018	Budget Adjustments Fiscal 2019	Total Exec. Budget Fiscal 2019	Executive Budget Request 2019 Biennium
FTE	30.46	0.00	30.46	0.00	30.46	
Personal Services	2,288,239	(35,810)	2,252,429	(28,040)	2,260,199	4,512,628
Operating Expenses	2,199,024	(204,140)	1,994,884	(216,291)	1,982,733	3,977,617
Equipment & Intangible Assets	13,697	0	13,697	0	13,697	27,394
Grants	982,210	622,468	1,604,678	622,468	1,604,678	3,209,356
<b>Total Costs</b>	<b>\$5,483,170</b>	<b>\$382,518</b>	<b>\$5,865,688</b>	<b>\$378,137</b>	<b>\$5,861,307</b>	<b>\$11,726,995</b>
General Fund	3,110,763	(161,446)	2,949,317	(170,168)	2,940,595	5,889,912
State/Other Special	1,749,269	(45,593)	1,703,676	(41,698)	1,707,571	3,411,247
Federal Spec. Rev. Funds	623,138	589,557	1,212,695	590,003	1,213,141	2,425,836
<b>Total Funds</b>	<b>\$5,483,170</b>	<b>\$382,518</b>	<b>\$5,865,688</b>	<b>\$378,137</b>	<b>\$5,861,307</b>	<b>\$11,726,995</b>

Program Proposed Budget Adjustments				
	Budget Adjustments Fiscal 2018		Budget Adjustments Fiscal 2019	
	General Fund	Total Funds	General Fund	Total Funds
<b>Statewide Present Law Adjustments</b>				
SWPL - 1 - Personal Services	(29,934)	(35,810)	(22,990)	(28,040)
SWPL - 2 - Fixed Costs	17,879	(12,652)	1,829	(28,395)
SWPL - 3 - Inflation Deflation	495	495	879	879
<i>Total Statewide Present Law Adjustments</i>	<i>(\$11,560)</i>	<i>(\$47,967)</i>	<i>(\$20,282)</i>	<i>(\$55,556)</i>
<b>Present Law Adjustments</b>				
PL - 4 - LSTA Grants - BIEN	0	622,468	0	622,468
PL - 5 - Cost Adjustments	8,554	8,554	8,554	8,554
<i>Total Present Law Adjustments</i>	<i>\$8,554</i>	<i>\$631,022</i>	<i>\$8,554</i>	<i>\$631,022</i>
<b>New Proposals</b>				
NP - 555 - Appropriation Rebase	(149,417)	(149,417)	(149,417)	(149,417)
NP - 556 - IT Convergence Savings	(9,023)	(16,000)	(9,023)	(16,000)
NP - 9 - Balance Coal Tax Shared Account	0	(35,120)	0	(31,912)
<i>Total New Proposals</i>	<i>(\$158,440)</i>	<i>(\$200,537)</i>	<i>(\$158,440)</i>	<i>(\$197,329)</i>
<b>Total Budget Adjustments</b>	<b>(\$161,446)</b>	<b>\$382,518</b>	<b>(\$170,168)</b>	<b>\$378,137</b>

-----Statewide Present Law Adjustments-----

	<u>General Fund Total</u>	<u>Total Funds</u>
FY 2018	(\$29,934)	(\$35,810)
FY 2019	(\$22,990)	(\$28,040)

**SWPL - 1 - Personal Services -**

The budget includes a reduction of funding to annualize various personal services costs including FY 2017 statewide pay plan adjustments and increases to state share costs for health insurance passed by the 2015 Legislature, benefit rate adjustments, longevity adjustments related to incumbents in each position at the time of the snapshot, and vacancy savings.



## Montana State Library - 51150

### Statewide Library Resources - 01

	<u>General Fund Total</u>	<u>Total Funds</u>
FY 2018	\$17,879	(\$12,652)
FY 2019	\$1,829	(\$28,395)

**SWPL - 2 - Fixed Costs -**

The request includes a reduction of \$17,830 in FY 2018 and a reduction of \$33,573 in FY 2019 to provide the funding required in the budget to pay increases in fixed costs assessed by other agencies within state government for the services provided. Examples of fixed costs include liability and property insurance, legislative audit, warrant writer, payroll processing, and others. The rates charged for these services are approved in a separate portion of the budget.

	<u>General Fund Total</u>	<u>Total Funds</u>
FY 2018	\$495	\$495
FY 2019	\$879	\$879

**SWPL - 3 - Inflation Deflation -**

This change package includes funding to reflect budgetary changes generated from the application of inflation and deflation factors to specific expenditure accounts. Affected accounts include food, postage, natural gas, electricity, gasoline, and others.

-----**Present Law Adjustments**-----

	<u>General Fund Total</u>	<u>Total Funds</u>
FY 2018	\$0	\$622,468
FY 2019	\$0	\$622,468

**PL - 4 - LSTA Grants - BIEN -**

The library requests re-establishing biennial appropriations for the Library Services and Technology Act (LSTA) grant federal funding to \$850,000 per year. The 2017 starting point was \$227,532.

	<u>General Fund Total</u>	<u>Total Funds</u>
FY 2018	\$8,554	\$8,554
FY 2019	\$8,554	\$8,554

**PL - 5 - Cost Adjustments -**

MSL requests \$8,554 each year of the 2019 biennium for increased costs for: Digital Library, \$2,100 for 3% inflationary increase in resource databases; Statewide Library Resources, \$5,900 for 3% inflationary increase in the group services contract; and Talking Book Library, \$554 for 3% inflationary increase in software maintenance contract.

-----**New Proposals**-----

	<u>General Fund Total</u>	<u>Total Funds</u>
FY 2018	(\$149,417)	(\$149,417)
FY 2019	(\$149,417)	(\$149,417)

**NP - 555 - Appropriation Rebase -**

The Executive Budget includes targeted budget reductions across most agencies. The Executive proposes the Montana State Library Appropriation Rebase totaling \$149,417 per year and was included in the agency reduction plan submitted in compliance with 17-7-111, MCA.

## Montana State Library - 51150

### Statewide Library Resources - 01

	<u>General Fund Total</u>	<u>Total Funds</u>
FY 2018	(\$9,023)	(\$16,000)
FY 2019	(\$9,023)	(\$16,000)

#### NP - 556 - IT Convergence Savings -

In accordance with Executive Order 09-2016, state agencies have migrated information technology assets to the state data center and taken advantage of other enterprise IT solutions. The estimated savings for the Montana State Library is \$16,000 per year.

	<u>General Fund Total</u>	<u>Total Funds</u>
FY 2018	\$0	(\$35,120)
FY 2019	\$0	(\$31,912)

#### NP - 9 - Balance Coal Tax Shared Account -

In order to provide a balance of revenues and expenditures in the Coal Severance Tax Shared Account, the State Library is budgeted a reduction of \$35,120 in FY 2018 and \$31,912 in FY 2019 to cover its share of the pro-rata reduction.

Proposed Library Development Budget -  
CST Reallocation

Description	LSTA Projected Cost	LSTA Project Total	FY18 Coal Severance Tax Funds	FY18 State General Fund	MSL Goal	LSTA Intent
<b>APPROVED HOUSE BILL 2 EXPENDITURES</b>						
Administration (4% for LSTA award administration)	\$ 42,650	\$ 1,066,243	\$ 378,907	\$ 170,190		
<b>TOTAL ADMINISTRATION</b>		\$ 42,650				

Communications/Marketing Coordinator (0.25 FTE) \$ 24,591 \$ 24,591 #4 Sustainable Success

Federation Funding \$ 176,122 #4 Consultation

**Library Infrastructure, Collaboration**

OCLC Group Services \$ 98,885 #2 Access Improve Users' Ability to Discover Information

Montana Shared Catalog \$ 98,885 #2 Access Improve Users' Ability to Discover Information

Statewide Projects Librarian Position & Operations \$ 65,404

**TALKING BOOK LIBRARY**

**Personnel:**

Talking Book Library FTE \$ 174,263

Talking Book Library Operations \$ 25,099

Total Talking Book Library Personnel - LSTA \$ 199,362

**TOTAL TALKING BOOK LIBRARY - LSTA** \$ 199,362

**TOTAL HOUSE BILL 2 EXPENDITURES** \$ 266,603 \$ 275,007 \$ 164,289

**LIBRARY DEVELOPMENT FY17 BEGINNING**

**BALANCE** \$ 799,640 \$ 103,900 \$ 5,901

**Library Infrastructure & Collaboration**

**MONTANA SHARED CATALOG** #2 Access Improve Users' Ability to Discover Information

**Personnel:**

Montana Shared Catalog Administrator \$ 74,143

Montana Shared Catalog Administrator Operations \$ 1,000

Montana Shared Catalog Information Specialist \$ 88,289

Montana Shared Catalog Technical Assistant (.38 FTE) \$ 24,600

MSC Staff Operations for Information Specialist and Tech Assistant \$ 1,260

**Total Montana Shared Catalog Personnel** \$ 189,292

**Projects and Services:**

Montana Shared Catalog New Libraries (2 Libraries) \$ 2,836

**TOTAL MONTANA SHARED CATALOG** \$ 192,128

**BALANCE** \$ 607,512 \$ 103,900

**OCLC GROUP SERVICES CONTRACT** #2 Access Improve Users' Ability to Discover Information

**Personnel:**

Statewide Projects Librarian

**Projects and Services:**

WorldShare Interlibrary Loan*	\$	24,317	\$	9,680	\$	5,901
Contribution Toward FirstSearch and Unlimited Cataloging*			\$	51,078		
FY17 Group Services Gap*			\$	4,878		
Hosted EZproxy*			\$	3,046		

<b>TOTAL OCLC GROUP SERVICES</b>	\$	<b>24,317</b>	\$	<b>24,317</b>	\$	<b>68,682</b>
<b>BALANCE</b>			\$	<b>583,195</b>	\$	<b>35,218</b>
					\$	<b>5,901</b>

**Library Infrastructure & Public Access Technology**

Broadband Planning	\$	-		#6 Sustainable Success	Improve Users' Ability to Obtain Information Resources
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<b>TOTAL BROADBAND PLANNING</b>	\$	-	\$	-
<b>BALANCE</b>	\$	<b>583,195</b>	\$	<b>35,218</b>
			\$	<b>-</b>

**COURIER**

**Personnel:**  
Statewide Projects Librarian

**Projects and Services:**

Contribution to Support Courier and Sharing Group Activity	\$	9,950
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<b>TOTAL COURIER</b>	\$	<b>9,950</b>	\$	<b>-</b>
<b>BALANCE</b>	\$	<b>573,245</b>	\$	<b>35,218</b>

**Library Directors, Staff, Boards, Volunteers**

**STATEWIDE CONSULTING & TRAINING**

**Personnel:**

Statewide Consulting Librarian	\$	70,698
Statewide Consulting Librarian	\$	83,696
Statewide Consulting Librarian	\$	64,935
Operations - Consultant	\$	6,450
Operations - Consultant	\$	6,450
Operations - Consultant	\$	6,450
<b>Total Consultants</b>	\$	<b>238,679</b>

Statewide Training & Development Specialist	\$	63,266
Statewide Training & Development Specialist Operations	\$	5,000
<b>Total Statewide Training &amp; Development Specialist</b>	\$	<b>68,266</b>

<b>Total Statewide Training &amp; Consulting Personnel</b>	\$	<b>306,945</b>
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**Staff Priorities:**

Board Development Training
Professional Development Training
New Library Director Support
Routine Consulting Services
Certification Management Program

**INFORMATIONAL ONLY**

E-Rate Consulting  
Technology Evaluation and Planning

**Projects and Services:**

Training Budget \$ 43,661 \$ 5,004

**TOTAL STATEWIDE CONSULTING & TRAINING**

**BALANCE** \$ 350,606 \$ 5,004  
\$ 222,639 \$ 30,214

Lifelong Learning, Library Infrastructure, Collaboration

**MONTANA MEMORY PROJECT**

#1 Content Information Access

**Personnel:**

Montana Memory Project Director \$ 68,225  
Montana Memory Project Director Operations \$ 1,200  
Montana Memory Project Travel \$ 4,500

**Total Montana Memory Project Personnel** \$ 73,925

**Projects and Services:**

MSL Portion of CONTENTdm (Software and Storage)\* \$ 9,403  
MSL Portion of Digital Archive\* \$ 2,811  
Montana Memory Project: New Collections Digitization \$ 6,000

**TOTAL MONTANA MEMORY PROJECT** \$ 73,925 \$ 18,214

**BALANCE** \$ 148,714 \$ 12,000

Improve Users' Ability to Obtain Information Resources

**E-CONTENT**

#1 Content

**Personnel:**

Statewide Projects Librarian

**Projects and Services:**

EBSCO Discovery Service\* \$ -  
Statewide Databases Suite\* \$ -  
OverDrive Annual Hosting Fee for FY17\* \$ 36,000  
Adobe Content Server License Renewal for FY17\* \$ 1,500

**TOTAL E-CONTENT** \$ 37,500

**BALANCE** \$ 111,214 \$ 12,000

Lifelong Learning

Apply Information that Furthers their Parenting and Family Skills

**LIFELONG LEARNING**

#3 Training

**Personnel:**

Lifelong Learning Coordinator Position & Operations \$ 78,000  
**TOTAL LIFELONG LEARNING PERSONNEL - LSTA** \$ 78,000

**Projects:**

Lifelong Learning Project Budget \$ 12,000

**Staff Priorities:**


Community Partnerships

#5  
Collaboration

TOTAL LIFELONG LEARNING  \$ 78,000 \$ 12,000  
BALANCE \$ 33,214 \$ -

**Additional Projects**

Required 5 Year LSTA Evaluation for IMLS \$ 15,000

BALANCE FOR FY17 LIBRARY DEVELOPMENT \$ 18,214 \$ -

\*Contracts Administered by MSL

**Library Development Study Task Force**

**Recommendations**

- Prioritize Investment
- Investment Remains the Same
- Decrease Investment

# Memo

**To:** Jennie Stapp, State Librarian      **To:** Montana State Library Commission  
**From:** Kris Schmitz  
Central Services Manager      **From:** Jennie Stapp, State Librarian  
**Date:** November 21, 2016  
**Re:** **Policy Reviews**

The following policy updates are presented for review at the December 2016 meeting. Action to adopt these policies will be requested at the February 2017 meeting.

**Montana State Library Telework Policy:** Highlights of changes: changing formatting, eliminating the eligibility requirement that employees have to work for one year with the State Library to be considered as we have positions considered telework from the date of hire. Note: the addendum to this policy is provided for informational purposes and is not included for Commission action.

**Drug & Alcohol Free Workplace Policy:** Highlights of changes: adding alcohol and updating clarity and formatting changes. No changes in law.

**Code of Conduct:** A replacement to the current Disruptive Patron Policy.

Current versions of the policies are included for reference. Please let us know if you have any questions.

## Montana State Library Commission Policy

### Montana State Library Telework Policy

**Policy:** It is the policy of the Montana State Library (MSL) to allow employees to telework when there are opportunities for improved employee performance, reduced commuting miles, agency savings, and other business reasons

The agency is adopting this policy to:

- (A) Define specific criteria and procedures for telecommuting;
- (B) Ensure that it is applied consistently;
- (C) Require management, in exercising its discretion, to consider an employee's request to telework in relation to the agency's operating and customer needs.

Employees interested in telework are encouraged to review a copy of the Telework Program Guide to learn more about telework programs, including the kinds of duties that adapt well to telework and types of workers who are most productive as teleworkers.

Employees will be selected for telework based on job suitability, the likelihood of success as teleworkers, and the supervisor's ability and willingness to manage telework employees. Employees that have worked at MSL for a year will be considered for selection. To the extent possible, all employees eligible for teleworking on the basis of these criteria will be given equal opportunity to telework. However, equipment availability or other factors may limit the agency's ability to approve telework for multiple employees; in these cases, the agency is in no way obligated to expend funds to make telework possible for additional employees.

Products, documents, and records used or developed while teleworking shall remain the property of the agency, and are subject to agency policies regarding confidentiality and records retention requirements.

Employees will sign and abide by a telework agreement between the employee and the supervisor. A model agreement, an addendum to this policy, may require modification to fit individual tele-worksite circumstances.

- (A) Telework shall be voluntary. Unless otherwise provided in the agreement, either the agency or the employee may discontinue the arrangement at any time, generally giving one week's notice.
- (B) The agreement shall specify individual work schedules that are in compliance with FLSA regulations.

The teleworker's conditions of employment shall remain the same as for non-telework employees. Employee salary, benefits and employer-sponsored insurance coverage shall not change as a result of telework.

- (A) Business visits, meetings with agency customers, or regularly scheduled meetings with co-workers shall not be held at the home worksite unless approved by the supervisor.
- (B) Telework employees shall not act as primary care giver for dependents nor perform other personal business during hours agreed upon as work hours, unless the supervisor provides written approval.

The Department of Administration's policies and procedures will be followed in cases of computer equipment and software and modem connection to state computer systems.

Home worksite furniture and equipment shall normally be provided by the teleworker, although computer equipment, phones, software and other appropriate equipment may be provided at the option of the agency. Tele-worksite office supplies shall be provided by the agency. All items provided by the agency for use at the tele-worksite, shall be only for the purposes of conducting agency business. The agency shall keep current at all times an inventory list of equipment and software placed at the employee's home.



The employee shall maintain a safe workspace. In the case of injury occurring during telework hours, the employee shall immediately report the injury to the supervisor. MSL reserves the right to inspect the home office space. The employee shall provide MSL with the completed safety and security checklist.

Teleworkers are advised to contact their insurance agent and a tax consultant for information regarding home worksites.

**Definitions:**

- (1) Central worksite means the traditional office or work place.
- (2) Tele-worksite means a worksite alternate to the central worksite. It may be in the employee's home or in a building owned or leased by the state that is closer to the employee's home than the central worksite.
- (3) Telework means a flexible work arrangement where selected employees work one or more days a week from their home or at a site near the home instead of physically traveling to a central workplace.

# Model Telework Agreement

TELE-WORKSITE \_\_\_\_\_

Employee Name: \_\_\_\_\_

Home (Specify location in home): \_\_\_\_\_

Other Location (Specify): \_\_\_\_\_

Address: \_\_\_\_\_

Phone:(\_\_\_\_\_) \_\_\_\_\_

## CENTRAL WORKSITE

Will there be any sharing of or changes in work space when telework begins? Yes No

If yes, specify: \_\_\_\_\_

## SCHEDULE

\_\_\_ **Fixed:** Telework days and hours are scheduled and will not be substituted without advance approval of the manager.

Telework days: Mon. Tue. Wed. Thur. Fri. Sat. Sun.

Telework time: Start: \_\_\_\_\_ Finish: \_\_\_\_\_ Total daily hours \_\_\_\_\_

Lunch \_\_\_\_\_ to \_\_\_\_\_

\_\_\_ **Flexible Schedule**

Hours of Work Permitted: \_\_\_\_\_

Use of sick leave, vacation, other time off, or other leave credits must be approved in advance by the supervisor. Overtime to be worked must be approved in advance by the supervisor.

## TASKS

Tasks for telework days:

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## EQUIPMENT

The agency is not responsible for any private property used, lost, or damaged. The state may pursue recovery from the employee for property that is deliberately or negligently damaged or destroyed while in the employee's care, custody, or control. The agency is responsible for the deductible on state property unless otherwise specified in this agreement under OTHER ARRANGEMENTS. Employees are advised to contact their insurance agent and a tax consultant for information regarding home worksites. In the event of equipment failure, the employee may be assigned to another project and/or work location. The employee shall surrender all state-owned equipment, software, and data documents immediately upon request.

## EXPENSES

The agency will pay for the following expenses:

Charges for business related telephone calls. Yes No

Maintenance and repairs to state-owned equipment. Yes No

Other:

Claims will be submitted with receipt, bill, or other verification of the expense.

The agency will not pay for the following expenses:

- Maintenance or repairs of privately owned equipment.
- Utility costs associated with the use of the computer or occupation of the home.
- Liability insurance to cover the use of space in the home for work.
- Supplies (these should be requisitioned through the main office.)
- Travel expenses associated with commuting to the central office.

## COMMUNICATION

Will the following be utilized:

Call forwarding? Yes No

Answering machine or voice mail? Yes No

Receptionist or co-workers take calls? Yes No

How will incoming calls to the central worksite be answered on telework days? \_\_\_\_\_

The employee agrees to call the office to obtain messages at least \_\_\_\_\_ times a day.

Call in times: \_\_\_\_\_

The employee will promptly notify the supervisor when unable to perform work assignments due to equipment failure or other unforeseen circumstances.

Other procedures: \_\_\_\_\_



## **SAMPLE SUPERVISOR'S CHECKLIST FOR TELEWORKERS**

Name of Teleworker \_\_\_\_\_

Name of Supervisor \_\_\_\_\_

Date Completed \_\_\_\_\_

- Employee has read the orientation documents and the telework policy.
  
- Employee has been provided with a schedule of core hours or guidelines for flexing work hours.
  
- Equipment issued by the agency is documented.
  
- Performance expectations have been discussed and are clearly understood. Assignments and due dates are documented.
  
- Requirements for adequate and safe office space at home have been reviewed with the employee, and the employee certifies that those requirements have been met.
  
- Requirements for care of equipment assigned to the employee have been discussed and are clearly understood.
  
- The employee is familiar with this agency's requirements and techniques for computer information security.
  
- Phone contact procedures have been clearly defined.
  
- The employee has read and signed the Telework Agreement prior to actual participation in the program.
  
- Other:

# MONTHLY TELEWORK FEEDBACK FORM

Name \_\_\_\_\_

Date \_\_\_\_\_

Telework From: (Check one) Home Office \_\_\_ Remote Office \_\_\_ Annex Office\_\_\_

Reason for Telework:

What is working well?

Concerns: (check all that apply)

\_\_\_ Communications with Manager

\_\_\_ Communication/Networking with peers

\_\_\_ Being adequately prepared for the work you do at home (e.g. having the right files and information, etc.)

\_\_\_ Your own ability to work independently and to set and meet deadlines

\_\_\_ Information Services (IS) Support

\_\_\_ Ergonomics/Safety

\_\_\_ Schedule

\_\_\_ Policies

\_\_\_ Equipment

\_\_\_\_\_ Other:

Give details on any concerns listed above:

To enhance this experience, my suggestions would be

Additional Comments:

**COMPUTER EQUIPMENT PLACED IN AN EMPLOYEE'S HOME**

Date: \_\_\_\_\_

Employee's Name: \_\_\_\_\_

Address: \_\_\_\_\_

Computer Uses:

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Date to Begin: \_\_\_\_\_ Ending: \_\_\_\_\_

Terms: \_\_\_\_\_

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Equipment: \_\_\_\_\_

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**SAMPLE HARDWARE/SOFTWARE INVENTORY LIST**

Employee's Name: \_\_\_\_\_ Date: \_\_\_\_\_

Employee's Division/Agency: \_\_\_\_\_

**Agency Provided Hardware**

Hardware	Type	Serial #	Program	Version
PC				
Monitor				
Surge Protector				
Printer				
Other				
Other				
Other				

**Agency Provided Software**

Type	Serial #	Program	Version

**Employee Provided Hardware and Software**



**Employee Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**IT Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

## SAFETY AND SECURITY CHECKLIST

YES NO **Security**

\_\_\_ \_\_\_ Are work materials and equipment in a secure place that can be protected from theft, damage or misuse?

\_\_\_ \_\_\_ Are the security requirements in place to protect confidentiality and security of state information and computer systems?

### **Electrical**

\_\_\_ \_\_\_ Are all machines properly grounded?

\_\_\_ \_\_\_ Are portable hand tools grounded or double insulated?

\_\_\_ \_\_\_ Are junction boxes closed?

\_\_\_ \_\_\_ Is all electrical equipment in good working condition?

\_\_\_ \_\_\_ Are all phone lines, electrical, and other cords kept out of the way?

\_\_\_ \_\_\_ Is there evidence of fraying on any electrical cords?

\_\_\_ \_\_\_ Is adequate amperage provided to the home and the work site?

\_\_\_ \_\_\_ Are all circuit breakers and fuses in the electrical panel labeled for intended service?

\_\_\_ \_\_\_ Are circuit breakers labeled clearly for open and closed positions?

\_\_\_ \_\_\_ Is the computer equipment connected to a surge protector?

### **Fire Protection**

\_\_\_ \_\_\_ Is a fire extinguisher readily available?

\_\_\_ \_\_\_ Is it fully charged and operable?

\_\_\_ \_\_\_ Are there smoke detectors in the work site?

\_\_\_ \_\_\_ Is there a smoke detector within hearing distance of the workspace?

\_\_\_ \_\_\_ Are the batteries or other power supplies of the smoke detectors checked regularly?

### **Liability**

\_\_\_ \_\_\_ Does the homeowner or renters' insurance cover business use in the home?

### **Housekeeping**

\_\_\_ \_\_\_ Is the work area clean and orderly?

- \_\_\_ \_\_\_ Are aisles and doorways free of obstructions?
- \_\_\_ \_\_\_ Are all spilled materials or liquids cleaned up immediately?
- \_\_\_ \_\_\_ Is combustible scrap, debris, and waste stored safely and removed from the worksite promptly?
- \_\_\_ \_\_\_ Are the file cabinets arranged so drawers do not open into walkways?
- \_\_\_ \_\_\_ Are carpets well secured to the floor, and free of frayed or worn seams?

**Means of Exit**

- \_\_\_ \_\_\_ Are there enough exits to allow prompt escape?
- \_\_\_ \_\_\_ Do employees have easy access to exits?

**Materials Handling and Storage**

- \_\_\_ \_\_\_ Is adequate clearance allowed in aisles where materials must be moved?
- \_\_\_ \_\_\_ Are tiered materials stacked, interlocked, locked, and limited in height to maintain stability?
- \_\_\_ \_\_\_ Are storage areas kept free of tripping, fire, explosion, and pest hazards?

**Employee Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

# Addendum

## Montana State Library Telework Agreement

### Telework Site

Employee Name: \_\_\_\_\_  
Location (specify location if in home): \_\_\_\_\_  
Address: \_\_\_\_\_

### Montana State Library Work Site

MSL makes shared work space available for remote staff at MSL. This space includes a phone and computer workstation.

### Schedule

\_\_\_\_\_ **Fixed:** Telework days and hours are scheduled and will not be substituted without advance approval of the manager.  
Telework Days: Monday \_\_\_ Tuesday \_\_\_ Wednesday \_\_\_ Thursday \_\_\_ Friday \_\_\_ Saturday \_\_\_  
Telework Time: Start: \_\_\_\_\_ Finish: \_\_\_\_\_ Total Hours Per Day: \_\_\_\_\_  
Lunch: \_\_\_\_\_ to \_\_\_\_\_

\_\_\_\_\_ **Flexible Schedule:** Telework days may fluctuate weekly and will be mutually agreed upon by the supervisor and the employee.  
Telework days permitted each week: \_\_\_\_\_  
Hours of work permitted each week: \_\_\_\_\_  
The supervisor must approve use of sick leave, vacation, comp time, or other types of leave in advance. Overtime must be approved in advance by the supervisor.

### Telework tasks and duties

(Describe the telework tasks, duties, and expectations)  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

### Equipment

The agency is not responsible for lost or damaged private property. The state may pursue recovery from the employee for state-owned property deliberately or negligently damaged or destroyed while in the teleworker's care, custody, or control. In the event of state-owned equipment failure, the teleworker must immediately notify their supervisor and may be assigned to another project and/or work location. The employee shall surrender all state-owned equipment and data documents immediately upon request.

### Expenses

The agency will pay for the following expenses:

- Business-related telephone calls Yes \_\_\_\_ No \_\_\_\_
- Maintenance, repairs, or service, to state-owned equipment Yes \_\_\_\_ No \_\_\_\_
- Broadband Connection Yes \_\_\_\_ No \_\_\_\_
- Other: \_\_\_\_\_

Requests for reimbursement will be submitted according to agency policy for reimbursable expenses.

The agency will not pay for the following expenses:

- Maintenance, repairs, or service, to privately owned equipment.
- Utility costs associated with the use of the computer or occupation of the alternate work site.
- Homeowners' or Renters' Liability insurance to cover the use of space in the alternate work site.

### **Furnishings and Supplies**

Teleworkers will provide their own office furnishings and supplies. If the interest of the agency requires the employee to telework, agency management may provide the following state-owned office furnishings and supplies:

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### **Communication**

Will the following be used?

- Call forwarding Yes \_\_\_\_ No \_\_\_\_
- Answering machine or voice mail Yes \_\_\_\_ No \_\_\_\_
- Receptionist or co-workers take calls Yes \_\_\_\_ No \_\_\_\_
- Video conferencing Yes \_\_\_\_ No \_\_\_\_
- E-mail Yes \_\_\_\_ No \_\_\_\_
- Other \_\_\_\_\_

The employee will call the office to obtain messages at least \_\_\_\_\_ times a day.

Call-in times: \_\_\_\_\_

The employee will promptly notify the supervisor when unable to perform work assignments due to equipment failure or other unforeseen circumstances.

Other procedures: \_\_\_\_\_

### **Terms of the Agreement**

Date telework begins: \_\_\_\_\_

Date telework agreement reviewed (minimum of annually): \_\_\_\_\_

### **Termination**

The department may terminate this agreement at any time. When possible the supervisor and/or employee will give 30 days advance notice prior to terminating this agreement.

**Other**

Describe any other conditions of this Agreement:

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**Acknowledgement**

By signing this telework agreement, I acknowledge that I have read and understand the state's and agency's telework policies and this agreement. I agree to comply with their terms and conditions. I understand this agreement's purpose is to set out the terms of my telework. This agreement is not an employment contract nor is it an amendment to one.

\_\_\_\_\_ Date: \_\_\_\_\_

Employee's Signature

\_\_\_\_\_  
Employee's name printed

By signing this telework agreement, I certify that I have discussed the terms and conditions of the state's and agency's telework policy and this agreement with the above-signed employee. The employee has been given an opportunity to ask questions and indicates an understanding of the agreement and the policy.

\_\_\_\_\_ Date: \_\_\_\_\_  
Supervisor's Signature

\_\_\_\_\_  
Supervisor's name printed

\_\_\_\_\_  
State Librarian's Signature

## **Montana State Library Telework Policy**

### **Policy:**

It is the policy of the State Library Commission to allow teleworking when the arrangement is mutually beneficial to Montana State Library and the employee. Management should use its discretion to consider an employee's request to telework in relation to the MSL's operating and customer needs. Employees will be approved for telework based on job suitability, the likelihood of success as teleworkers, and the supervisor's ability and willingness to manage telework employees.

This policy:

1. establishes uniform guidelines for administering the telework program for the Montana State Library;
2. ensures guidelines are consistently applied; and
3. communicates teleworking to employees as an available work option for approved positions.

### **A. Guidelines**

1. Work products, documents, and records used or developed while teleworking shall remain the property of the agency and are subject to agency policies regarding confidentiality and records retention.
2. Telework shall be voluntary. Agency management or the employee may discontinue the telework agreement by giving a minimum of one week's notice.
3. Teleworkers must comply with this policy and all state or agency-specific policies and procedures.
4. Conditions of employment shall remain the same as for non-telework employees. Employee salary, benefits and employer-sponsored insurance coverage shall not change as a result of telework.
5. Business meetings shall not be held at the telework site unless approved by the supervisor.
6. Employees shall not act as primary care giver for dependents nor perform other personal business during hours agreed upon as telework, unless approved by the supervisor.

### **B. Telework Agreement Requirements**



1. The addendum to this policy contains a model agreement.
2. A telework agreement is required for all telework expected to last longer than two weeks.
3. The employee, supervisor, and the State Librarian must sign the agreement. The agreement must contain a completed and signed "Safety and Security Checklist" and "Hardware and Software Inventory List".
4. The agreement shall specify the work schedule. The work schedule shall comply with Montana wage and hour requirements and the Fair Labor Standards Act regulation.
5. The agreement shall be reviewed and renewed annually by the manager and employee, or when there is a change in supervisor, job responsibilities, work circumstances, or performance.
6. The agreement must be filed in the employee's personnel file.

### **C. Telework Site**

1. MSL management must approve alternate work areas.
2. Designated work areas must be kept clean, professional, and safe at all times by the employee. In the case of injury occurring during telework hours, the employee shall immediately, or as soon as practical, report the injury to the supervisor.

### **D. Computer Equipment and Software for Teleworking:**

1. State-owned computer equipment and software at the telework site shall be used for agency business only.
2. The telework agreement must list all state-owned equipment, services, or software provided by the agency. The agreement must also specify the responsible party for maintaining, servicing, and repairing state-owned equipment issued.
3. MSL is not responsible for cost, repair, or service when authorizing teleworkers to use their own equipment.
4. Teleworkers may provide their own office furnishings and supplies. If MSL requires the employee to telework, agency management may provide state-owned office furnishings and supplies.

### **E. Security of Confidential Agency Information**

1. The state and agency-specific security and confidentiality policy provisions and requirements apply in the alternate worksite while teleworking.
2. All confidential information in the possession of teleworkers must be kept confidential at all times.

### **III. Resources:**

State of Montana Telework Policy (MOM #03-0175)  
State of Montana Telework Fact Sheet with links  
Telework , Section 2-18-120, Montana Code Annotated 4 of 4

### **IV. Definitions:**

1. **Telework site** means a worksite alternate to MSL. It may be in the employee's home or in a building owned or leased by the state that is closer to the employee's home than MSL.
- 2 **Telework** means a flexible work arrangement where selected employees work one or more days a week from their home or at a site near the home instead of physically traveling to MSL.

# Montana State Library Commission Policy

## Drug Free Workplace

The Montana State Library Commission is committed to a drug free workplace. It is the policy of the State of Montana and of the State Library that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance in the workplace by any employee of this agency is prohibited. An employee who violates this prohibition is subject to disciplinary action, up to and including discharge, as provided in the state's discipline policy. Disciplinary action may include required participation in an approved drug abuse assistance and rehabilitation program.

In compliance with the Drug free Workplace Act, an employee who is performing work under a covered federal grant will:

1. Abide by the terms of the state's policy statement requiring a drug free workplace, and
2. Notify the agency of any conviction of a criminal drug statute which is the result of a violation which occurred in the workplace. The agency must be notified no later than five days after the conviction.

The employee's supervisor and the State Librarian shall take one of the following actions within 30 days of receiving notice of a conviction from an employee:

1. Take appropriate disciplinary action against the employee, up to and including discharge, or
2. Require such employee to participate satisfactorily in an approved drug abuse assistance or rehabilitation program.

State Library administrative staff will provide a list of local drug counseling and rehabilitation agencies, as well as educational materials relating to drugs and alcohol, through the state's Employee Assistance Program.

New employees will be made aware of this policy as part of the orientation process. Drug awareness information will be an agenda item for at least one staff meeting per year, or more frequently as necessary.

This policy statement is adopted in compliance with the Drug free Workplace Act of 1988 (Pub. L. 100-690, Title V, Sub title D).

# **Montana State Library Commission Policy**

## **Drug & Alcohol Free Workplace**

### **Purpose**

The Montana State Library will provide a workplace for employees and customers, free from inappropriate use and possession of controlled substances and alcohol.

“Controlled substance” means a controlled substance in Schedules I through V of the Controlled Substances Act (U.S.C ) and as further defined by regulation at 21 C.F.R. 1308.11 through 1308.15.

### **Policy Statement**

It is the policy of the State of Montana and of the State Library that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance in the workplace by any employee of this agency is prohibited. The unlawful buying, selling, bartering, exchanging, giving away, or offering to buy, sell, barter, exchange, or give away of any dangerous drug in the workplace by any employee is also prohibited. Except as provided for in the State Conduct and Use Policy for State Space and State Grounds in Helena, the possession or use of alcohol in any state facility is strictly forbidden. In accordance with the Conduct and Use Policy, alcoholic beverages may be served by an alcoholic beverage licensee at authorized events if approved by the State Librarian.

This Policy Statement is adopted in compliance with Drug Free Workplace Act of 1988 (Pub. L. 100-690, Title V, Subtitle D).

An employee who violates this prohibition is subject to disciplinary action, up to and including discharge, as provided in the Discipline Handling Policy, ARM 2.21.6505 et seq.. Disciplinary action may include required participation in an approved drug abuse assistance and rehabilitation program.

In compliance with the Drug Free Workplace Act, an employee who is performing work under a covered federal grant will:

1. Abide by the terms of the state’s policy statement requiring a drug free workplace, and
2. Notify the agency of any conviction of a criminal drug statute which is the result of a violation which occurred in the workplace. The agency must be notified no later than five days after the conviction.

The employee’s supervisor and the State Librarian shall take one of the following actions within 30 days of receiving notice of a conviction from an employee:

1. Take appropriate disciplinary action against the employee, up to and including discharge, or

2. Require such employee to participate satisfactorily in an approved drug abuse assistance or rehabilitation program.

State Library administrative staff will provide a list of local drug counseling and rehabilitation agencies, as well as educational materials relating to drugs and alcohol, through the state's Employee Assistance Program.

New employees will be made aware of this policy as part of the orientation process. Drug awareness information will be an agenda item for at least one staff meeting per year, or more frequently as necessary.

Montana State Library  
Drug & Alcohol Free Workplace Policy Notification

I have completed reading the Montana State Library Drug & Alcohol Free Workplace Policy. My signature below indicates that I understand my responsibilities with regard to this policy.

\_\_\_\_\_  
Employee

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name

From the U.S. Code Online via GPO Access  
[wais.access.gpo.gov]  
[Laws in effect as of January 3, 2005]  
[Document not affected by Public Laws enacted between  
January 3, 2005 and November 8, 2006]  
[CITE: 41USC701]

## TITLE 41--PUBLIC CONTRACTS

### CHAPTER 10--DRUG-FREE WORKPLACE

#### Sec. 701. Drug-free workplace requirements for Federal contractors

##### (a) Drug-free workplace requirement

###### (1) Requirement for persons other than individuals

No person, other than an individual, shall be considered a responsible source, under the meaning of such term as defined in section 403(8) of this title, for the purposes of being awarded a contract for the procurement of any property or services of a value greater than the simplified acquisition threshold (as defined in section 403(11) of this title) by any Federal agency, other than a contract for the procurement of commercial items (as defined in section 403(12) of this title), unless such person agrees to provide a drug-free workplace by--

(A) publishing a statement notifying employees that the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited in the person's workplace and specifying the actions that will be taken against employees for violations of such prohibition;

(B) establishing a drug-free awareness program to inform employees about--  
(i) the dangers of drug abuse in the workplace;  
(ii) the person's policy of maintaining a drug-free workplace;  
(iii) any available drug counseling, rehabilitation, and employee assistance programs; and

(iv) the penalties that may be imposed upon employees for drug abuse violations;

(C) making it a requirement that each employee to be engaged in the performance of such contract be given a copy of the statement required by subparagraph (A);

(D) notifying the employee in the statement required by subparagraph (A), that as a condition of employment on such contract, the employee will--

(i) abide by the terms of the statement; and  
(ii) notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than 5 days after such conviction;

(E) notifying the contracting agency within 10 days after receiving notice under subparagraph (D)(ii) from an employee or otherwise receiving actual notice of such conviction;

(F) imposing a sanction on, or requiring the satisfactory participation in a drug abuse assistance or rehabilitation program by, any employee who is so convicted, as required by section 703 of this title; and

(G) making a good faith effort to continue to maintain a drug-free workplace through implementation of subparagraphs (A), (B), (C), (D), (E), and (F).

###### (2) Requirement for individuals

No Federal agency shall enter into a contract with an individual unless such individual agrees that the individual will not engage in the unlawful manufacture,

distribution, dispensation, possession, or use of a controlled substance in the performance of the contract.

(b) Suspension, termination, or debarment of contractor

(1) Grounds for suspension, termination, or debarment

Each contract awarded by a Federal agency shall be subject to suspension of payments under the contract or termination of the contract, or both, and the contractor thereunder or the individual who entered the contract with the Federal agency, as applicable, shall be subject to suspension or debarment in accordance with the requirements of this section if the head of the agency determines that--

(A) the contractor violates the requirements of subparagraph (A), (B), (C), (D), (E), or (F) of subsection (a)(1) of this section; or

(B) such a number of employees of such contractor have been convicted of violations of criminal drug statutes for violations occurring in the workplace as to indicate that the contractor has failed to make a good faith effort to provide a drug-free workplace as required by subsection (a) of this section.

(2) Conduct of suspension, termination, and debarment proceedings

(A) If a contracting officer determines, in writing, that cause for suspension of payments, termination, or suspension or debarment exists, an appropriate action shall be initiated by a contracting officer of the agency, to be conducted by the agency concerned in accordance with the Federal Acquisition Regulation and applicable agency procedures.

(B) The Federal Acquisition Regulation shall be revised to include rules for conducting suspension and debarment proceedings under this subsection, including rules providing notice, opportunity to respond in writing or in person, and such other procedures as may be necessary to provide a full and fair proceeding to a contractor or individual in such proceeding.

(3) Effect of debarment

Upon issuance of any final decision under this subsection requiring debarment of a contractor or individual, such contractor or individual shall be ineligible for award of any contract by any Federal agency, and for participation in any future procurement by any Federal agency, for a period specified in the decision, not to exceed 5 years. (Pub. L. 100-690, title V, Sec. 5152, Nov. 18, 1988, 102 Stat. 4304; Pub. L. 103-355, title IV, Sec. 4104(d), title VIII, Sec. 8301(f), Oct. 13, 1994, 108 Stat. 3342, 3397; Pub. L. 104-106, div. D, title XLIII, Secs. 4301(a)(3), 4321(i)(13), Feb. 10, 1996, 110 Stat. 656, 677.)

## Amendments

1996--Subsec. (a)(1). Pub. L. 104-106, Sec. 4321(i)(13), substituted "(as defined in section 403(12) of this title)" for "as defined in section 403 of this title" in introductory provisions.

Pub. L. 104-106, Sec. 4301(a)(3)(A), substituted "agrees to" for "has certified to the contracting agency that it will" in introductory provisions. Subsec. (a)(2). Pub. L. 104-106, Sec. 4301(a)(3)(B), substituted "individual agrees" for "contract includes a certification by the individual". Subsec. (b)(1). Pub. L. 104-106, Sec. 4301(a)(3)(C), redesignated subpar. (B) as (A), struck out "such certification by failing to carry out" after "contractor violates", redesignated subpar. (C) as (B), and struck out former subpar. (A) which read as follows: "the contractor or individual has made a false certification under subsection (a) of this section;"

1994--Subsec. (a)(1). Pub. L. 103-355 substituted "greater than the simplified acquisition threshold (as defined in section 403(11) of this title) by any Federal agency,



other than a contract for the procurement of commercial items as defined in section 403 of this title," for ``of \$25,000 or more from any Federal agency" in introductory provisions.

#### Effective Date of 1996 Amendment

For effective date and applicability of amendment by Pub. L. 104-106, see section 4401 of Pub. L. 104-106, set out as a note under section 251 of this title.

#### Effective Date of 1994 Amendment

For effective date and applicability of amendment by Pub. L. 103-355, see section 10001 of Pub. L. 103-355, set out as a note under section 251 of this title.

#### Effective Date

Section 5160 of Pub. L. 100-690 provided that: ``Sections 5152 and 5153 [enacting this section and section 702 of this title] shall be effective 120 days after the date of the enactment of this subtitle [Nov. 18, 1988]."

#### Short Title

Section 5151 of Pub. L. 100-690 provided that: ``This subtitle [subtitle D (Secs. 5151-5160) of title V of Pub. L. 100-690, enacting this chapter] may be cited as the `Drug-Free Workplace Act of 1988'."

#### Consistency of Regulations With International Obligations of United States; Extraterritorial Application

Section 4804 of Pub. L. 100-690 required that regulations promulgated by agency heads be consistent with international obligations of United States, prior to repeal by Pub. L. 103-447, title I, Sec. 103(b), Nov. 2, 1994, 108 Stat. 4693.

# Montana State Library Commission Policy

## Disruptive Patrons

Policy Statement: The Montana State Library is dedicated to providing access to information and to providing patrons and employees the right to use materials and service without being disturbed, impeded, or endangered. The Montana State Library will provide a secure and comfortable environment to patrons and staff. The following examples of disruptive behavior are for illustration only and are not permitted in the library:

- quarreling, challenging to fight, or fighting
- using threatening, profane, or abusive language
- rendering the free ingress or egress to public or private places impassable
- interfering with the work of other patrons and/or library staff
- use of the Public Access Computers that is contrary to the library computer use guidelines

### Procedures

- A patron who engages in any activity which disrupts the use of library facilities by patrons or disrupts the ability of staff to perform its duties will be asked to cease such activity immediately by library staff.
- If the patron fails or refuses to comply with a request, or responds to the request in an abusive fashion, he or she will be required to leave the library premises immediately for the remainder of that calendar day. If he or she refuses to leave, library staff will summon capitol security.
- Library staff will record disruptive patron behavior in an incident log to be shared with library management.
- If the library staff believes the actions of a person constitutes an immediate threat to patrons or staff, the library staff will call 911 as outlined in the Justice Building Emergency Action Plan; no warning to the patron is necessary.

## Montana State Library Commission Policy

### Code of Conduct

The Montana State Library wishes to create a safe and pleasant environment for all library patrons and staff. In order to ensure that everyone can use the Library's resources effectively, the Library requires all patrons to comply with the Code of Conduct.

The following activities are prohibited:

1. Engaging in any activity that violates federal, state, and/or local law.
2. Intimidating, harassing, and threatening behavior toward any person in the library, including but not limited to yelling, threats of violence, obscene or abusive language, staring, following, unwanted attention.
3. Intentionally making loud and unreasonable noises, using offensive words, or fighting.
4. Using electronic devices such as cell phones and computers in a manner that is disruptive.
5. Interfering with the work of other patrons and/or library staff.
6. Removing of library materials without proper authorization.
7. Obstructing library equipment, resources, or facilities.
8. Destroying, damaging, or misusing library property.
9. Consuming food in the library.
10. Leaving unattended personal items in the library. The library assumes no responsibility for lost, stolen, or unattended personal items, and items left longer than 30 minutes may be removed.
11. Smoking.
12. Sleeping.
13. Possessing, using, or being under the influence of alcohol or controlled substances.
14. Bringing animals other than service animals inside the library.
15. Remaining in the library after closing or after being asked to leave.
16. Bringing weapons into the library.
17. Acting in a way that is harmful to self or others.
18. Using the Public Access Computers in a manner contrary to the computer use policy.
19. Failing to comply with the reasonable request of a library staff member.

Patrons who violate any of these rules may be asked to leave the library. If a patron refuses to leave the library when asked, library staff will summon capitol security. Serious or repeated violation of any of these rules may result in the patron being banned from the library. Bans may be appealed to the State Librarian.

If the library staff believe the actions of a person constitutes an immediate threat to patrons or staff, the library staff will call 911 as outlined in the Justice Building Emergency Action Plan; no warning to the patron is necessary.

# Memo

**To:** Montana State Library Commission

**From:** Jennie Stapp, State Librarian

**Date:** December 5, 2016

**Re: Recommendation for approval of the FY '18 Land Information Plan from the Montana Land Information Advisory Council**

The Montana Land Information Advisory Council (MLIAC) approved the FY '18 Land Information Plan at its December 5, 2016 meeting. Staff and the Council have discussed adopting a two-year Land Plan that allows more time for grantees and staff to work towards the Land Plan goals and to more effectively evaluate work resulting from the Land Plan in order to better inform future planning. To that end, this year's Land Plan is largely an update of the Land Plan that was approved for FY '17.

We respectfully submit the plan to the Commission with a recommendation for approval at the December Commission meeting.

# Montana Land Information Plan

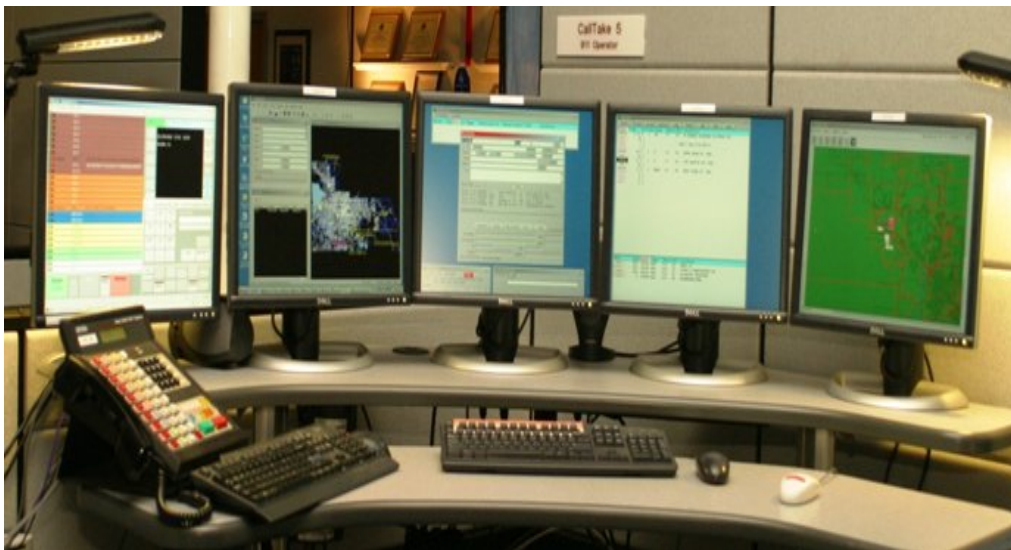
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***Effective:***

***July 1, 2017 to***

***June 30, 2018***

***(State Fiscal Year  
2018)***



*Photo courtesy of the National Public Safety Telecommunications Council*

Produced by the Montana State Library in coordination with the Land Information Plan Subcommittee of the Montana Land Information Advisory Council pursuant to [§ 90-1-404\(c\), MCA](#), of the Montana Land Information Act (Senate Bill 98) and Administrative Rule IV of the Montana Land Information Act

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## ***I. Introduction and Overview***

The Montana Land Information Act (MLIA) requires that the Montana Land Information Advisory Council (MLIAC or the Council), under the legislative authority of the Montana State Library (MSL), prepare an annual Land Information Plan (the Montana Land Information Plan or the Land Plan) that describes Montana's priority needs to collect, maintain, and disseminate land information ([MCA 90-1-404\(c\)](#)). Those priority needs are used in part to allocate funds from the state land information account. In order to define the priority needs, MSL has solicited advice from the Council, the Montana Spatial Data Infrastructure (MSDI) Theme Stewards, and other stakeholders. Priorities must be consistent with the intent of the MLIA which recognizes the importance of digital land information for all sectors of Montana society. It also recognizes the need to ensure that digital land information is:

- Collected consistently – in accordance with standards;
- Maintained accurately - in accordance with standards; and
- Made available in common ways for all potential uses and users, both private and public.

The priorities documented in this plan describe tasks that the Council, as representatives of the larger Montana GIS community, deem critical to the work of Montana GIS users and are high priorities for data integration, maintenance and require statewide coordination.

These priorities represent key areas of focus during the plan period and are in addition to the day to day work that is conducted by MSL staff and local state and federal partners to develop and use the 15 Framework themes formally recognized by the Council and collectively referred to as the MSDI. Readers are encouraged to review online summary information about the MSDI (<http://geoinfo.msl.mt.gov/Home/msdi>) to learn more about theme data, its construction and maintenance, theme stakeholders, funding and support, cross-MSDI theme relationships and current related projects.

The Land Plan also reflects Montana's vision for a spatial data infrastructure that encourages and integrates data developed at the local level by those who are considered the authoritative data sources into a statewide resource that meets the needs of all Montana stakeholders. Grant priorities documented in the plan support this vision.

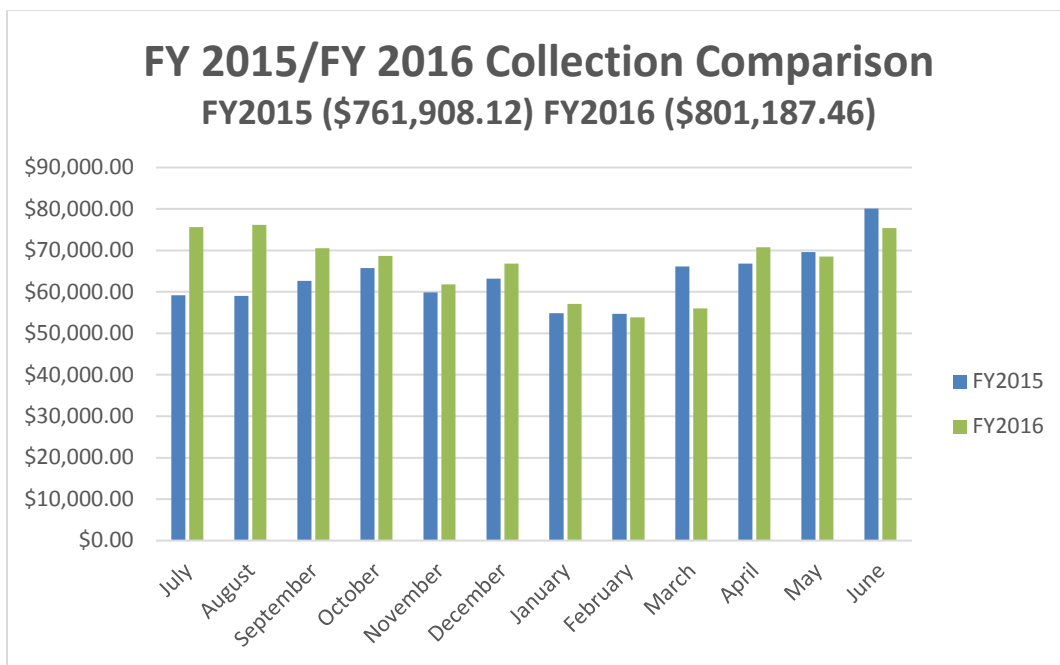
Finally, as is required by statute, the Land Plan contains a budget designed to accomplish the goals of the plan. By defining annual priorities, the plan provides a roadmap that directs the collective efforts of MSL, the Council, and MSDI Theme Stewards. This plan also provides guidance for our partners including the Montana Association of Geographic Information Professionals (MAGIP), GIS practitioners and others interested in contributing to the development and maintenance of the MSDI and furthering the interests of GIS in Montana.



## II. Funding, Timeline and Grant Process

MSL administers funds collected through the state land information account. These funds are generated through collection of recordation fees as described in [MCA 7-4-2637 \(\(3\) iii\)](#). This account represents a significant funding source to accomplish the priorities of the Land Plan. As is documented in the MSDI summary information referenced above and the Land Plan budget, MSL and other GIS partners also rely heavily on additional sources of funding to support GIS in Montana.

Since established in 2005, the state land information account has proven to be a source of funding subject to a variety of external factors including fluctuations in real estate markets and the oil and gas industry. Currently collections appear to be increasing from an all-time low in FY 2014 however collections have never reached the point where they can support MSDI needs and a robust grant program. For this reason, the budget for this year's Land Plan shows only a modest increase over the FY 2017 plan. The budget still remains well below previous years' budgets and projected funding does not support overall needs for MSDI and grant funding.



MSL makes use of MLIA funding for MSDI and GIS Coordination priorities specified in this plan. To document specific work objectives to address the priority goals for data development and GIS Coordination, MSL, in conjunction with the other MSDI Stewards will submit a work plan by May 1, 2017 for Council review. Some MSDI tasks may be undertaken by parties other than MSL; however, MSL will assume ultimate accountability for meeting the plan's objectives. These objectives documented in the work plan will be met over the course of state fiscal year 2018 (July 1, 2017 through June 30, 2018). Publication of the Land Plan in January informs the MLIA grant application process. The Council seeks grant applications from local, regional and tribal jurisdictions that will address the Land Plan grant

priorities through one-year MLIA grants. In accordance with Administrative Rule 10.102.9105 the grant application process will be announced by January 15, 2017. Announcements will be made through MAGIP, the Montana Association of Counties (MACo), the MLIAC distribution list and other communication channels. Grant applications must be received by MSL by February 15, 2017. Review and ranking of grant applications is conducted by a subcommittee of the Council. Final grant awards are approved by the MSL Commission in June, 2017. Grants are administered by MSL and are awarded for the period beginning July 1, 2017. Grant work should be completed by June 30, 2018.

### ***III. FY 2018 Land Plan Priorities***

[Section 90-1-404, MCA](#), requires MSL to administer the MLIA. This work is funded in part through the state land information account as well as additional funding sources including state general fund, (see Section IV) grants, and contracts.

#### **Administrative and Coordination Functions**

**MSL Duties** - MSL takes pride in carrying out this work in a manner that is efficient and accountable.

MSL will:

- Carry out the duties of the department as described in [§ 90-1-404, MCA](#);
- Administer the MLIA grant program; and
- Staffing support for the Council.

**MSDI Framework** - To ensure that MSDI framework layers are developed, integrated, maintained, disseminated, and preserved in an efficient and standardized manner, MSL will:

- Conduct new data collection, ongoing maintenance data discovery through the Montana Data List, data delivery via download and web services, archival assessment and other projects as per the MSDI work plan;
- Engage stakeholder work groups to seek input on the priorities and best practices for data development;
- Support data partners through on-site visits, on-line training and other activities that promote data and technology transfer;
- Continue to expand a Montana spatial data archive that includes annual MSDI entries; and
- Develop an annual MSDI work plan, to be incorporated into the MSL work plan that prioritizes actions, supports data partners and identifies funding needs.

**GIS Coordination** - MSL is responsible for GIS coordination through outreach and education that is targeted to reach the GIS community. Specifically, MSL will:

- Support the creation of metadata that can be incorporated into the MSL GIS Data List;

- Support local data providers as they adopt appropriate data standards and data collection methodologies;
- Provide technical support to users of the MSDI;
- Preserve and improve relationships with MSDI data providers through support and local visits that foster knowledge transfer;
- Attend appropriate meetings and conferences including MACo, Montana Association of Planners, Montana State IT Conference, MAGIP, the National States Geographic Information Council and other meetings of subject matter experts;
- Advocate for the use of MSDI data;
- Provide consultation and advice to MLIA grant applicants as they strive to best meet the MLIA grant criteria.

### **Priorities for data development, integration, and coordination**

In addition to the day to day administrative and coordination functions, the Land Plan identifies the following priorities for data development, integration, and coordination. Local and tribal entities are encouraged to apply for grants that build capacity at the local level as described in the following categories.

#### **1. Land Records**

The need to improve the accuracy of land record information continues to be critical for the overall accuracy of the MSDI and numerous other GIS datasets. Hundreds of townships are still in need of accuracy enhancement. Each enhancement requires planning, technical expertise, and communication so users know when data has changed. From a technical perspective the projects require:

1. Improved tools for surveyors to provide data they have already collected;
2. Alignment of coincident data such as boundaries;
3. Timely and efficient change management that provides users notifications when changes to the CadNSDI (the geospatial representation of the Public Land Survey System (PLSS)) are planned and when they actually happen.

#### **1.a. Next Generation 9-1-1 Data Standardization**

Current 9-1-1 systems are reaching end of life and the use of mobile devices as replacements for traditional land lines is ballooning. Support for the creation of a statewide Next Generation 9-1-1 (NG 9-1-1) system that utilizes standardized data incorporates MLIA's most basic vision; "...digital land information is collected consistently, maintained accurately in accordance with standards..." ([§ 90-1-402, MCA](#)) While compliance with the National Emergency Numbers Association standards for address points, road centerlines and emergency responder jurisdictional boundaries will require both funding and effort to achieve, the benefit is that these standards can improve the data currently contained in the statewide MSDI data sets. This is a critical time for local data providers need to assess, improve, and build workflows that will maintain this data in order to be ready for NG 9-1-1 implementation.

MSL will continue to serve as the lead subject matter expert to the 9-1-1 Advisory Committee. MSL will continue to attend local government coordination meetings to provide guidance regarding GIS data needs and will ensure staff aids local governments by reviewing, assessing, improving and maintaining street centerlines, address points and jurisdictional boundaries that will be required for NG 9-1-1.

MSL will continue to review NG 9-1-1 relevant MSDI datasets including road centerlines, address points and jurisdictional boundaries, to identify data improvement needs as we learn more about the NENA standards and/or as the state adopts NG 9-1-1 data standards.

Data partners should apply for grants that would enable them to assess, improve and maintain required NG 9-1-1 data, including road centerlines, address points and jurisdictional boundaries, according to the NENA standards.

### **1.b. County Land Records**

MSL manages the Cadastral Administration through Streamlined Parcel Adjustment Workflows (CATSPAW) project to make use of ESRI's parcel fabric to improve vertical integration of the data within the Montana Cadastral Database. This work improves the accuracy of local control data, tax parcel data, administrative boundaries, etc., and aligns that data with aerial imagery. This work improves the quality of statewide MSDI data and it ensures the continued value of the Council's multi-year investment in county grants to support the collection of local Geographic Coordinate Database points.

Ongoing work to support the Montana CadNSDI will require continued coordination with the Bureau of Land Management and local governments to identify and prioritize areas for accuracy adjustments. MSL will make accuracy adjustments to the CadNSDI by incorporating additional control data created from corner recordation records held by county governments and new land surveys. In areas where the CadNSDI has been adjusted, MSL will vertically align all associated tax parcels and administrative boundaries.

Data partners should apply for grant funding that enables them to continue to collect local land records and control data that will develop and enhance administration of county records.

## **2. *Natural Resource Data***

Substantial resources from State and Federal partners are invested every year for the collection, maintenance, and delivery of natural resource data. For these efforts to benefit the MSDI natural resource themes, specifically Hydrography, Land Use/Cover, and Wetlands, the activities of individual agencies need improved coordination and communication to identify priority data collection and integration strategies and update schedules

### **2.a. Montana Hydrography Dataset**

The Hydrography theme lead at MSL is the state steward for the National Hydrography Dataset (NHD). The United State Geological Survey (USGS) NHD data structure and editing routines make it difficult for Montana to support the federal/state stewardship model while still attempting to meet state and local hydrography needs. As a result, over the last several years, MSL, with input from the Hydrography Working Group, has begun to focus work on a Montana Hydrography Data which better aligns to the needs of the partners as opposed to the current NHD. Some of these needs include keeping this critical data current as there are constant natural changes each year in water quantity and flow, and adding more local-scale data.

MSL will continue to coordinate the Montana Hydrography Working Group and hold meetings approximately quarterly. This group is the primary sounding board for State agencies to express their hydrography data needs. The DNRC, Department of Environmental Quality, Fish Wildlife and Parks, and the Montana Climate Office are regular, active participants.

MSL will continue to coordinate with the DNRC to carry out Water Information System recommendations made in the 2015 State Water Plan.

MSL will continue to develop workflows that expedite the MSDI hydrography dataset editing process, especially when revisions are obtained in bulk or extracted from existing spatial datasets. Editing efforts will primarily focus on improving the spatial alignment of streams, rivers, and lakes and adding more local-scale features, such as canals, ditches, springs, and small dams and reservoirs that are not currently in the statewide dataset. Additional attention will be given to improving feature attributes, primarily flow classification (perennial, intermittent, or ephemeral).

MSL will continue to coordinate editing efforts with Glacier National Park and to seek additional sub-stewards of the hydrography dataset. Data partners are encouraged to apply for grant funds to support development of local-scale spatial data that can be added to the statewide dataset, such as canals and ditches, irrigation infrastructure, and storm water drainage systems.

## 2.b. Land Cover

There is a critical need for consistent annual funding to support the Land Cover and Wetlands themes. The Land Cover theme cannot be treated as a stationary product that has limited need for updates. Aggressively continuing work on the Wetlands theme cannot be treated as optional. These themes provide essential information to public and private land managers and the need for a long-term, sustainable funding strategy to support them is imperative. Given the continued reduction in MLIA funds, the current data priorities of MSL presented in this plan do not address the needs of these vital data sets. Just as the statutory responsibility of MSL for the Water Information System provided leverage to secure funding for the Water Information Manager position, MSL's statutory responsibility for the Natural Resource Information System may provide an opportunity to obtain funding sources through future legislative action for the long-term needs of the Land Cover and Wetlands themes.

The Montana Natural Heritage Program (MTNHP or the Heritage Program) acts as the state steward for the Land Use/Land Cover (LULC) dataset. In prior years, staff and resources at the UM Spatial Analysis Lab were utilized to update and maintain this data. While MTNHP was able to update this data during FY2016, this was done using one-time project funding and there is still no sustainable funding for future updates. For successful implementation of statewide natural resource planning activities, such as the Governor's Sage Grouse Habitat Conservation Program and forest and Range Management Initiative, there is a critical need for the LULC mapping to be kept current and ideally incorporate data with greater spatial resolution.

The DNRC and the US Forest Service map fire boundaries yet neither agency coordinates the delivery of this data to the LULC theme steward to assist with updates to the Land Cover Mapping and there is no established annual schedule for updating the Land Cover mapping to reflect changes due to forest and grassland fires. Likewise, there is no established interagency protocol or schedule for incorporating land use changes mapped by the State Department of Revenue as part of their land use taxation process. This is also the case for LULC changes mapped by county and local jurisdictions. Data from natural resource inventories conducted by Federal agencies such as the Natural Resources Conservation Service (NRCS) have also mapped classes of Land Use and Land Cover that could be incorporated and improve the MSDI LULC data. These and other projects have also acquired and pre-processed the Landsat satellite imagery needed for updating the MSDI LULC. Yet without funding for MTNHP staff with the skills required for development and maintenance of the MSDI LULC, not only will the data become further out of date, but it is unlikely that the Heritage Program will be able to retain the essential staff and skillset to perform future updates.

## 2.c. Wetlands

MTNHP had hoped to have a single statewide MSDI theme for wetlands in spring of 2016 by including historic (1980s) National Wetlands Inventory (NWI) mapping. However, after further investigation, this NWI mapping was found to be composed of a combination of:

Outdated Mapping (NWI Legacy): This is based on ink lines drawn on aerial photographs taken from 1980-1989 at a scale of 1:58,000 to 1:65,000 that were later transferred to digital file. Only wetland features were mapped and classified; riparian areas were NOT mapped. While cartographers attempted to capture all wetlands in Montana regardless of size, the imagery did not support it. Therefore, small or linear wetlands are represented as points or lines, or not at all. While this mapping met FGDC standards at the time it was created, it no longer meets current FGDC standards.

Incomplete Mapping (NWI Scalable): This is a recent addition (2012-2014) to the NWI prepared by the USFWS using an automated ArcMap mapping process and is intended to be an interim product. The data are generalized wetland mapping and are to be used for landscape level (small scale) use only. According to the USFWS, "these interim products may include map information at different scales, classification level(s), or resolution." In Montana, creation of the

scalable layer involved applying the Cowardin classification system to the “swamp/marsh” features on USGS Topographic maps, some of the river and lake features in the USGS NHD and other ancillary data layers. The incomplete mapping does not satisfy any FGDC standard.

In order to fully inform data users of the differences and limitations associated with these wetland mapping products as compared to the recent MTNHP wetland and riparian mapping product, MTNHP will make all three datasets and associated metadata available for separate download on the Montana Wetland and Riparian Framework MSDI download page. MTNHP will continue to seek funding for recent wetland and riparian mapping, focusing on areas where the absence of riparian mapping compromises the value of the data for planning and analysis (e.g., the Rocky Mountain Front) or where land use change has rendered the other datasets obsolete (e.g., portions of the Hi-Line).

### 3. Local and Tribal GIS development

The results of several grants from previous cycles that provided funding for rural county Web GIS development were impressive. The challenge is to keep this momentum going for other rural counties not yet invested in the technology. MSL, in coordination with local entities, will:

- Explore opportunities to create regional GIS consortiums that leverage a multi-jurisdictional approach to problem solving using GIS analysis to demonstrate the value of GIS to policy makers; and,
- Encourage localized GIS solutions that demonstrate the value of GIS in improving the quality of life for Montana citizens and building grass roots support for location based services.

## IV. FY 2018 Land Plan Budget

The FY 2018 Land Plan Budget represents a modest increase of \$21,500 over FY 2017. This increase is reasonable given the current slight uptick in revenues in the MLIA account. A final determination for the amount of available grant funds will be made at the end of March, 2017, in accordance with administrative rule. If additional funds are available, there may be an opportunity to further increase grant funding.

Digital Library	General Fund**	MLIA Funds	NRIS State Core	Coal Tax	Anticipated Contracts/Grants	Total
<b>PERSONAL SERVICES *</b>	722,356	495,000			80,000	1,297,356
<b>OPERATIONS</b>						
Fixed Costs, General						
Operations	469,368	55,000		41,500	20,000	585,868
Council		10,000				10,000
UM Heritage Contract	168,092	10,000	283,523			461,615

<b>SUB-TOTAL</b>	<b>1,359,816</b>	<b>570,000</b>	<b>283,523</b>	<b>41,500</b>	<b>100,000</b>	<b>2,354,839</b>
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**MLIA GRANTS - FY 18**

<b>Budgeted</b>		<b>230,000</b>				<b>230,000</b>
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<b>TOTAL DIGITAL LIBRARY</b>	<b>1,359,816</b>	<b>800,000</b>	<b>283,523</b>	<b>41,500</b>	<b>100,000</b>	<b>2,584,839</b>
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<b>*GIS Personal Services</b>	<b>General</b>	
<b>FTE</b>	<b>Fund</b>	<b>MLIA funds</b>
User Services Staff (incl. Coordinator)	1 FTE	1 FTE
Information Management	1.9 FTE	4 FTE
Information Products	2 FTE	1 FTE
<b>Total FTE</b>	<b>4.9 FTE</b>	<b>6 FTE</b>

**\*\* Projection based on  
FY17 Appropriation**

***V. Future focused planning***

The current Land Plan reflects the priorities deemed most pressing by the Council that can be addressed within the scope of existing resources. MSL and the Council recognize that numerous opportunities exist for improved GIS data and services in Montana that are not currently being directly addressed but that warrant future consideration.

- **Climate data:** The Montana Climate Office housed at the University of Montana has discussed forming a working group, but has no budget (estimated .25 FTE) for this activity. This kind of coordination will become more important in future years as climate information is more tightly integrated with broad-based policy decisions. A climate-specific working group could also identify products and formats of interest. A broader collaboration through a working group could identify additional avenues for funding and opportunities for new products.
- **Elevation data:** The National 3D Elevation Program (3DEP) led by the USGS is being developed to respond to growing needs for high-quality topographic data. The National Enhanced Elevation Assessment identified Flood Risk management as the top business use for enhanced elevation data with a benefit nationwide of \$295 to \$502 million dollars annually. In Montana alone, Flood Risk Modeling (Flood Plain Mapping) and Mapping of Riverine areas are the primary drivers for enhanced elevation with the potential for \$600,000 in annual benefit to the state from an enhanced elevation dataset. (<http://www.dewberry.com/services/geospatial/national-enhanced-elevation-assessment>) The 3DEP program estimates it will distribute over \$100M to state and local partners at a 50% match rate to acquire quality level 2 (Q2) LIDAR data. The problem Montana faces is that the estimated



cost for statewide data at today's collection rates for Q2 data is \$48M at a time when the state is struggling just to pay maintenance of cadastral data. A pre-proposal submitted by the Montana Bureau of Mines and Geology, for Q2 LIDAR over Roosevelt, Daniels and Sheridan Counties is estimated at \$1.8 Million, meaning the state's share would be approximately \$900,000; more than the MLIA account took in during FY 2014. Clearly some compromise needs to be worked out with USGS so that Montana can obtain higher quality topographic data at an affordable cost. Montana does not have an identified state steward for elevation and lack of funds prevents our participation in the USGS 3D Elevation Program (3DEP). Without leadership and funding to obtain higher resolution elevation data, GIS users have not been actively engaged in discussions around this dataset.

- **Geographic Names:** Significant edits to the Geographic Names Information System (GNIS) have been submitted to USGS by MSL though the edits have not been incorporated into the USGS master database. For this reason, maintaining the Montana Geographic Names database results in a redundant and laborious workflow for the MSDI Geographic Names theme lead.
- **Imagery:** MSL continues to ask whether Montana stakeholders are ready and/or able to form a consortium that would pursue acquisition of higher resolution imagery than what NAIP can provide. At this point it appears there is little resolve to do this however the state's revised appraisal cycle along with local government needs may create more opportunity in the future.
- **Federal Support of MSDI:** Several MSDI stewards and leads have noted the fragmented efforts between their programs and corresponding federal agencies that historically led data development and supported state efforts. Examples of the shift in support are noted above as they relate to PLSS, NHD and Geographic Names. Other MSDI stewards simply noted that they have noticed that, primarily due to budget limitation, federal agencies have significantly reduced external coordination activities in the last few years. Some successful instances of Federal coordination are worth noting. For example, the U.S. Department of Transportation recently sponsored a national address summit, reaching out to state and local address authorities for their expertise and ideas on how to construct a national address database. The costs for Montana state and local representatives to attend was covered by USDOT. Ideally, these types of positive coordination efforts should be the norm. Another example is the successful coordination between the NRCS and MSL which supports a streamlined integration of annual updates to the SSURGO soils data into the MSL data discovery and access portal and the Data Bundler applications. There is opportunity for representatives on the Council to actively seek innovative ways to improve communication and coordination between levels of government to prevent and reverse what appears to be jurisdictional movement in opposite directions on several MSDI issues.
- **GIS Coordination:** Opportunities for increased GIS Coordination abound. In addition to increasing engagement with federal partners, MSL should increase support to the State GIS Community of Interest and staff should engage local governments through the use of tools like ArcGIS Online. To that end, MSL should seek opportunities to make funding for such tools affordable for all local governments. Finally, the GIS coordinator and staff should work with the Statewide Library Resources Division of the State Library to more fully adopt GIS technology across the library, to

support adoption of GIS technology by libraries around the state and to increase access to and use of GIS data by Montanans in every community.

## ***VI. Summary***

Informed by the accomplishments and ongoing needs identified by previous Land Plans and MLIAC members, and within the funding resources that currently exist, the FY2018 Land Plan identifies key priorities for ongoing GIS development and coordination in Montana. These priorities included:

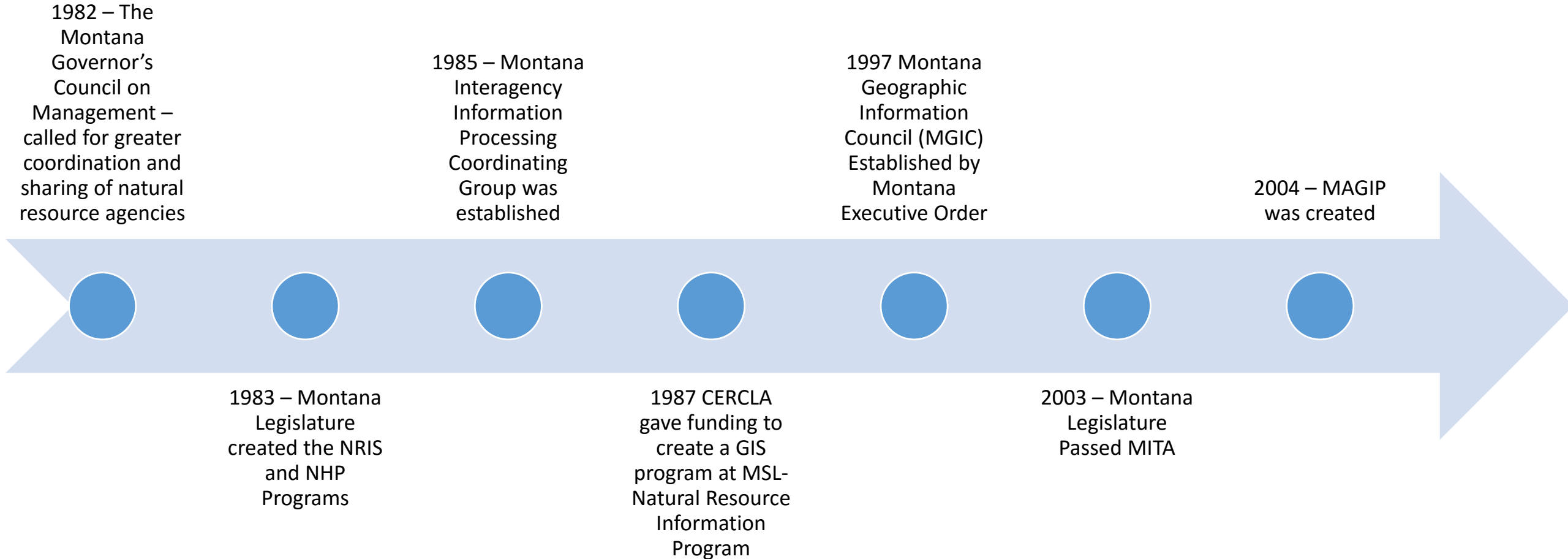
- Targeted work to improve the accuracy of land records at both the state and local level and vertical integration of adjustments in other MSDI themes;
- Support for local, regional, and statewide efforts to develop a NG 9-1-1 system for Montana that relies on local road centerlines, address points and jurisdictional boundaries, according to the NENA standards;
- Ongoing development of the Montana Hydrography Dataset in partnership with the NHD work group. Development includes improved processes for editing the dataset and the identification and inclusion of locally significant features;
- Work to identify funding to continue to maintain the Land Cover dataset;
  - Mapping USGS quads for which no current or historical mapping exists and evaluating historic mapping; and,
- Continuing to build capacity for local and tribal GIS programs.

To accomplish these tasks, this Land Plan allocates \$800,000 in MLIA funds for GIS Coordination, MSDI development and grants to local, regional, and tribal governments. MSL and the Council are mindful of the fact that current funding only allows us to accomplish a portion of the ongoing work necessary to develop a robust and well-adopted GIS infrastructure in Montana as envisioned by the Montana Land Information Act. MSL also recognizes a need to increase GIS coordination activities with a variety of partners, including local governments, and state and federal agencies to further the vision of a Spatial Data Infrastructure that encourages and integrates data developed at the local level by those who are considered the authoritative data sources into a statewide resource that meets the needs of all Montana stakeholders.

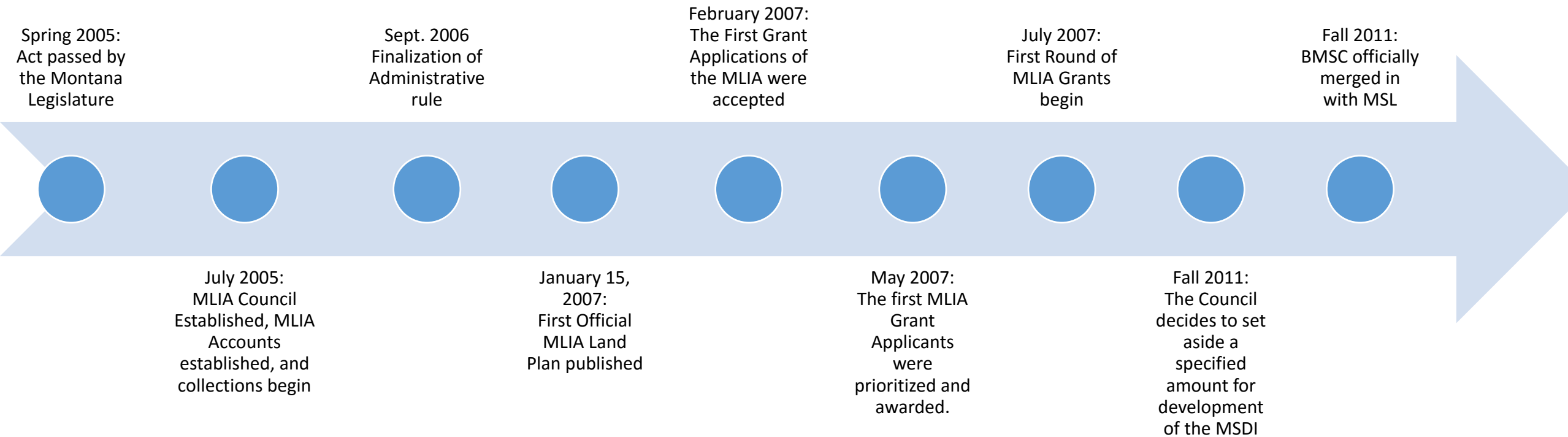


**10 Years Later: Montana Land Information Act (MLIA)**

# PRE - MLIA TIMELINE



# MLIA TIMELINE

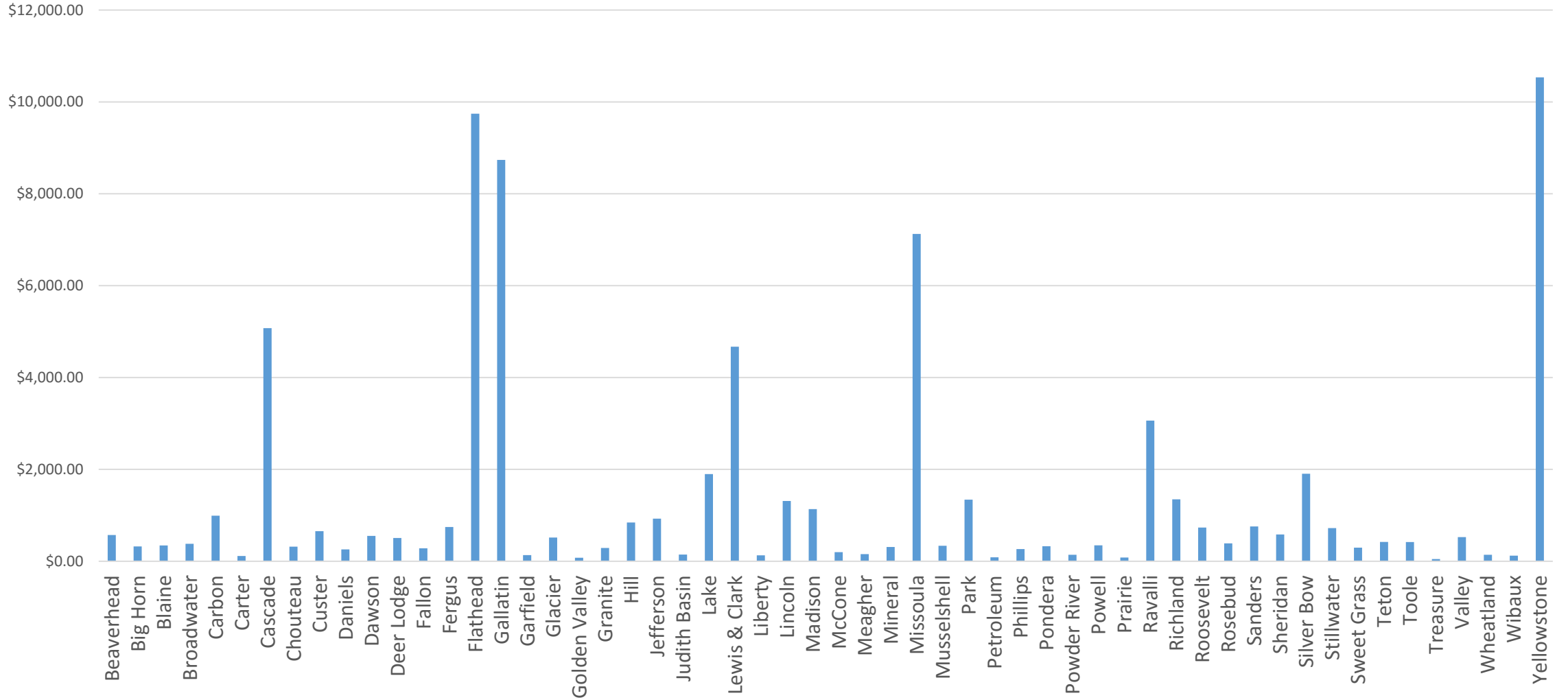


## Monthly Montana Land Information Account Collection, July 2005 – July 2016

FY	July	August	September	October	November	December	January	February	March	April	May	June
2006	\$187	\$94,734	\$101,758	\$86,972	\$110,716	\$87,397	\$74,855	\$61,895	\$93,024	\$76,060	\$89,006	\$92,104
2007	\$96,066	\$91,043	\$87,427	\$90,568	\$87,190	\$75,056	\$79,332	\$80,319	\$73,205	\$76,215	\$100,461	\$78,501
2008	\$102,870	\$74,003	\$67,990	\$72,273	\$61,427	\$107,753	\$73,165	\$59,208	\$86,376	\$72,304	\$80,223	\$86,916
2009	\$65,620	\$76,219	\$55,957	\$70,765	\$47,269	\$53,225	\$58,439	\$72,615	\$96,441	\$104,998	\$89,099	\$95,861
2010	\$87,065	\$63,428	\$66,953	\$65,707	\$66,067	\$62,407	\$56,377	\$49,360	\$48,962	\$65,392	\$56,670	\$63,988
2011	\$116,147	\$75,171	\$72,757	\$76,629	\$78,092	\$78,420	\$65,494	\$60,649	\$65,225	\$57,642	\$74,615	\$42,882
2012	\$52,618	\$75,822	\$58,882	\$74,655	\$70,150	\$71,644	\$66,820	\$64,548	\$67,542	\$60,201	\$72,621	\$77,411
2013	\$72,326	\$79,700	\$73,779	\$79,521	\$90,470	\$80,013	\$75,142	\$71,497	\$73,429	\$77,704	\$82,505	\$69,983
2014	\$91,106	\$77,271	\$68,939	\$62,018	\$56,809	\$55,629	\$49,288	\$41,400	\$44,905	\$54,412	\$57,659	\$62,573
2015	\$59,146	\$58,995	\$62,663	\$65,765	\$59,857	\$63,229	\$54,838	\$54,697	\$66,152	\$66,848	\$69,618	\$80,101
2016	\$75,599	\$76,165	\$70,514	\$68,696	\$61,837	\$66,816	\$57,069	\$53,826	\$55,988	\$70,780	\$68,541	\$75,357
2017	\$65,713											
2007- 2016 Avg	\$81,856	\$74,782	\$68,586	\$72,660	\$67,917	\$71,419	\$63,596	\$60,812	\$67,822	\$70,650	\$75,201	\$73,357

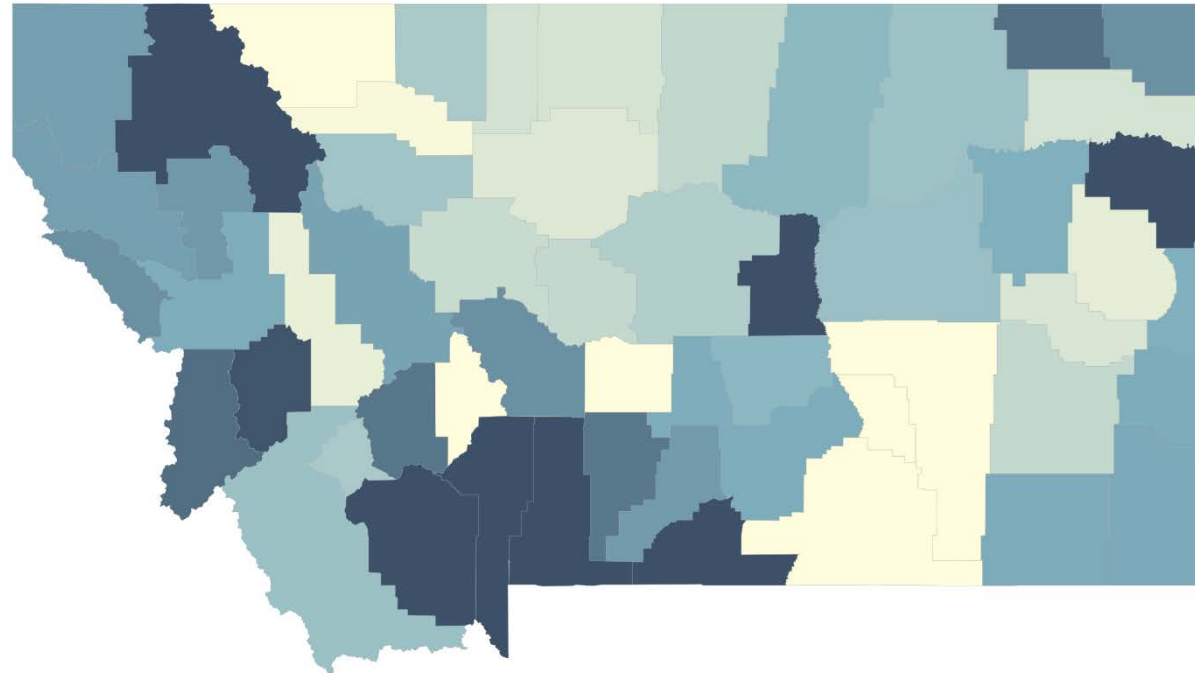


## Average Monthly Collections by County

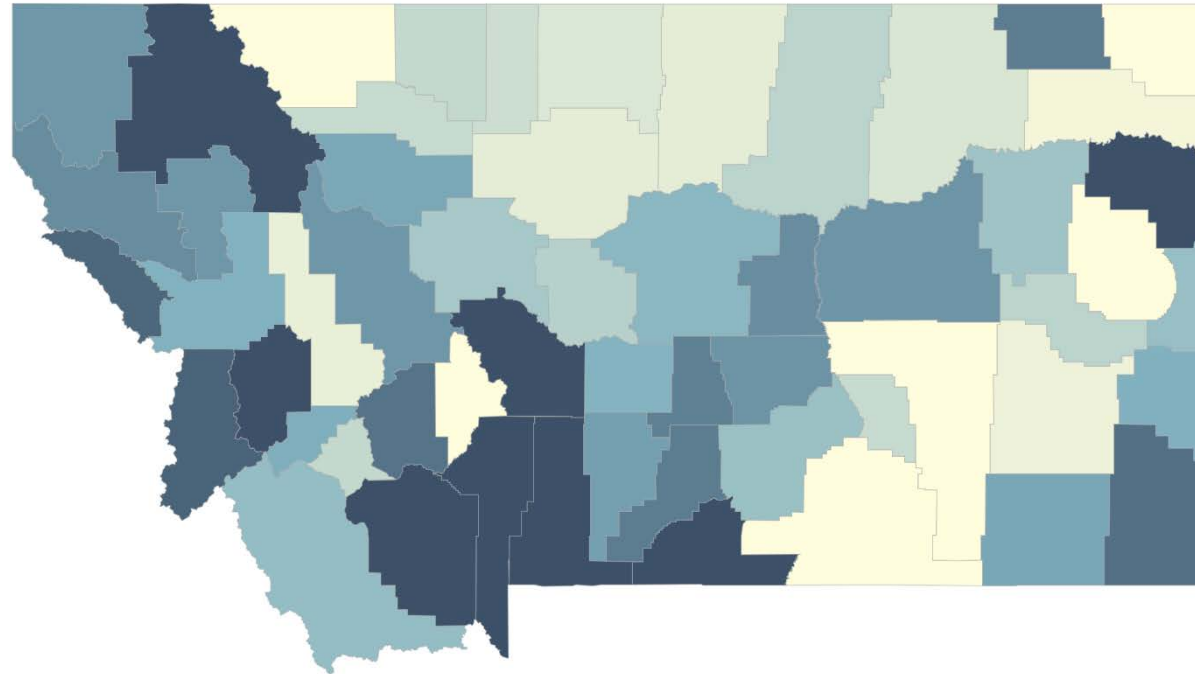




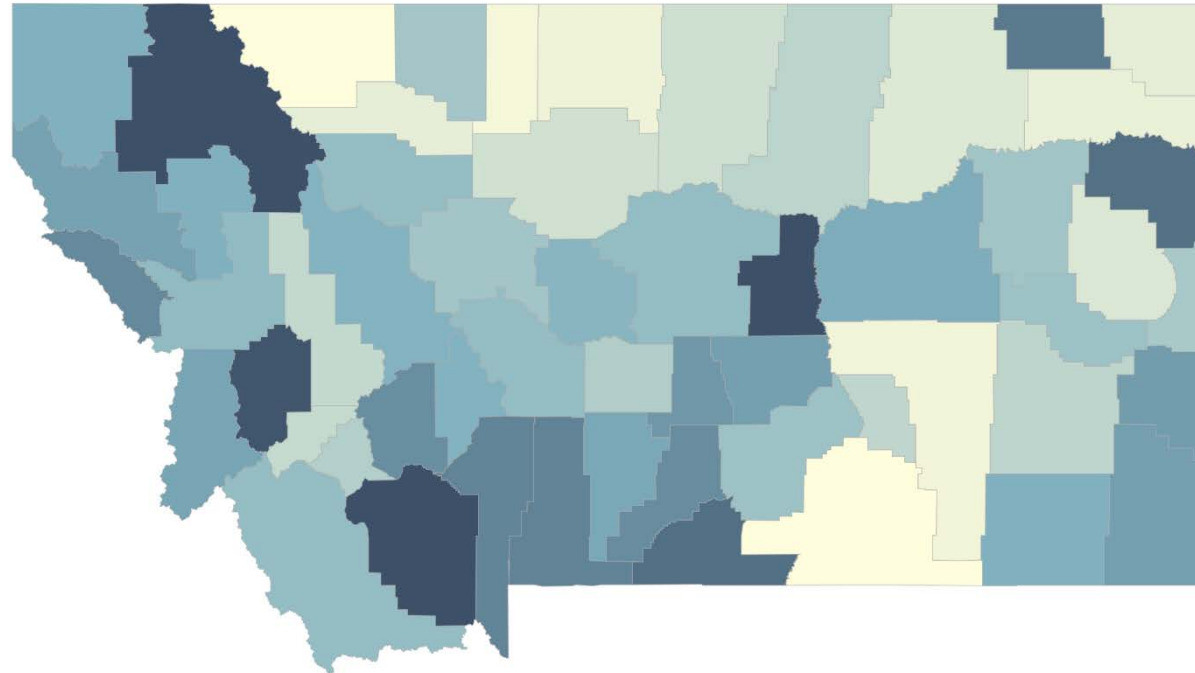
FY2006



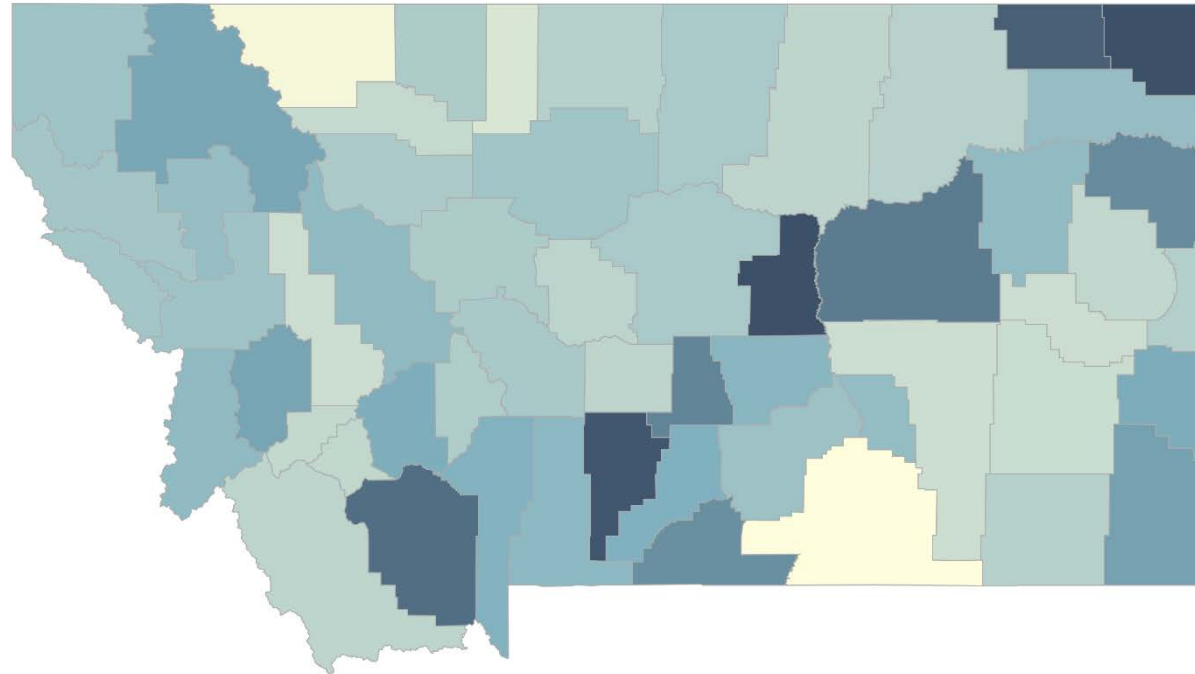
FY2007



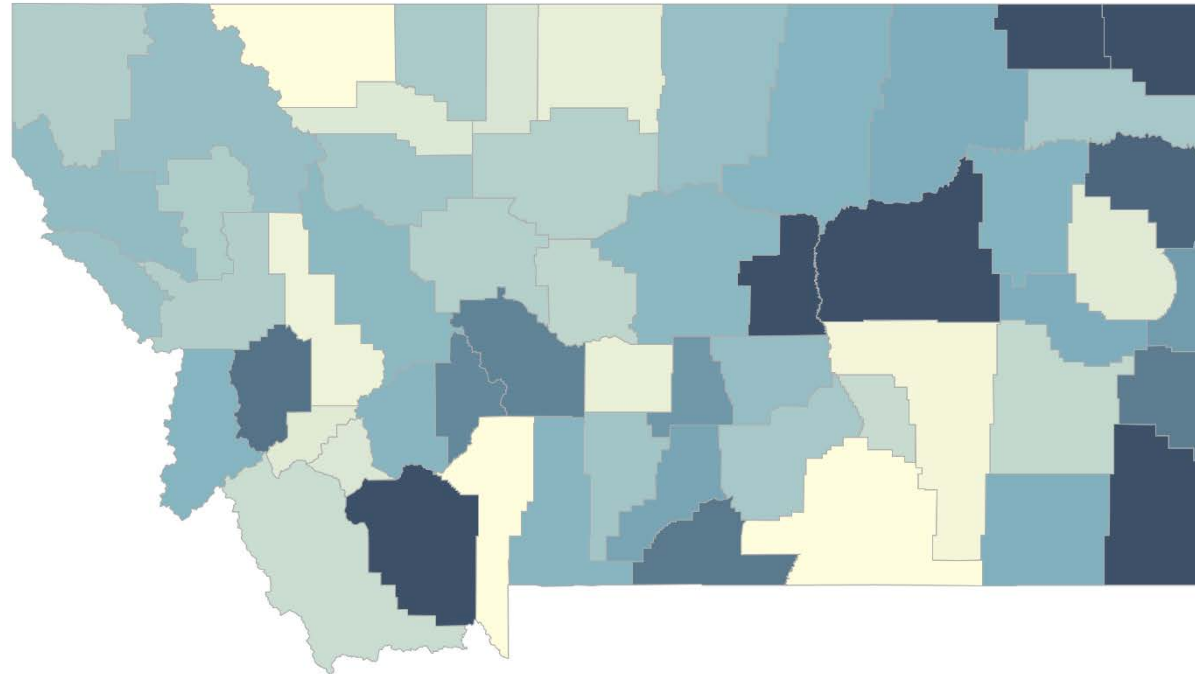
# FY2008



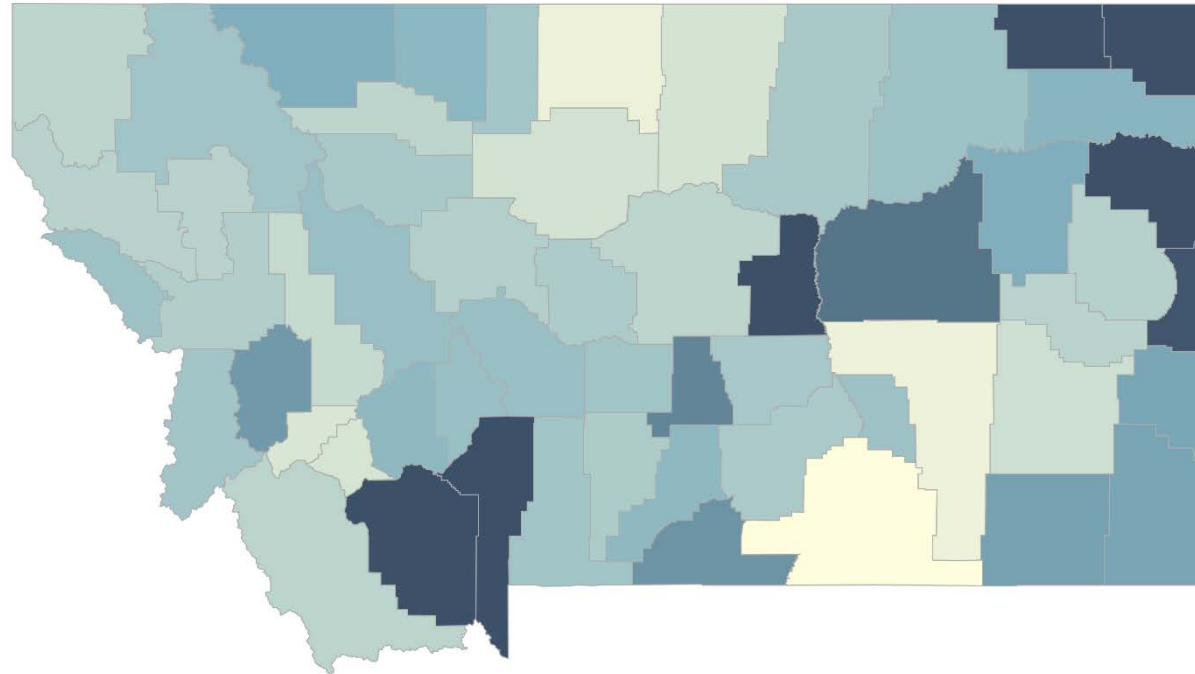
FY2009



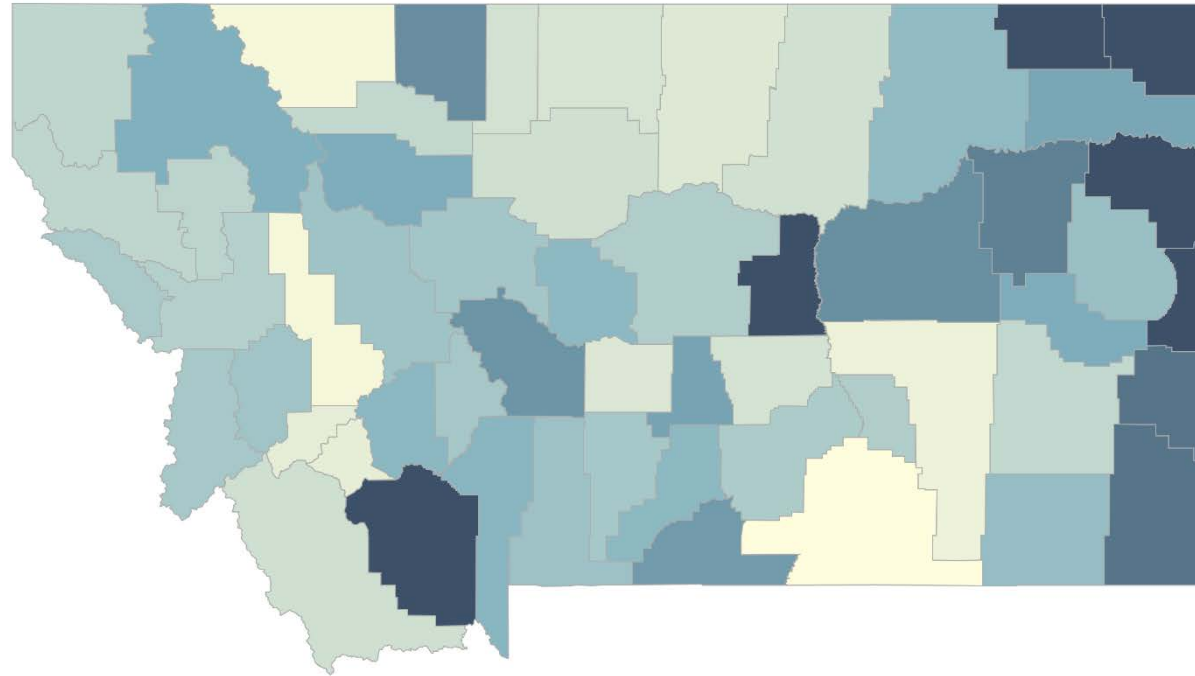
# FY2010



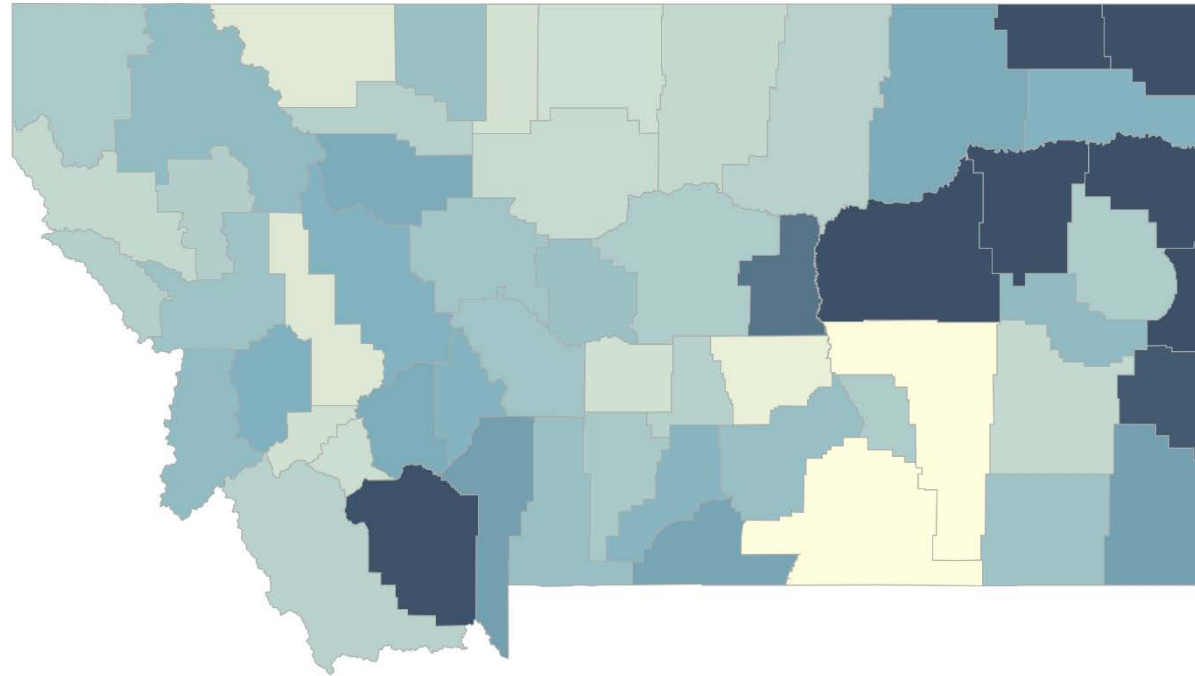
# FY2011



# FY2012

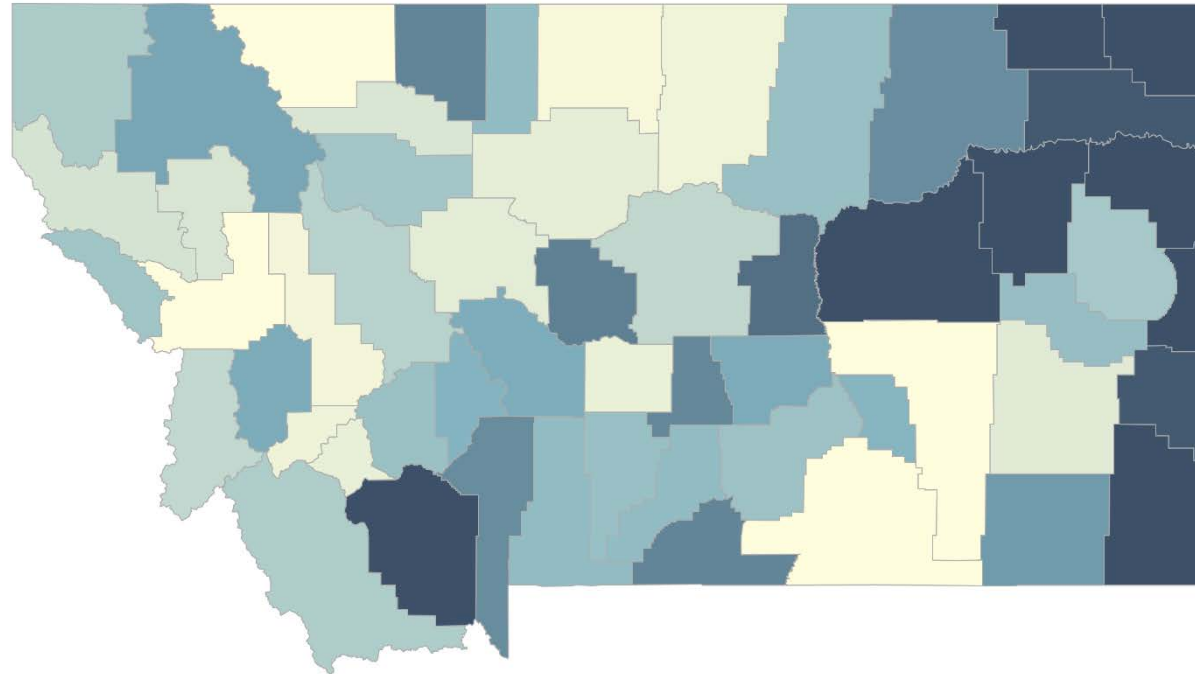


# FY2013

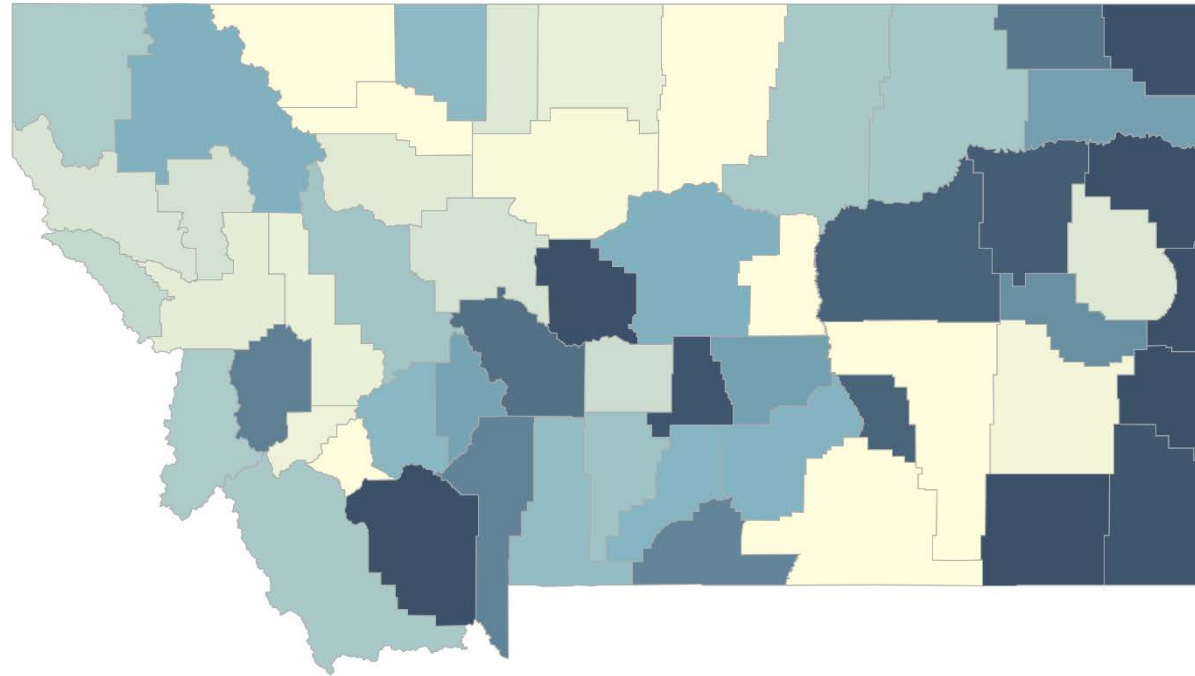




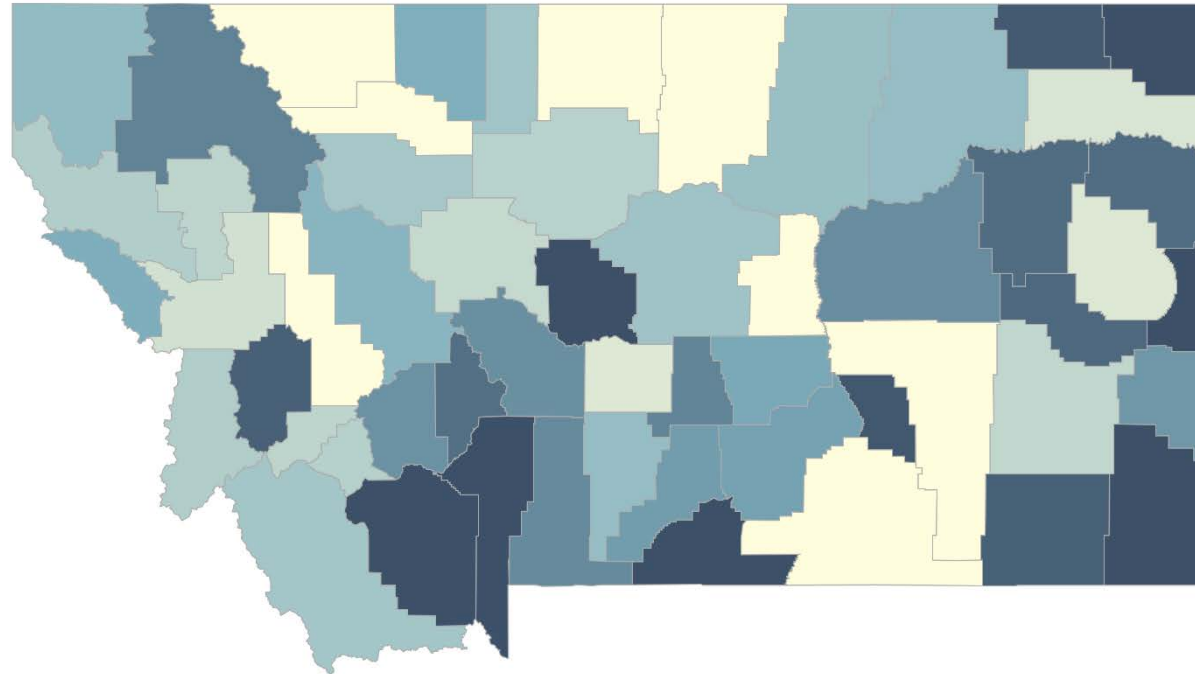
# FY2014



# FY2015



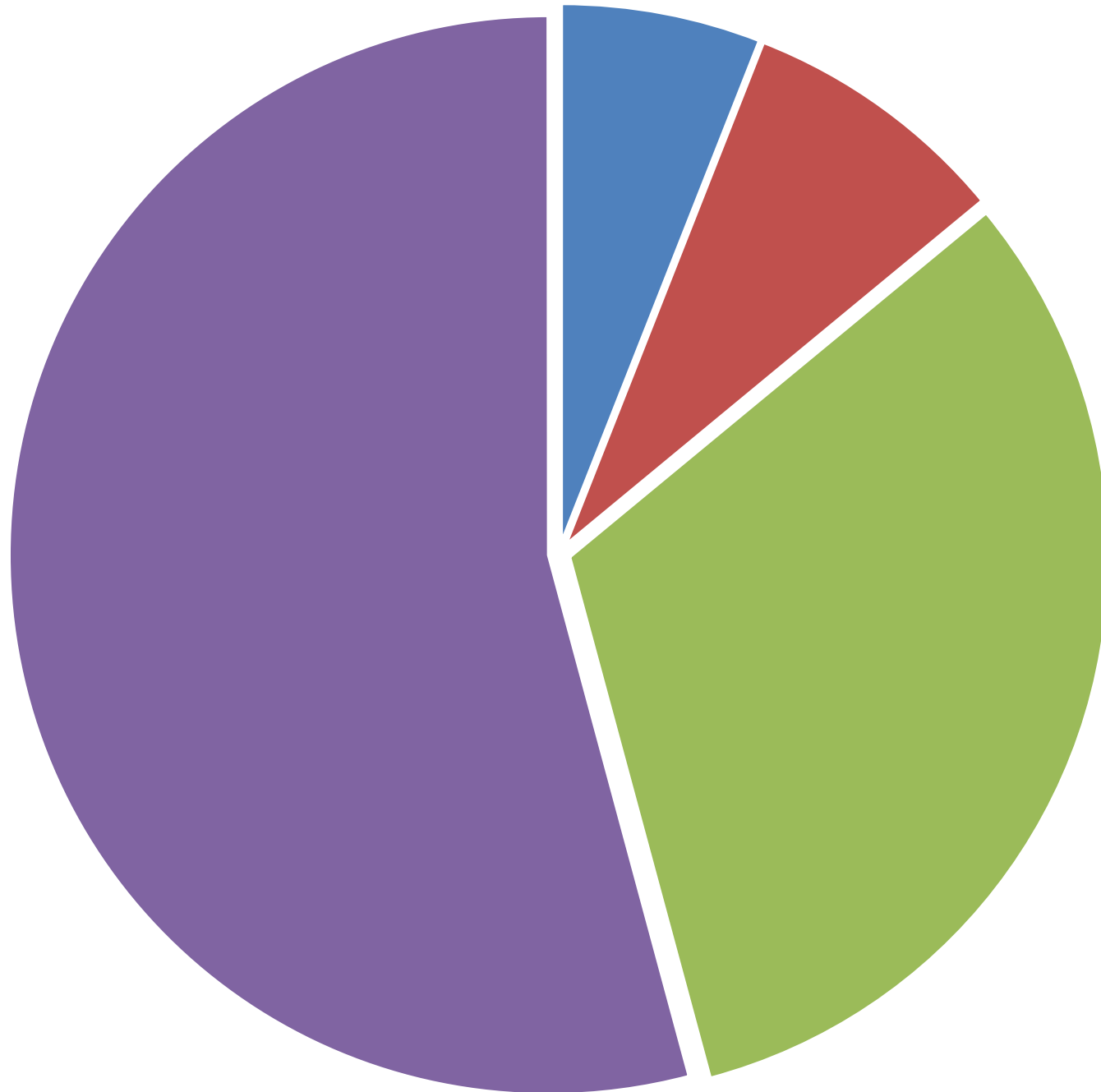
# FY2016



# Initial observations on MLIA Collections

- The account has been very volatile during the first 10 years with returns ranging from a low of \$722,000 (FY2014) to a high of \$1,015,000 (FY2007).
- While FY2016 was a better year for collections, it was still well below average. Average annual collections since inception are \$859,000, but over the last 5 years collections average just \$804,000. This may be the new normal.
- Traditionally MSDI development and support plus GIS coordination costs run about \$650,000 and our target is to grant out at least \$250,000 (though \$300,000 would be preferred). With recent low collections we have budgeted just over \$550,000 for MSDI Coordination and \$200,000 for grants.
- We need to better understand external factors impacting collection to better predict account balances from year to year.

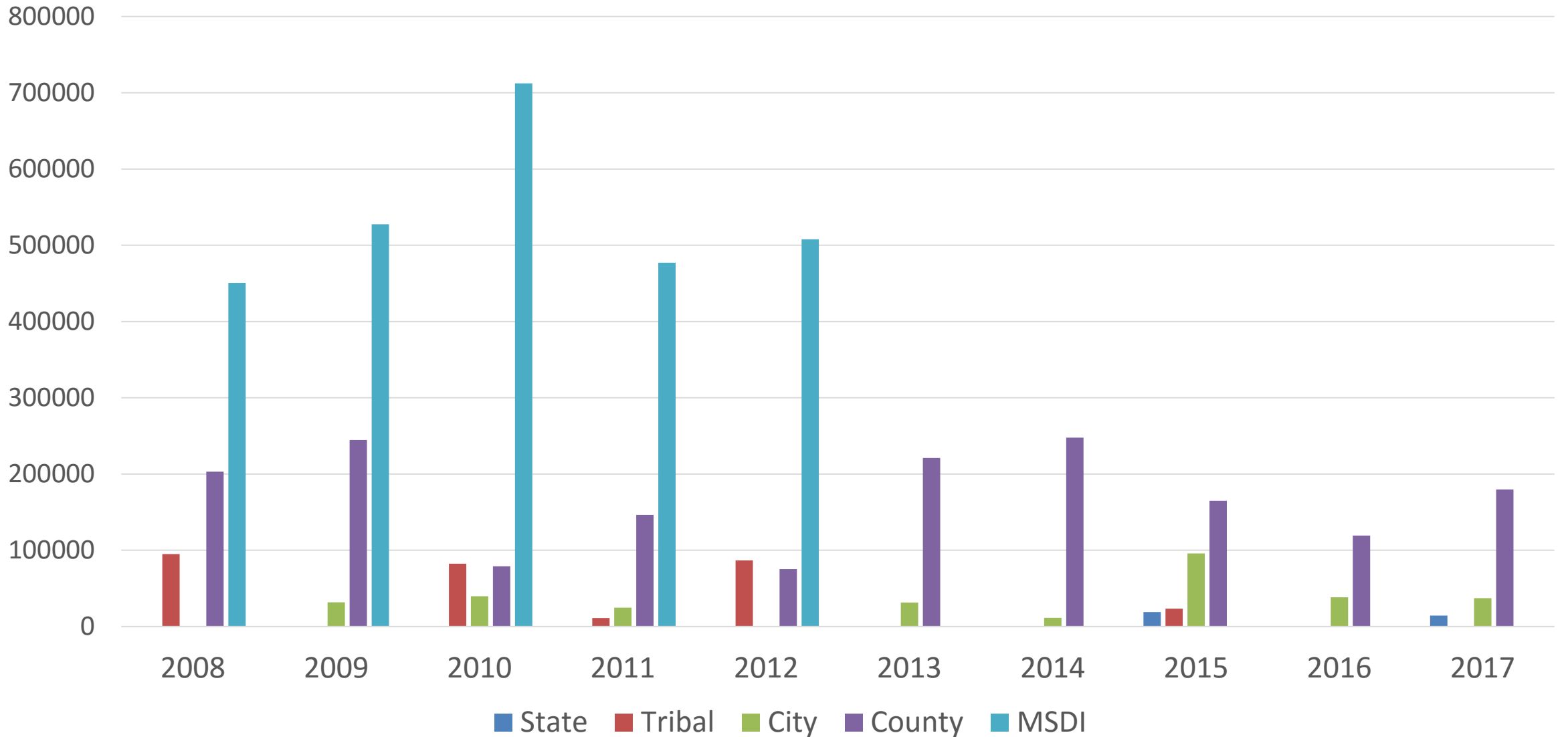
# Awarded MLIA Grants Fiscal Years 2008 - 2017



- Reservation
- City
- County
- MSDI/State

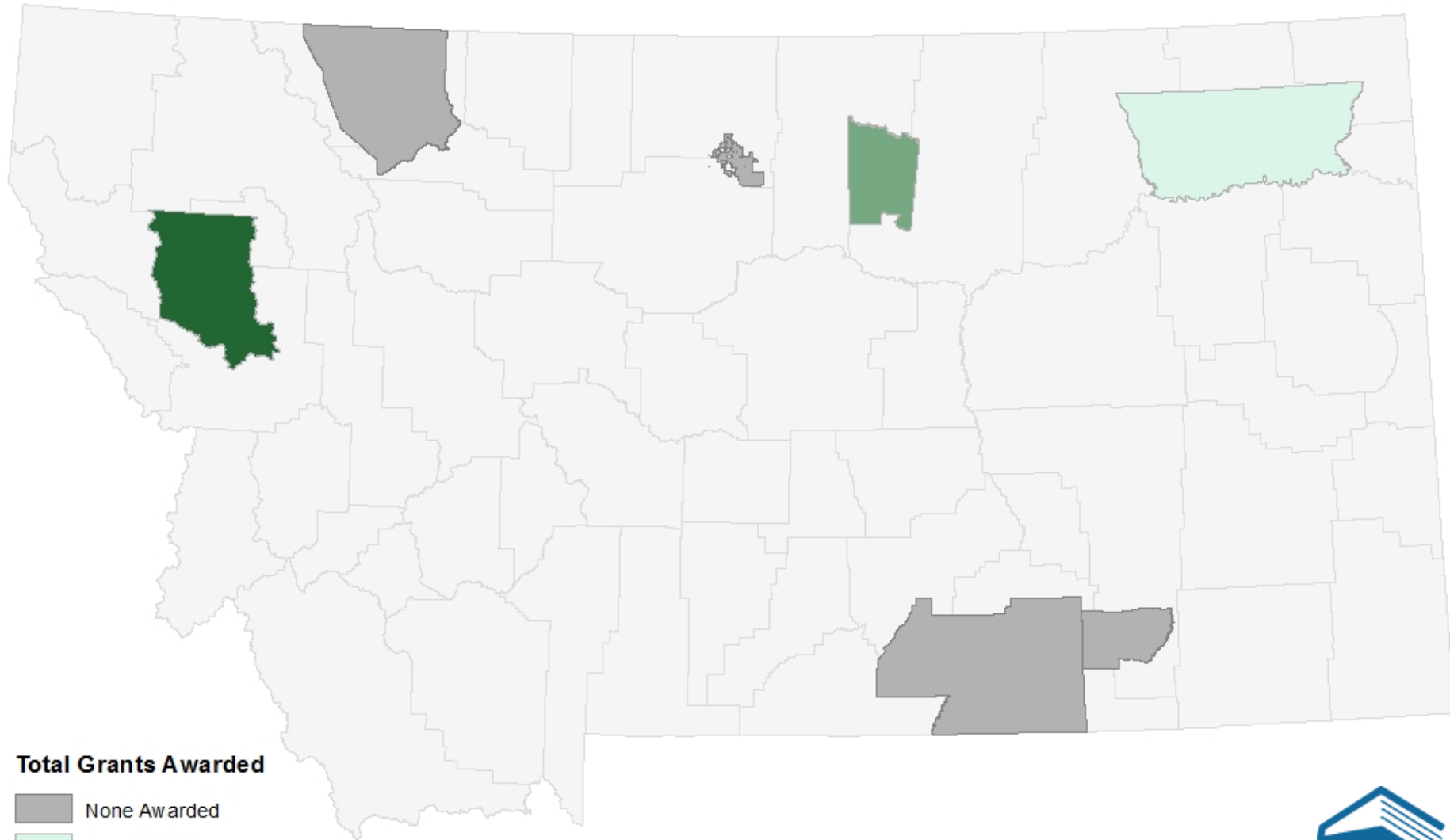
# Grants Awarded by Sector

## FY 2008-2017



# Montana Land Information Act Grants Awarded by Reservation

State of Montana Fiscal Years: 2008 - 2017

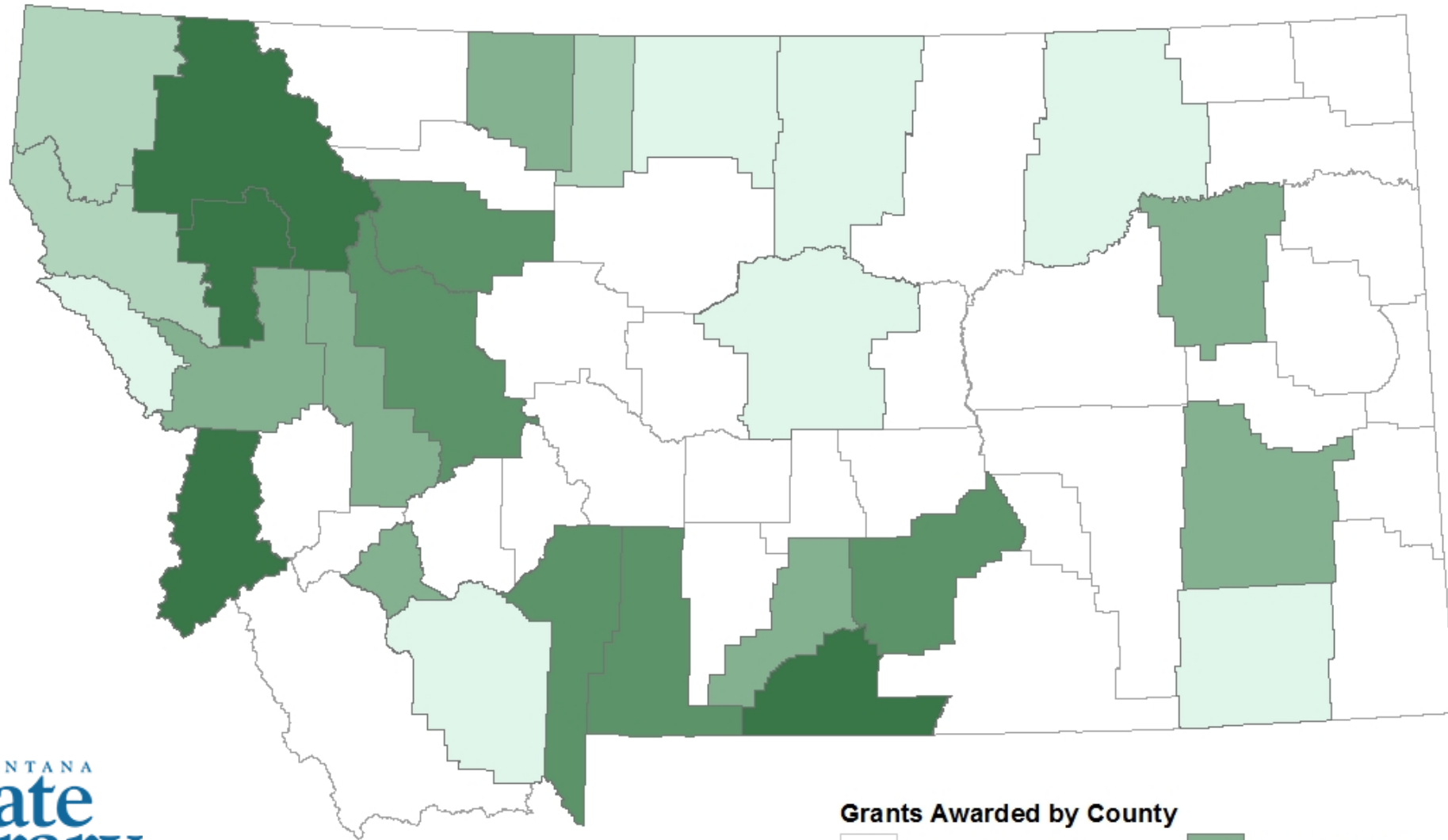


## Total Grants Awarded

- None Awarded
- \$1 - \$12,000
- \$12,001 - \$24,001
- \$24,001+

# Montana Land Information Act Grants Awarded to Local Governments by County

State of Montana Fiscal Years: 2008 - 2017



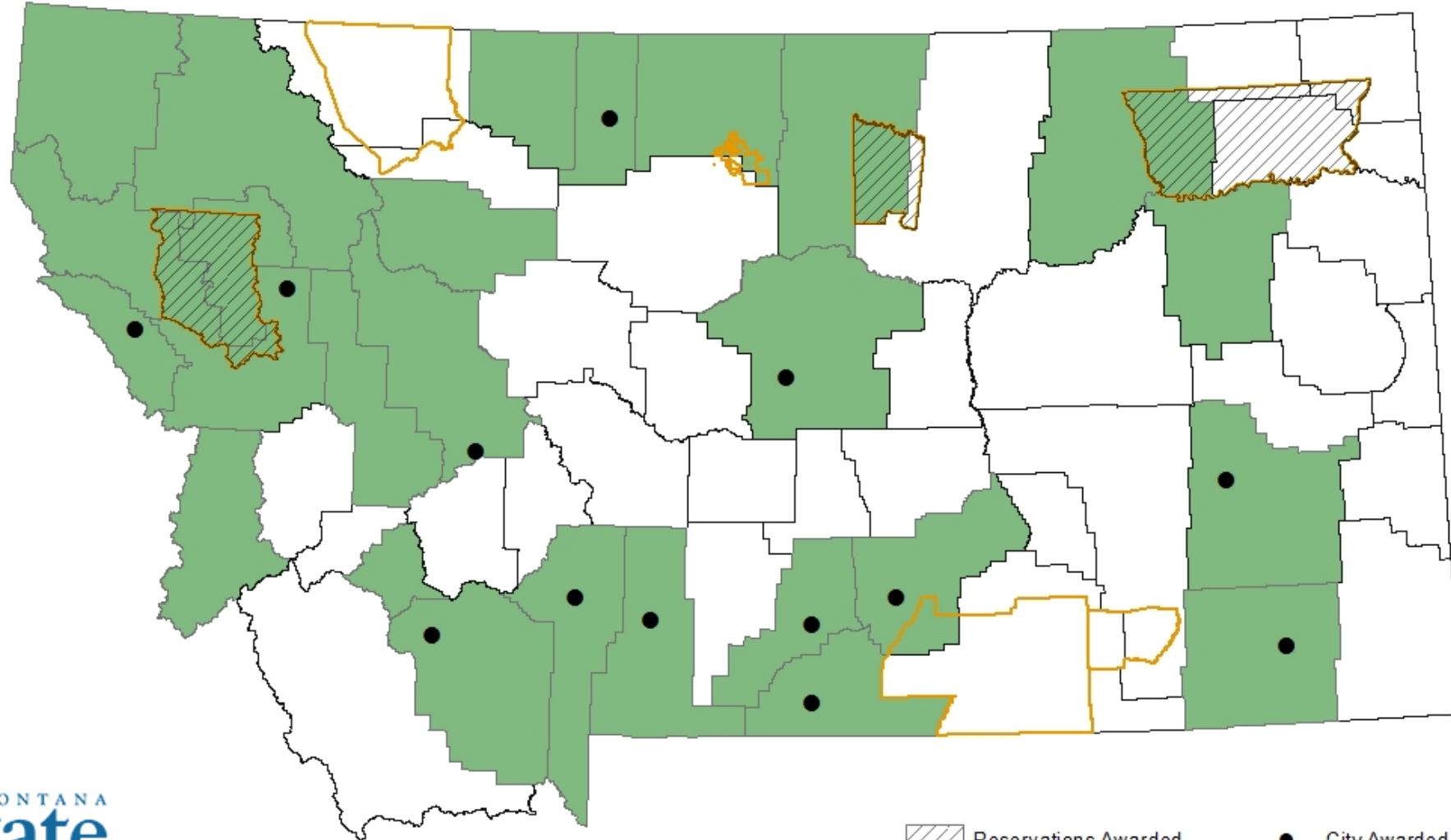
## Grants Awarded by County


 No Grants Awarded	 \$64,001 - \$96,000
 \$1 - \$32,000	 \$96,001 - \$128,000
 \$32,001 - \$64,000	 \$128,001 - \$160,000





# Montana Land Information Act Grants by Location


State of Montana Fiscal Years: 2008 - 2017



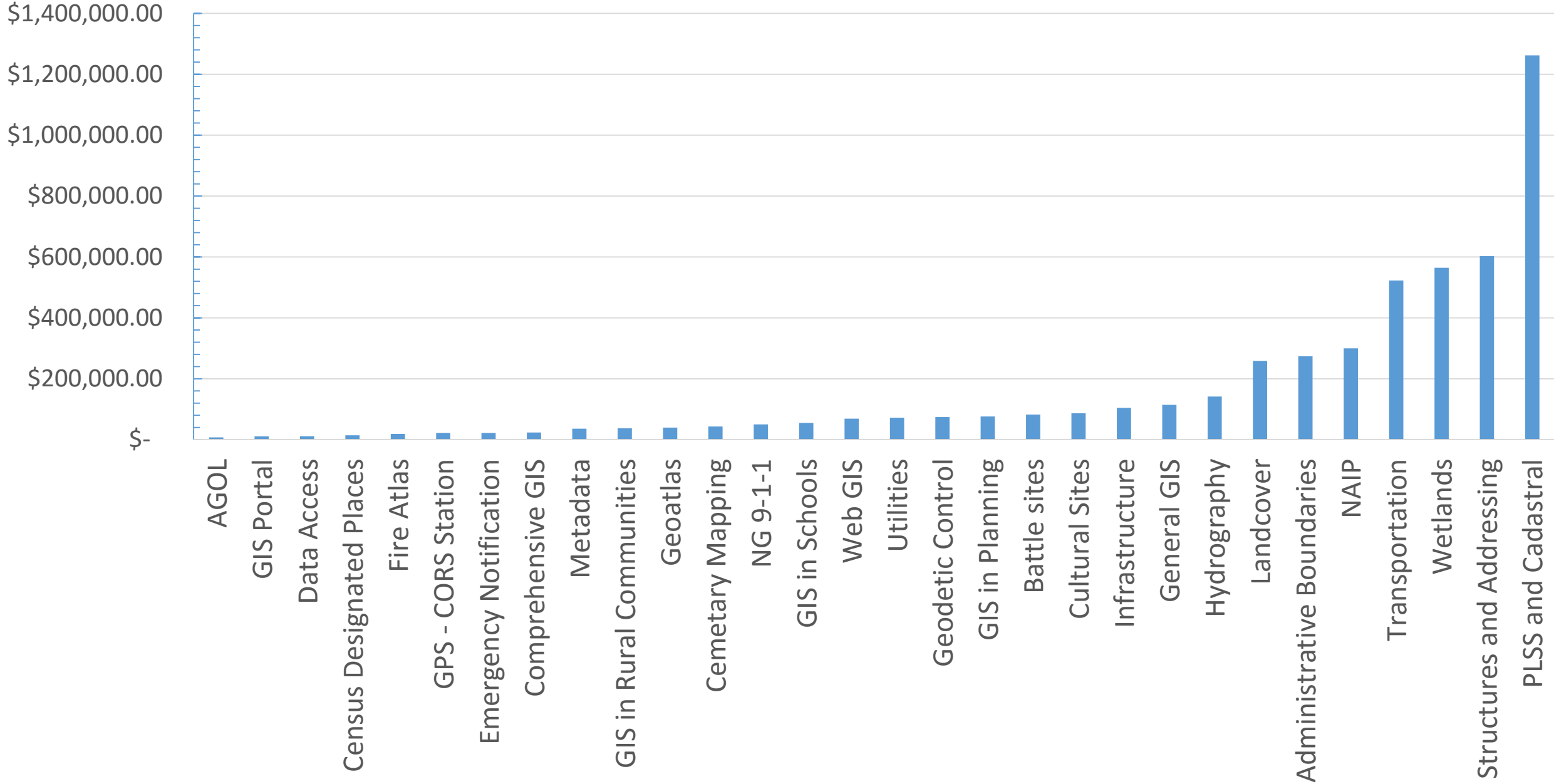
 Reservations Awarded

 City Awarded

 Reservations

 Counties Awarded

# Grants Awarded by General Topic



# Success Stories

- Funded Stewardship of some of the MSDI Themes
  - i.e: Cadastral, Administrative Boundaries, Structures & Addressing
- Swan Valley Elementary: developed onsite capacity to operate a geographical information system for teaching and community access.
- Town of Shelby: Utility Mapping/Data Collection
- Liberty County: CORS (Continual Operating Reference) Station
- Confederated Salish Kootenai Tribes – Flathead Reservation – Battle Site Locations

# Initial observations on MLIA Granting

- Funds available for granting have been impacted by several years of low collections but we hope to be able to make at least \$250,000 available in FY2017.
- There seems to be no shortage of projects if funding is available.
- We have to do a better job of outreach to Tribal governments.
- We struggle with measuring the impact of the MLIA funds spent to date.
  - While our framework layers have matured into much more complete and reliable datasets over the last 10 years we don't have much hard data to support that...yet.
  - Measuring the impact of local investments may be even more challenging. We will be trying to figure that one out and we are interested in any suggestions any of you may have.

Thank You!



- Evan Hammer, Digital Library Director
  - [ehammer@mt.gov](mailto:ehammer@mt.gov)
- Erin Fashoway, State GIS Coordinator
  - [efashoway@mt.gov](mailto:efashoway@mt.gov)

# Memo

**To:** Montana State Library Commission

**From:** Jennie Stapp, State Librarian,  
Erin Fashoway, State GIS Coordinator

**Date:** December 5, 2016

**Re: Recommendation for approval of the Montana Land Information Act  
FY 2016-2017 Legislative Report**

As required by the Montana Land Information Act, 90-1-404 (I), Montana Code Annotated, the State Library submits for approval the Montana Land Information Act FY 2016-2017 Legislative Report: <http://arcg.is/2fXCmF4>.

Earlier this year, MSL received approval from the Legislature to use a storymap rather than a traditional, text-based report, to meet this legislative requirement. We are excited to make use of this new format that conveys the required information in a way that showcases the data and information described in the report.

Upon approval this report will be submitted to the Legislative Services Division.

In addition to the legislative report, staff prepared a 10-year history of the Montana Land Information Act which was presented at the National States Geographic Information Council Annual Meeting in October. This history is also shared with the Commission and will be reviewed during the December Commission meeting.

# Memo

**To:** Montana State Library Commission

**From:** Jennie Stapp, State Librarian

**Date:** December 5, 2016

**Re: Recommendation to approve the MSL Strategic Framework**

Staff is pleased to present the final draft of the MSL Strategic Framework for Commission approval. Modifications made to this draft reflect the October 17 Commission Work Session and feedback received during the public feedback process. That feedback has been compiled and is included in an accompanying document.

Because the Strategic Framework is intended to be a living document, it is no longer time bound. The "How" portion of the framework are examples provided by staff of work plan objectives for the coming year. These objectives will be more fully formed, prioritized, and made measurable when shared with the Commission in February.

The practical vision statements and barriers identified during the strategic planning process, are included final discussion. They are not intended to be a part of the final framework but they will be kept for regular review as the Commission evaluates progress made on key objectives.



# Strategic Framework

***FINAL DRAFT FOR REVIEW***

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## Our Purpose

***The Montana State Library (MSL) helps all organizations, communities, and Montanans thrive through excellent library resources and services.***

## What we value

- User-centric services;
- The diverse worldviews of our users and partners;
- Open and free information that is accurate, timely, comprehensive and convenient;
- Data driven planning and evaluation coupled with compelling narrative;
- Risk-taking;
- Progressive library services and collections that is a model for others.

## Our Roles

- The Montana State Library is the source for State Government Information, Natural Resources Information, and Geographic Information, for all Montanans.
- MSL supports the development and excellence of Montana's tax-supported public libraries.
- MSL supports reading for Montanans with visual or physical disabilities.

What we will do:	*How we will do it:	Why we will do it:
<hr/> <p style="text-align: center;"><i>Foster partnerships</i></p> <hr/>	<div style="display: flex; align-items: center; justify-content: center;"> <div style="margin-right: 10px;">+</div> <div style="margin-right: 10px;">=</div> </div> <p><b>EXTERNAL</b></p> <ul style="list-style-type: none"> <li>• Adapt consulting model from statewide library services to digital library.</li> <li>• Revitalize NRIS Advisory Committee.</li> <li>• Reinvigorate MSDI Workgroups to provide input.</li> <li>• Define how to align our interests with diverse professional groups (as appropriate).</li> <li>• Define our goals for Federations, including tribal, academics and schools – how do we engage them?</li> <li>• Help libraries measure impact through stories and data.</li> </ul> <p><b>INTERNAL</b></p> <ul style="list-style-type: none"> <li>• Train internally about MSL programs.</li> <li>• Provide training in story-telling to commissioners, local libraries, and MSL staff.</li> <li>• Map MSL Stakeholders and how they inter-relate (local, state and federal).</li> <li>• Train staff on communicating and engaging advisory groups for MSL.</li> </ul>	<hr/> <p style="text-align: center;"><i>Partnerships are necessary to ensure that Montanans thrive. Through partnerships, MSL and those we serve will continue to move Montana forward.</i></p> <hr/>

What we will do:	*How we will do it:	Why we will do it:
<hr/> <p style="text-align: center;"><i>Secure sufficient and sustainable funding</i></p> <hr/>	<div style="display: flex; align-items: center; justify-content: center;"> <div style="margin-right: 10px;">+</div> <div style="margin-right: 10px;">EXTERNAL</div> <ul style="list-style-type: none"> <li>• Identify and create strategic partnerships that leverage funding for MSL and partners to achieve our purpose.</li> <li>• Align return on investment information to the values of strategic partners.</li> </ul> <div style="margin-right: 10px;">INTERNAL</div> <ul style="list-style-type: none"> <li>• Create a clear, consistent message about MSL that captures all we do.</li> <li>• Create talking points for commissioners in support of MSL.</li> <li>• Offer training to help staff understand the funding picture.</li> <li>• Create a marketing plan for MSL with public service announcements, social media, search engine optimization, etc.</li> <li>• Develop return on investment information for all MSL programs.</li> </ul> </div>	<hr/> <p style="text-align: center;"><i>We have the funds and capacity to meet the expectations of our partners and Montanans.</i></p> <p style="text-align: center;"><i>We are an innovative, forward thinking, and fiscally responsible organization in fulfilling our mandates and meeting the expectations of our partners and Montana Citizens.</i></p> <hr/>

What we will do:	*How we will do it:	Why we will do it:
<hr/> <p style="text-align: center;"><i>Create a useful information infrastructure</i></p> <hr/>	<p style="text-align: center;">+</p> <p><b>EXTERNAL</b></p> <ul style="list-style-type: none"> <li>• Make GIS connections with libraries across the state.</li> <li>• Provide training on copyright and Creative Commons; set a good example for open data.</li> <li>• Develop plan to inspire local focus on broadband.</li> <li>• Research open data cultures.</li> <li>• Assess information resources needed by local libraries.</li> </ul> <p><b>INTERNAL</b></p> <ul style="list-style-type: none"> <li>• Optimize web search results.</li> <li>• Research options for creating an “open data culture.”</li> <li>• Create parameters and definitions for pilot projects, including criteria to determine success and failure.</li> <li>• Review statutes on open data to identify needed changes and resources to carry out mandates.</li> </ul> <p style="text-align: center;">=</p>	<hr/> <p style="text-align: center;"><i>Montanans have the information and library services they need to understand and influence change in their community.</i></p> <p style="text-align: center;"><i>Others follow Montana’s model of open, transparent, cooperative information management practices.</i></p> <hr/>

\* Examples provided from staff work session with Ned Cooney. A complete list will formulate program work plans. Work plans will reflect the work of individual programs. Work plans will consist of measurable objectives.

For internal review only:

### Practical Vision

What do we want to see in place in the next five years?

## Foster Partnerships

Collected & shared stories for human connection

Workshops for non-librarians to communicate our value & information available

PSAs with music and interviews about impact/ value of MSL

Vets have presence at MLA conferences, MSL advisory groups

Local leaders embrace role of libraries in community problem solving, through MSL's leadership

MSL partners with local leaders to work on community transformation

Connecting & building communities through the work of MSL

Empowering the people - crowdsourced, curated, engaged information

People come to us to get their information out & accessible

MSL staff brings strengths to collaborate on programs/ services for end users

Lifelong Learning Department reaching various groups (vets, seniors)

MSL leads other agencies to standards for data to ensure easy access

## Secure sufficient and sustainable funding

Average budget of Montana's public libraries has doubled from 2016-2021

Businesses & foundations support library initiatives

MSL budget is \$60.1 million (increased ten-fold from 2016)

## Create a useful information infrastructure

Augmented reality app using GIS data connected to other data sets

MSL leads in making cultural, natural resource & historical collections available online

All librarians have affordable, high-speed broadband

Interconnected infrastructure of local to state library to federal to international levels

3D, 360° GIS is in place

MSL is a leader in creating a culture of open information access

Montana is a model for information infrastructure for other states

MSL & National Library Service have developed sustainable service delivery model for the visually impaired

Programming and resources in place to reach more veterans, with impact data collected

GIS and other data is readily available for legislative use (context-setting, "geo notes" like a fiscal note)

**Underlying Contradictions**

***What blocks or barriers might hold us back from achieving our Practical Vision?***



# Memo

**To:** Montana State Library Commission

**From:** Jennie Stapp, State Librarian and Tracy Cook, SLR Director

**Date:** December 1, 2016

**Re:** **Strategic Framework feedback**

The following feedback is shared for Commission review and discussion. These comments were gathered at face to face meetings and via Survey Monkey.

The comments no longer include information about the strategic directions since the new framework does not use them. It continues to include overall rankings for the barriers and the major areas of focus (now called what we will do). The language has been modified to reflect the new strategic framework.

## QUANTITATIVE RANKINGS FOR VISION STATEMENTS, BARRIERS, AND STRATEGIC DIRECTIONS

Question: Do you see value in working towards fostering partnerships; securing sufficient and sustainable funding; and creating a useful information infrastructure?

	<b>Yes</b>	<b>No</b>
<b>Partnerships</b>	51	2
<b>Funding</b>	45	0
<b>Infrastructure</b>	42	2

Question: How would you rate the barriers listed: strong barrier; we can overcome; or this isn't a barrier?

	<b>Strong</b>	<b>Overcome</b>	<b>Not a barrier</b>
<b>Challenging Geography</b>	11	24	3
<b>Non-strategic resource allocation</b>	10	24	0
<b>Divergent Expectations</b>	9	23	4
<b>Risk-Averse Library Culture</b>	9	23	4
<b>Limiting Political Climate</b>	21	13	1



## RESPONSES TO OPEN-ENDED QUESTIONS ABOUT VALUE OF VISION STATEMENTS, BARRIERS, AND OVERALL PLAN

### Question: What value do you see in working towards fostering partnerships?

- Making sure your community understands the libraries importance in the community!
- Ability to share resources & workloads on collaborative projects. Shared knowledge, experience, & expertise
- Sharing resources; reduction if overlap or duplication of efforts; added "advertising"
- Shared knowledge, building on each other's strengths, avoiding duplication.
- Collaboration between agencies and those we serve; helps reduce duplication of efforts and preserves fiscal integrity
- I think libraries having a connected partnership with other community entities is a win-win for all. It would make advocacy easier, there would be a broad understanding of the library's work in the community along with those of the partners, and also more transparency for the public and library users.
- More shared resources between libraries
- The more we share (ideas, experience, resources), the more efficiently we deliver services to our users.
- With funding cuts and inadequate staff hours, community partnerships help others to see the value of libraries and takes some of the pressure off library staff.
- Cost sharing; information sharing; improved access; resource sharing
- Partnerships assist everyone in reaching goals and reaching out to community members.
- Clear identification of user needs; strengthening of MSL's importance
- Enhanced cooperation may lead to better data sources and larger user base.
- Speaking from the perspective of the Geographic Information Program, the value of the data and GIS products we provide is dependent upon the kinds of partnerships we have with state, federal, and local agencies, as well as others who utilize geographic data.
- They allow the Library to address the needs of users.
- Combining services can help alleviate duplication of resources within state agencies
- Better able to connect patrons to resources
- Better Understanding amongst the different sectors in the community.
- ILLs, e-book and audiobook consortium, professional development, list serve to help each other with questions and ordering
- Builds community, solves problems, improves governance, greater transparency, saves money

- Leveraging limited resources. Accomplishing what our users need us to accomplish instead of guessing at what they need to accomplish.
- Connected communities can work more effectively for shared goals.
- We have lofty goals that can't be met by working in isolation
- Enables small libraries to have access to information that a small library cannot afford
- Connecting with users and non-users
- To leverage common interests and ensure a need is being met

**Question: What value do you see in working towards securing sufficient and sustainable funding?**

- Possibility of different programs & projects
- Ability to offer Pilot projects; keep existing programs & projects free
- Possibly find funding previously not apparent or newly available
- Staff can focus on most important projects, rather than ones that bring in funds (such as grants). I do not like the idea of securing funding through grants.
- Better able to budget plan and create stability of staff and users.
- The work we do is contingent on sufficient funding, and the sustainability of the funding allows us to provide continuity of services and data.
- Sufficient and sustainable funding is necessary to accomplish realistic goals.
- Not relying on state budgeting for funding would provide stability in planning and remove a level of uncertainty that could impede growth or program implementation
- Avoid providing a service and then having to discontinue it for lack of funds; plan for future
- Knowing what the budget will be.
- Connections/relationships with legislature to educate them about why we need sustainable funding. Tech is always changing and we will need to bridge the gaps, then keep up.
- We need sustainable funding to recruit and retain high quality staff. Our partner/patrons need to know that we will be there into the future or they won't enter into partnerships and will leave the partnership when funding declines.
- Our current funding is inadequate and too vulnerable to reduction.
- Particularly in an uncertain political climate, one cannot rely on just one or a few sources of funding
- It is possible there is funding available that is not being asked for by our libraries.
- Changing times, old funding may become smaller or deleted.
- Opportunities for external funding sources -- organizations want to give money to assist with worthy causes, but often our MT regulations doesn't allow us to accept these funds when it would otherwise be a perfect match for both the funder and recipients, a great fit for the projects.

- With new and diversified funding there is the hope of actually having funding. "New and diversified" seems pretty vague, so hopefully that idea will be fleshed out and include a more focused form of funding sources.
- I think this is important to look for, however I don't understand what resources the state library would get funding from.
- Stable funding is absolutely necessary for a library's continued existence.
- We have to, as we've already seen cuts due to decreased funding resulting from the war on coal and I suspect that will continue.
- Cost sharing
- Better accountability and transparency
- Funding sources are never stable, so diversified funding will help. The State Library also helps each library in the State, so funding helps everyone.
- a library needs funds to operate and a sustainable fund would help with the planning
- Sustainable funding is extremely important. There appears to be a reliance on other state agencies to fund and general fund dollars.
- Without secured sustained funding any medium to long term plans are at risk.
- Sustained funding is worthy, but prioritization is more worthy

**Question: What value do you see in working towards creating a useful information infrastructure?**

- Exchange of ideas is better
- Making sure money is well spent!
- Reduce duplication -time spent looking for Resc; coord. of services
- More users; MSL becomes THE place for information rather than another option.
- Internet and information are inherently connected to successful distribution of data and security of resources.
- Providing a useful information infrastructure is at the core of the services that libraries provide, and particularly within the context of accessing GIS and natural resource related data, products, and services.
- It is critical for ensuring all patrons have equal access to information resources.
- The infrastructure is the backbone of information delivery, the better supported the whole system is the more effectively and efficient it can be disseminated, even to the most remote locations
- Infrastructure is the bones of our operation; it must be solid and reliable for our stakeholders
- It is the essence of what a modern library must be....not just the high speed pipes, but comprehensive, reliable, and up-to-date information.
- Information is inherently valuable, but not if its infrastructure is useless. The statement from the previous question seems to imply that "high speed internet" is the definition of "useful information infrastructure". It should also include the idea that the tools for obtaining information are useful rather than difficult.
- Broadband is increasingly important to education and economic development.

- Better ability to provide patrons with access to job searching, training, and education.
- The near future will demand on this. No exceptions.
- This is already shown as being valuable with the transmission of personal health information among participating medical facilities for the safety and optimum care of Montana residents & visitors.
- I think those areas with a weak infrastructure are likely those areas of economic disadvantage and very rural with low population. It seems just as important that rural/economic disadvantaged areas have the same (or relatively the same) capabilities to inform their communities and end users with the information they desire/need.
- I think this is very important as more and more information is found digitally now rather than on the stacks.
- The internet is the way we'll be sharing data at long distances and in large clumps, for the foreseeable future. It needs to be as fast and reliable as possible.
- I would love some help from MSL, as our technology isn't up to par and our county IT Dept does not see the value in libraries having up to date technology.
- Closing the digital gap and enhancing all members of a community.
- It's the best way for libraries to keep current and remain relevant to the public
- Collated useful information in one place makes it easier to find.
- If you don't have a stable infrastructure you won't be able to deliver services or they will be very limited.
- Enable collaboration, engagement, and participation from community; need to make it easy and modern to folks can interface with it the same as they do in their personal lives (cell, mobile, as you go just in time interaction)
- The Commission along with many others should lobby for information access, but in the absence of the infrastructure the Commission needs to effectively utilize existing pathways (e.g. book mobiles, mobile facilities)

**Question: What other barriers should the Commission consider?**

- Internal barriers; lack of an encompassing, inclusive strategic vision that equitably values all the different programs at MSL
- Diverse educational backgrounds and values of patrons.
- Public Libraries should reflect their communities. I think people will want to pay more for their libraries if they feel connected to them.
- The greatest barrier at this point is branding to both our patrons and the governor's office and legislators with regard to thinking of libraries as books on shelves instead of the information infrastructure they need to make decisions and enrich their lives at many levels.
- This is a difficult time to be planning. A change in leadership could present real barriers.
- The public's definition of what a library is and does offer.
- Marketing the library.

- The lack of knowledge of what other agencies are doing that are similar or otherwise dovetail our efforts too. Lack of communication and awareness outside of "librarian-thinking."
- I'm sure there are other barriers, but I can't think of anything right now. I think the political climate/library culture barriers seem like plenty to tackle.
- Communities aren't fully aware of all our libraries have to offer.
- Local government
- Some staff clinging to outdated business practices
- Inertia is a barrier particularly in a thorny political climate. Change / transformation is hard and takes leadership, buy-in and focus on a long term vision
- Overcome the idea that libraries are no longer relevant in today's information society

**Question: What other concerns, comments, or questions do you have about the Commission's draft strategic plan?**

- It is extremely broad, but maybe that is intentional and necessary. There are not specific tasks for each program, which has caused some programs to feel left out and less important than others.
- The Geographic Information Program and the work of the GIS staff at MSL is entirely missing from this strategic plan. I realize GIS and geographic information is part of the Digital Library, but I think it's important that geographic information is called out explicitly in the mission statement, in the definition of roles, and in the plan's Practical Vision, beyond some idea of an augmented reality app. Ultimately, the work and value of the geographic information program is just not reflected or present in this Strategic Plan. Also, under "Who we are," it's unclear to me how the current statements define who we are.
- It is important for the process to be transparent and have a strong outreach component.
- How will the Commission support all Montana students through partnerships and shared resources with our schools?
- "First, kudos on the new version which is very compact, easy to digest, and provides an essential overarching direction for our agency. Our Purpose: I really get hung up on the last word, "lives" for two reasons. First, I think the purpose statement needs to indicate that MSL strives to serve the needs of "individuals of all ages and abilities". Second, you can have thriving organizations and communities, but "thriving individuals" makes a lot more sense than "thriving lives". I would suggest replacing "lives" with "individuals of all ages and abilities". Who We Are: In its current form the last sentence only means something to us and it only focuses on the negative. It needs to be more explicit for ready interpretation by everyone...something like "We strive to promote a modern view of libraries as providing a holistic digital information infrastructure that is essential to our economy and our communities." Page 3 under Internal:

marketing is missing "et" Page 4 under External: copyright is one word Internal Review Only Section 1. Still find doubling the budget or going to 60.1 million to be of no use for a practical vision. A number of people have indicated they agree with me on this. Seems more practical to focus on recruiting and retaining staff to meet the needs of a modern library than to throw out pie in the sky dollars. 2. Would add "Governor's Office and" to the "Legislators are unaware about why & how MSL should be funded" box under the Limiting political climate section."

- Nice work!
- I feel there is not enough representation from all types libraries and other industries.
- I think it's an excellent start and look forward to what the Commission decides.
- Keep it focused and attainable. Challenge is good, but we want to be able to achieve stated goals in a manner that show value, viability, and future growth and orientation.
- Thank you to all who worked on this plan. Thank you for leading by example.
- There didn't appear to be a whole lot of tangible "action items". There also appeared to be a large importance placed on "story telling". That needs some context or it may not be viewed in the light MSL hopes.
- I did not get a good sense of the vision -- what does the library of 2021 look like and how citizens will identify with it?

## **MONTANA STATE LIBRARY COMMISSION WORK PLAN FY 2016/2017**

### **VISION**

Develop and deliver 21<sup>st</sup> Century library resources and information services.

### **MISSION**

The Montana State Library is committed to strengthening libraries and information services for all Montanans through leadership, advocacy, and service.

### **VALUES**

MSL values:

- An educated and inquisitive citizenry.
- Library services that are responsive to users' needs.
- Free government information that is easily accessible and widely distributed.
- Patron privacy.
- Equitable access to all library resources and services.
- Competent and professional staff.
- Open, direct, and timely communication.
- Economic development of Montana and Montanans.

The State Library Commission is established by Montana statute 22-1-101 (MCA).

The role of the State Library Commission is to set forth policies and funding priorities that empower the State Library to meet its mission and statutory obligations and to advocate for the State Library and the Montana library and information communities whenever possible.

The State Library Commission Group norms:

- The Commissioners will read and come to meetings prepared to discuss agenda items;
- Commission meetings follow Roberts Rules of Order;
- Commissioners are bound by the State Code of Ethics and Standards of Conduct: [http://leg.mt.gov/bills/mca\\_toc/2\\_2\\_1.htm](http://leg.mt.gov/bills/mca_toc/2_2_1.htm).

## Goal One—Content—Discussion

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

1.1. Advise, review and approve policies that enhance Montana State Library's statewide e-content subscription and purchase programs, and that support the Montana Memory Project, the collection development priorities of the Montana State Library Collection Development Policy, and the Talking Book Library Collection;

1.2. Advise, review, prioritize and approve budgets that enhance Montana State Library's statewide e-content subscription and purchase programs, and that support the Montana Memory Project, the collection development priorities of the Montana State Library Collection Development Policy, and the Talking Book Library Collection;

**(February 2016):** At the December 2015 Commission meeting Talking Book Library Supervisory Christie Briggs shared with the Commission a recommendation from the National Library Service for a new recording studio. In the next few months MTBL plans to pursue this recommendation and will bring to the Commission a request to use funds from the State Library Trust to install a new booth. Doing so will significantly increase MTBL's capacity to record Montana titles for our collection.

**(Update June 2016)** TBL will bring a request for trust funds to procure and install a modular recording studio.

**(Update June 2016)** At the April Commission meeting the Commission took action to align the Statewide Library Resources budget to the Library Development Study Task Force recommendations. The budget is a mix of Library Services and Technology Act (LSTA) and Coal Severance Tax (CST) monies. The new budget took into account a \$46,000 reduction in available CST monies this biennium.

At the May Commission meeting the Commission approved a reduction in the SLR budget to resolve a further \$166,000 CST reduction.

1.3. Request and participate in trainings and/or presentations by staff and other subject matter experts on new and existing topics that will educate the Commission on issues that will inform their understanding of the content needs of Montana Library users.



## Goal Two—Access—Discussion

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. Advise, review and approve policies that enhance access to information through statewide resource sharing initiatives;

2.2. Advise, review, prioritize and approve budgets that enhance access to information through statewide resource sharing initiatives;

**(Update February 2016):** At the December 2015 Commission meeting the Commission authorized the use of State Library Trust funds to pay for the creation of new marketing materials to market the Ready2Read texting program.

2.3. Request and participate in trainings and/or presentations by staff and other subject matter experts on new and existing topics that will educate the Commission on issues that will inform their understanding of the access needs of Montana Library users;

2.3.a. Montana Memory Project Director will offer a presentation to the Commission on the Digital Public Library of America (DPLA) at the December Commission meeting.

**(Update February 2016):** At the December 2015 Commission meeting the Commission heard a presentation from Jennifer Birnel about Montana librarians' involvement in the DPLA including training that Montana librarians were selected to receive in order to create curated collections of digital Montana content in the DPLA (<http://dp.la/exhibitions/exhibits/show/industries-settled-montana>) and plans to become a DPLA hub.

**(Update December 2016):** At the October 2016 Commission meeting the Commission heard a presentation from Bryce Maxell about two new services available through MTNHP, the MapViewer application and the Species Snapshot.

### **Goal Three—Training—Discussion**

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

3.1. Advise, review and approve policies that enhance Montana State Library's statewide training opportunities;

**(Update December 2015):** At the October 2015 Commission meeting the Commission approved a new MSL Table training lab use policy making new tablet training labs available to staff and MSL partners to enhance training services.

3.2. Advise, review and approve budgets that enhance Montana State Library's statewide training opportunities;

**(Update December 2015):** At the October 2015 Commission meeting the Commission approved a MSL Trust request to help fund the purchase of a replacement laptop training lab.

3.3. Request and participate in trainings and/or presentations by staff and other subject matter experts on new and existing topics that will educate the Commission on issues that will inform their understanding of the training needs of Montana Library users.

**(Update June 2016):** At the April Commission meeting the Commission received a report from 2015 attendees from the Summer Institute. Due to time constraints the Commission was unable to view a video attendees prepared to document the impact of the training. A link to the video was shared with Commissioners after their meeting.

**(Update December 2016):** The Commission will receive training at their December Commission meeting from Sonia Gavin, Legislative Reference Librarian, about how to use the Legislative Bill tracking system, LAWS.

## Goal Four—Consultation and Leadership—Discussion

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

4.1. Represent the interests of MSL partners including public libraries and the GIS community in appropriate legislative, community, regional, and national forums;  
**(Update February 2016):** After recognizing an inconsistency in the MSL Administrative Rules pertaining to the granting of deferrals for public library standards, at the recommendation of the State Librarian, the Commission completed a process to formally revise the rule.

4.2. Establish and maintain contact with Library Directors and Trustees, and other MSL partners, to remain cognizant of their needs and the challenges they face;

4.2.a. Each Commissioner will attend at least one library federation meeting during fiscal year 2016;

**(Update October 2015):** Commissioner Kish attended the Broad Valleys Federation teleconference on September 22, 2015.

Commissioner Roberts attended the South Central Federation meeting on September 26, 2015, in Forsyth.

**(Update December 2015):** Commissioner Wall attended the Tamarack Federation meeting teleconference on October 22, 2015.

Commissioner LaFromboise attended the Pathfinder Federation meeting on October 22, 2015 in Ft. Benton.

Commissioner Roberts attended the South Central Federation meeting on September 26, 2015, in Miles City.

**(Update April 2016):** Commissioners Newell and Bartow attended the Broad Valleys Federation on March 11 and 12, 2016 meeting in Butte.

Commissioner Eissinger attended the Sagebrush Federation meeting on March 5, 2016 in Miles City.

Commissioner Roberts attended the South Central Federation meeting on March 5, in Roundup.

**(Update June 2016):** Commissioner Eissinger attended the Golden Plains Federation meeting on April 21, 2016 in Wolf Point.

Commissioner LaFromboise attended the Pathfinder Federation meeting on May 19, 2016 in Fort Benton.

Commissioners LaFromboise and Wall attended the Tamarack Federation meeting on May 20 and 21, 2016 in Big Fork.

**(Update December 2016):** Commissioners were able to attend all federation meetings with the exception of the South Central Federation meeting in Harlowton.

4.2.b. Each Commissioner will attend the 2016 Montana Library Association Conference, April 6-9, 2016 in Missoula, Montana;

4.2.c. The Commission Chair will facilitate Conversations with the Commission session at the Montana Library Association Conference;  
**(Update June 2016):** The Commissioners hosted a well-attended, interactive session in which the Commissioners were able to describe some of recommendations of the Library Development Study Task Force, to share information about how the recommendations will impact library development services from MSL, and to hear feedback about priorities of librarians and trustees.

**(Update August 2016):** The 2017 MLA Conference is scheduled for March 28-April 1 in Billings.

4.2.d. At least one Commissioner will attend meetings of the Montana Shared Catalog and MontanaLibrary2Go each year;

4.2.e. Commissioners are encouraged to visit libraries as they travel the state. Advanced notice to the libraries is recommended;

**(Update October 2015):** The Commission's August Commission meeting was held in the Flathead Valley. Events included a reception hosted by the Whitefish Community Library and a Lunch & Learn hosted by the ImagineIf Library in Kalispell.

**(Update October 2015):** Commissioners Wall & LaFromboise attended the Fall Work Shops in Helena.

4.3. Share information about the role of the State Library Commission beyond the boundaries of the Montana Library Community;

4.4. At least one Commissioner will attend at least one "visioning" conference during the fiscal year, as funding allows. Discuss findings with the Commission and MSL staff and make recommendations for future opportunities for improved library services;

4.4.a. Commissioner LaFromboise attended the Research Institute for Public Libraries workshop in Colorado Springs, Colorado; discussion will focus on

evaluation design and implementation, data collection and use for strategic planning and measures for reporting library impact;

4.4.a.1. Commissioner LaFromboise and staff will present information from the workshop at the October Commission meeting;  
**(Update December 2015):** At the October 2015 Commission meeting the Commission heard a presentation and participated in a discussion about the Research Institute for Public Libraries conference on creating a culture of outcome based planning.

**(Update August 2016):** Commissioner Roberts was scheduled to attend the 2017 RIPL Conference. A new commissioner may need to be identified to attend in his place.

**(Update October 2016):** Commissioner Newell, along with Cara Orban and Tracy Cook will attend the 2017 RIPL Conference.

**(Update December 2016):** Commissioner Wall, along with Evan Hammer and Erin Fashoway attended the 2017 NSGIC Annual Conference in Indianapolis.

4.5. The Commission will invite at least one recipient of a Montana Land Information Act (MLIA) grant to present on the outcomes of their grant in order to better educate the Commission on the role, outcome and impacts of the MLIA.

**(Update February 2016):** At the December 2015 Commission meeting the Commission approved the 2017 Montana Land Plan.

**(Update October 2016):** The City of Shelby, represented by Lorette Carter, gave a wonder presentation on the MLIA grant that they received to do water main mapping. Originally mapped by a contractor, she reported that the grant gave them the confidence to continue the process on their own, meeting a fundamental goal of the grant program to build GIS capacity at the local government level.

## **Goal Five—Collaboration—Discussion**

5. MSL promotes partnerships and encourages collaboration among its users.

5.1. Facilitate information-sharing partnerships among federal, tribal, state and local governments, businesses and citizens. Partnerships should promote the role of libraries in Montana communities, create funding opportunities for Montana libraries, and extend the reach of information services and delivery throughout the state;

5.2. Commissioners designated to serve on the Network Advisory Council and the NRIS Advisory Committee will attend committee meetings to represent the interests of the Commission and will provide feedback to the Commission regarding committee reports and initiatives;

5.3. The Commission will continue a process to learn more about broadband service availability to libraries in Montana and opportunities to further support expansion of broadband technology to meet the needs of library public computing centers;

5.3.a. A designee of the Governor's Office will be invited to share the broadband priorities identified by the Main Street Montana Interconnectivity and Telecommunications Key Industry Network.

## Goal Six—Sustainable Success—Discussion

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

**(Update December 2015):** Commissioners Kish participated in the November 19 meeting of the Library Development Study Task Force during which the task force formulated their draft recommendations to the Commission. Commissioner Newell also attended the meeting in the morning.

**(Update August 2016):** Under the leadership of Central Services Manager, Kris Schmitz, the Commission is evaluating the need for and updating all MSL Commission policies. At that June Commission meeting the Commission recommended deletion of several policies that are either no longer relevant or that have been replaced by state policies and/or the Montana Operations Manual documentation.

**(Update August 2016):** At a special May meeting of the Commission, the Commission voted to approve four budget requests to move forward to the Governor's Office in accordance with the Executive Planning Process. At that meeting the Commission also took action to reduce expenditures tied to Coal Severance Tax monies as a result in the precipitous decline in CST revenue.

6.1. The Commission will evaluate the outcomes of the current long range strategic plan and will conduct a new strategic planning process.

**(Update April 2016):** The Commission began the strategic planning process during a work session at their February meeting. The Commission agreed to seek the expertise of an outside facilitator to guide the planning process. The State Librarian, with input from the Commission, issued a limited solicitation to identify a facilitator. Responses to the solicitation will be evaluated at the April meeting.

**(Update June 2016):** The Commissioner selected facilitator Ned Cooney to guide a strategic planning process. The Commission will have an initial planning meeting with him on June 9, 2016.

**(Update August 2016):** The Commission participated in a work session with facilitator Cooney. During the work session the Commission conducted a Strengths/Weaknesses/Opportunities/Threats (SWOT) analysis and identified stakeholders that Cooney will interview ahead of the August 9 work session.

**(Update October 2016):** The Commission participated in a second work session with facilitator Cooney at the Medicine Spring Library in Browning. During the work session the Commission developed a Practical Vision and Strategic Direction for the agency. Staff then used the vision and direction to derive actionable ideas to implement the plan.

**(Update December 2016):** After recognizing that the Practical Visions described in the draft strategic plan did not adequately express the desired impacts of the visions, Commission members participated in a ½ day visioning session to more clearly articulate the impacts of the MSL Strategic plan. As a result the plan has been reworked into a strategic framework that directly communicates what MSL will do and how we will do it in order to have desired outcomes.

6.2. Advocate for the Montana State Library and the Montana Library Community with federal, tribal, state and local governments, businesses and citizens. Advocacy should promote the role of libraries in Montana communities, create funding opportunities for Montana libraries, and extend the reach of information services and delivery throughout the state;

**(Update December 2016):** Ahead of the upcoming Legislative Session, the Governor’s Education Policy Advisor, Siri Smilie, and the MLA Government Affairs representative, John Finn, will attend the December Commission to update the Commission on legislative priorities. Also, during a work session, the Commission will discuss best practices for communicating with Legislators.

6.2.a. Commissioners will monitor the activities of the Education and Local Government (ELG) Interim Committee by listening to the meetings virtually. Chair Rep. Don Jones of Billings will be invited to the December Commission meeting;

**(Update December 2015):** The ELG meeting no longer coincides with the December Commission meeting so we were unable to arrange for this meeting. Future opportunities will be evaluated.

6.2.b. A member of the Commission will attend National Library Legislative Day (NLLD) May 2-3, 2016 in Washington, D.C.;

**(Update June 2016):** Commissioner Eissinger attended NLLD as well as the spring meeting of the Chief Officers of State Library Agencies the following day.

6.2.c. At least one Commissioner will attend a conference of the Montana Association of Counties;

**(Update October 2015):** Commissioner Wall attended the Montana Association of Counties and offered a presentation with GIS Coordinator Stu Kirkpatrick on the training and use of ArcGIS Online by counties as funded by a Montana Land Information Act grant.

**(Update April 2016):** Commissioner Wall joined Evan Hammer and Michael Fashoway at the National States Geographic Information Council midyear meeting in Annapolis, Maryland. The trip included meetings with our congressional delegation in Washington, DC.



6.3. Request and participate in trainings and/or presentations by staff and other subject matter experts on new and existing topics that will educate the Commissions on issues that will help the Commission to continually grow as a Commission and to support the work of the State Library;

6.3.a. Communications and Marketing Coordinator Sara Groves will present information about MSL's marketing efforts at the October Commission meeting;

**(Update October 2015):** At their August Commission meeting the Commission heard a presentation from Statewide Projects Librarian Cara Urban on the MakerSpace pilot used by libraries through the state.

**(Update December 2015):** At the October 2015 Commission meeting Sara Groves presented information about MSL's marketing efforts. Of particular interest was the successful engagement in the use of Facebook as a means of increasing use of the Montana Memory Project and access to state government information.

6.4. Advise, review and approve policies that recognize the significant contributions of and develop the leadership and management skills of MSL staff;

6.5. Provide guidance on and evaluation of the State Librarian work plan and performance.

6.5.a. Annual evaluation of the State Librarian scheduled for the June Commission meeting.

**(Update August 2016):** A formal evaluation of the State Librarian was completed during an executive session of the June Commission meeting.



JULY		AUGUST		SEPTEMBER		NOTES
1		1		1		
2		2		2		<b>Regular August meeting agenda items:</b>
3		3		3		Glacier County Library, Cut Bank
4		4		4		FY '16 4 <sup>th</sup> quarter financial report;
5		5		5		FY '17 opening budget;
6		6		6		Discuss programs & Commission work plans
7		7		7		
8		8		8	<b>MLIAC Meeting &amp; ELG Interim Committee</b>	<b>Golden Plains Federation Meeting</b>
9		9	<b>Work Session &amp; Reception, Browning</b>	9	September 8 & 9, 2016	Glasgow City-County Library, Glasgow
10		10	<b>Commission Meeting, Glacier County Library, Cut Bank</b>	10		<b>Commissioner: C. Eissinger</b>
11		11		11		Staff: Cook
12		12		12		
13		13		13	<b>Fall Workshops</b>	<b>South Central Federation Meeting</b>
14		14		14	<b>Polson, MT</b>	Harlowton Public Library, Harlowton
15		15		15		<b>Commissioner: N/A</b>
16		16		16		Staff: Cook, Stapp
17		17		17	<b>South Central Federation Meeting</b>	
18		18		18		<b>Broad Valleys Federation Meeting</b>
19		19		19		Conference Call
20		20		20		<b>Commissioner: A. Kish</b>
21		21		21		Staff: Cook
22		22		22		
23		23		23		
24		24		24		
25		25		25		<b>RIPL Conference</b>
26		26		26		Denver, Colorado
27		27		27	<b>Broad Valleys Federation Meeting</b>	<b>Commissioner: Newell</b>
28		28		28		Staff: Orban, Cook
29		29		29	<b>Golden Plains Federation Meeting</b>	Online information: <a href="http://ripl.lrs.org/">http://ripl.lrs.org/</a>
30		30		30	<b>Research Institute for Public Libraries</b>	
31		31		31		



OCTOBER		NOVEMBER		DECEMBER		NOTES
1	Research Institute for Public	1		1		<p><b>Regular October meeting agenda items:</b></p> <p>FY '17 1<sup>st</sup> quarter financial report;</p> <p>FY '16 Federation Reports</p> <p><b>TBL Volunteer Luncheon, Helena</b></p> <p><b>All Commissioners invited</b></p> <p><b>Tamarack Federation Meeting</b></p> <p>Conference Call</p> <p><b>Commissioner: Wall</b></p> <p>Staff: Cook, Stapp</p> <p><b>NSGIC Annual Meeting</b></p> <p>Indianapolis, IN</p> <p><b>Commissioner: Wall</b></p> <p>Staff: Hammer, Fashoway</p> <p><b>Pathfinder Federation Meeting</b></p> <p>Chouteau County Public Library, Ft. Benton</p> <p><b>Commissioner: A. LaFromboise</b></p> <p>Staff: Cook</p> <p><b>Sagebrush Federation Meeting</b></p> <p>Miles City Public Library, Miles City</p> <p><b>Commissioner: Newell</b></p> <p>Staff: Cook, Stapp</p> <p><b>Regular December meeting agenda items:</b></p> <p>FY '17 Land Plan approval</p> <p>Network Advisory Council Report</p> <p>2017 Commission meeting dates selection</p>
2	Libraries	2		2		
3		3		3		
4		4		4		
5		5	Sagebrush Federation Meeting	5		
6		6		6		
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10		10	Network Advisory Council Meeting	10		
11		11		11		
12	Commission Meeting	12		12		
13	TBL Volunteer Luncheon	13		13		
14		14		14	Commission Meeting	
15		15		15		
16		16		16		
17		17		17		
18		18	MLIAC Meeting	18		
19	Tamarack Federation Meeting	19		19		
20		20		20		
21		21		21		
22		22		22		
23		23		23		
24	National States Geographic	24		24		
25	Information Council Meeting	25		25		
26	October 24-28, 2016	26		26		
27	Pathfinder Federation Meeting	27		27		
28		28		28		
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JANUARY		FEBRUARY		MARCH		NOTES
1		1		1		<b>Library Legislative Day</b>
2	<b>2017 Legislative Session – Day 1</b>	2		2		Montana State Library, Helena, MT;
3		3		3		5:30 to 8:30 p.m.
4		4		4		<b>All Commissioners invited to attend</b>
5		5		5	<b>Sagebrush Federation Meeting</b>	
6		6		6		<b>Regular February meeting agenda items:</b>
7		7		7		FY '17 2 <sup>nd</sup> quarter financial report;
8		8	<b>Commission Meeting (Tentative)</b>	8		Conversations w/ Commission planning
9		9		9		
10		10		10		<b>NSGIC Midwinter Meeting</b>
11		11		11	<b>Broad Valleys Federation Retreat</b>	Annapolis, MD
12		12		12	March 11-12, 2017	<b>Commissioner: Wall</b>
					<b>South Central Federation Meeting</b>	
13		13		13		Staff: Hammer
14		14		14	<b>Network Advisory Council Meeting</b>	<b>Sagebrush Federation Meeting</b>
15		15		15		Miles City Public Library, Miles City
16		16		16		<b>Commissioner: TBD</b>
17		17		17		Staff: TBD
18	<b>Library Legislative Day</b>	18		18		
19		19		19		<b>Broad Valleys Federation Meeting</b>
20		20		20		Finlen Hotel, Butte, MT
21		21		21		<b>Commissioner: TBD</b>
22		22		22		Staff: TBD
23		23		23		
24		24		24		<b>South Central Federation Meeting</b>
25		25	<b>Tentative Legislative Transmittal</b>	25		Roundup School-Community Library
26		26	February 25-28, 2017	26		<b>Commissioner: TBD</b>
27		27	<b>National States Geographic</b>	27		Staff: TBD
28		28	<b>Information Council Meeting</b>	28		
29			February 27-March 2, 2017	29	<b>Commission Meeting (Tentative)</b>	<b>Montana Library Assn. Conference</b>
30				30	<b>Montana Library Assn. Conference;</b>	Billings, MT;
31				31	<b>Conversations w/ the Commission</b>	Conversations w/ the Commission
					March 28- April 1, 2017	<b>All Commissioners invited to attend</b>



APRIL		MAY		JUNE		NOTES
1		1	National Library Legislative Day	1		<b>Regular April meeting agenda items:</b> LSTA award and budget; Network Advisory Council Report; FY '17 3rd quarter financial report; Legislative discussion  <b>Golden Plains Federation Meeting</b> Glasgow City-County Library, Glasgow <b>Commissioner: TBD</b> Staff:  <b>National Library Legislative Day</b> Washington, DC <b>Commissioner: TBD</b> Staff: Stapp  <b>Pathfinder Federation Meeting</b> Chouteau County Public Library, Ft. Benton <b>Commissioner: TBD</b> Staff: TBD  <b>Tamarack Federation Meeting</b> TBD <b>Commissioner: TBD</b> Staff: TBD  <b>Regular June meeting agenda items:</b> FY '18 Federation Plans of Service State Librarian evaluation Staff appreciation event
2		2	May 1-2, 2017	2		
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9		9	Network Advisory Council Meeting	9		
10		10		10		
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14		14		14	Commission Meeting (Tentative)	
15		15		15	Western Council of State Libraries	
16		16		16	Helena, MT June 15-16, 2017	
17		17		17		
18		18		18		
19		19	Pathfinder Federation Meeting	19		
20		20	Tamarack Federation Meeting	20		
21	Golden Plains Federation Meeting	21	May 20-21, 2016	21		
22		22		22		
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JULY		AUGUST		SEPTEMBER		NOTES
1		1	Network Advisory Council Retreat	1		<p><b>Regular August meeting agenda items:</b></p> <p>TBD</p> <p>FY '17 4<sup>th</sup> quarter financial report;</p> <p>FY '18 opening budget;</p> <p>Discuss programs &amp; Commission work plans</p>
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9		9	Commission Meeting (Tentative)	9		
10		10		10		
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OCTOBER		NOVEMBER		DECEMBER		NOTES
1		1		1		
2		2		2		<b>Regular October meeting agenda items:</b>
3		3		3		FY '18 1 <sup>st</sup> quarter financial report;
4		4		4		FY '17 Federation Reports
5		5		5		
6		6		6		<b>TBL Volunteer Luncheon, Helena</b>
7		7		7		<b>All Commissioners invited</b>
8		8		8		
9		9		9		<b>Fall Federation meeting dates TBD</b>
10		10		10		
11	<b>Commission Meeting (Tentative)</b>	11		11		<b>Regular December meeting agenda items:</b>
12	<b>TBL Volunteer Luncheon</b>	12		12		FY '18 Land Plan approval
13		13		13	<b>Commission Meeting (Tentative)</b>	Network Advisory Council Report
14		14	<b>Network Advisory Council Meeting</b>	14		2018 Commission meeting dates selection
15		15		15		
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JANUARY		FEBRUARY		MARCH		NOTES
1		1		1		<b>2018 Commission Meeting Dates TBD</b>
2		2		2		
3		3		3		<b>Regular February meeting agenda items:</b>
4		4		4		FY '18 2 <sup>nd</sup> quarter financial report;
5		5		5		Conversations w/ Commission planning
6		6		6		
7		7		7		<b>Spring Federation meeting dates TBD</b>
8		8		8		
9		9		9		<b>Montana Library Assn. Conference</b>
10		10		10		TBD
11		11		11		Conversations w/ the Commission
12		12		12		<b>All Commissioners invited to attend</b>
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APRIL		MAY		JUNE		NOTES
1		1		1		<p><b>Regular April meeting agenda items:</b></p> <p>LSTA award and budget;</p> <p>Network Advisory Council Report;</p> <p>FY '18 3rd quarter financial report;</p> <p>Legislative discussion</p> <p><b>National Library Legislative Day</b></p> <p>Washington, DC</p> <p><b>Commissioner:</b></p> <p>Staff: Stapp</p> <p><b>Regular June meeting agenda items:</b></p> <p>FY '19 Federation Plans of Service</p> <p>State Librarian evaluation</p> <p>Staff appreciation event</p>
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# Memo

**To:** Montana State Library Commission      **Fr:** Tracy Cook, SLR Director

**Date:** December 1, 2016

**Re:** **Analyzing and communicating public value presentation**

During the Commission Work Session, I will be reviewing pages 5-11 of the “Data-Driven Libraries” presentation that was given by Samantha Becker from the University of Washington iSchool.

Ms. Becker gave this presentation during the Network Advisory Council’s retreat. Her focus is on creating public value and the importance of policy windows as public entities implement projects and services. Her presentation discusses all of the pieces of the data-driven model and how the collection of data can help us evaluate whether or not we are adding value with our services.

# Data-driven Libraries

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EVALUATION, DECISION-MAKING, AND ADVOCACY

SAMANTHA BECKER & CADI RUSSELL-SAUVE

UNIVERSITY OF WASHINGTON INFORMATION SCHOOL



Kit Hadley  
Director  
St. Paul Public  
Library

“An imperative for future library leaders is how we move beyond counting to measuring and evaluating. **We must ground library-centric indicators in a framework of measures of community well-being.** We need to better integrate evaluation into our operations in order to increase our impact and to better communicate how essential we are to learning and engagement in our communities.”



# Goals for today

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- Begin a cultural shift towards using data wisely and effectively
  - Understand the different internal and external needs and uses for data
  - Understand how data drives policy making
  - Connect library work to community/state goals
- Learn how data can be used to evaluate, plan, decide, and advocate
  - Develop theories of change and contribution
  - Identify important outcomes and indicators
  - Map potential partners and data users
  - Reflective practice
- Develop ideas about data collection
  - Understand what makes a good indicator
  - How to go from indicators to data collection procedures
  - Recycling data and reporting

# Agenda

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9:00-9:30	Introductions and goals
9:30-10:30	What is public value and what does it have to do with data?
10:30-12:00	Mapping the theory of change and discovering outcomes
12:00-1:00	Lunch
1:00-2:00	Indicators, metrics, and data collection
2:00-3:00	Reflective practice: using data for decision-making
3:00-4:00	Taking it to the street: using data in partnerships and advocacy

# A crash course on policy making

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A LITTLE THEORY GOES A LONG WAY TOWARDS  
UNDERSTANDING HOW PUBLIC POLICY WORKS

# Creating Public Value

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**Hey there. Are you ready to become a public entrepreneur?**

Because government obligates citizens to pay taxes to support services, public managers must make decisions that:

- Reflect the interests and aspirations of their communities;
- Result in substantive contributions to collective goals; and
- Ensure programs are cost-effective and manageable.

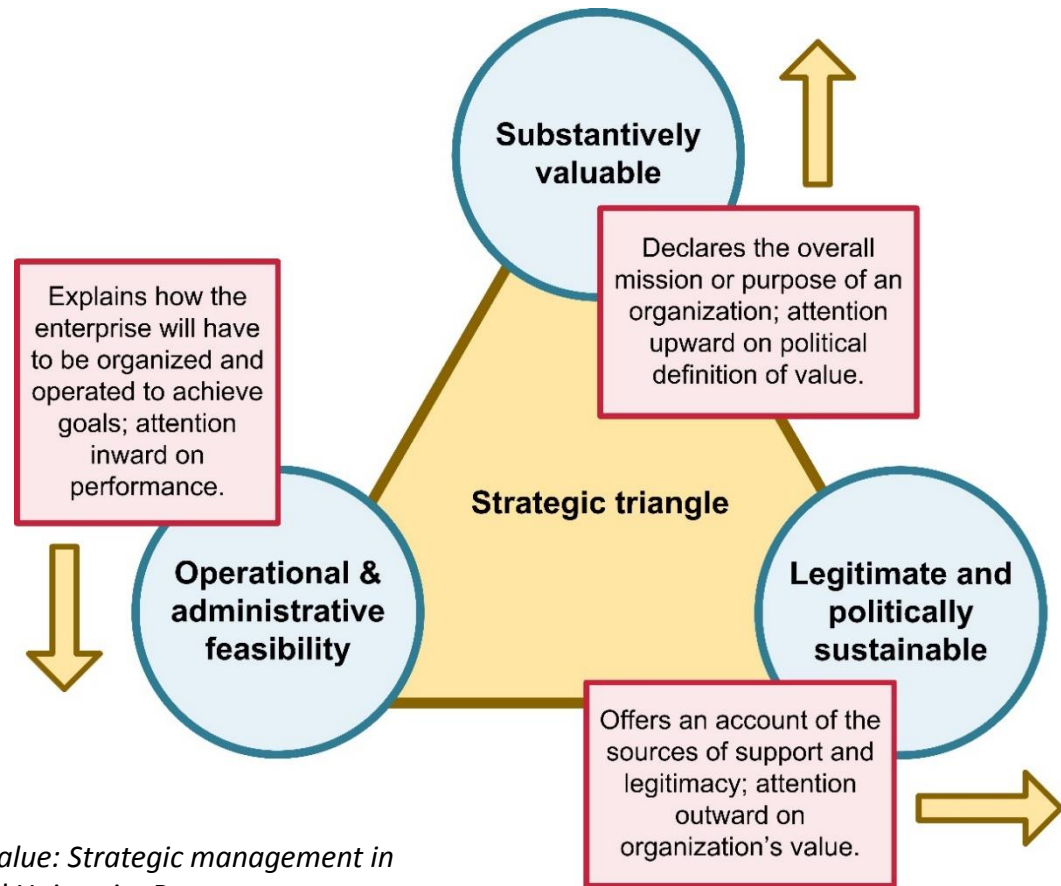
Let's Talk

Mark Moore asserts that citizens and their elected representatives are the customers. How does that change your thinking about where patron feedback fits into decision making?



# The Strategic Triangle

- All purpose decision-making framework
- Attending to all three corners of the triangle is essential for creating public value.
- Each needs to be monitored continuously to ensure stable, effective, and supported services for the community.
- Not attending to one or more will surely lead to trouble eventually.



Moore, Mark. (1995). *Creating public value: Strategic management in government*. Cambridge, Mass: Harvard University Press.

# The role of information in policy making

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PROVIDING THE RIGHT INFORMATION AT THE  
RIGHT TIME TO THE RIGHT PEOPLE—SOUNDS LIKE  
A JOB FOR A LIBRARIAN!

# The “Enlightenment Function” of data and analysis

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## Informing **policy makers**\*

- Helping them think about the issues
- Define the problem ←
- Identify important variables
- Get new ideas and perspectives
- Set the agenda for action

Let's Talk

Who are the policy makers in your environment and what are their priorities?

→ Developing solutions is the policy process and is always political, even at the hyper-local level, e.g., how many holds are patrons allowed.

Weiss, C. (1976). “Research for Policy’s Sake: The Enlightenment Function of Social research.”

# Policy beliefs

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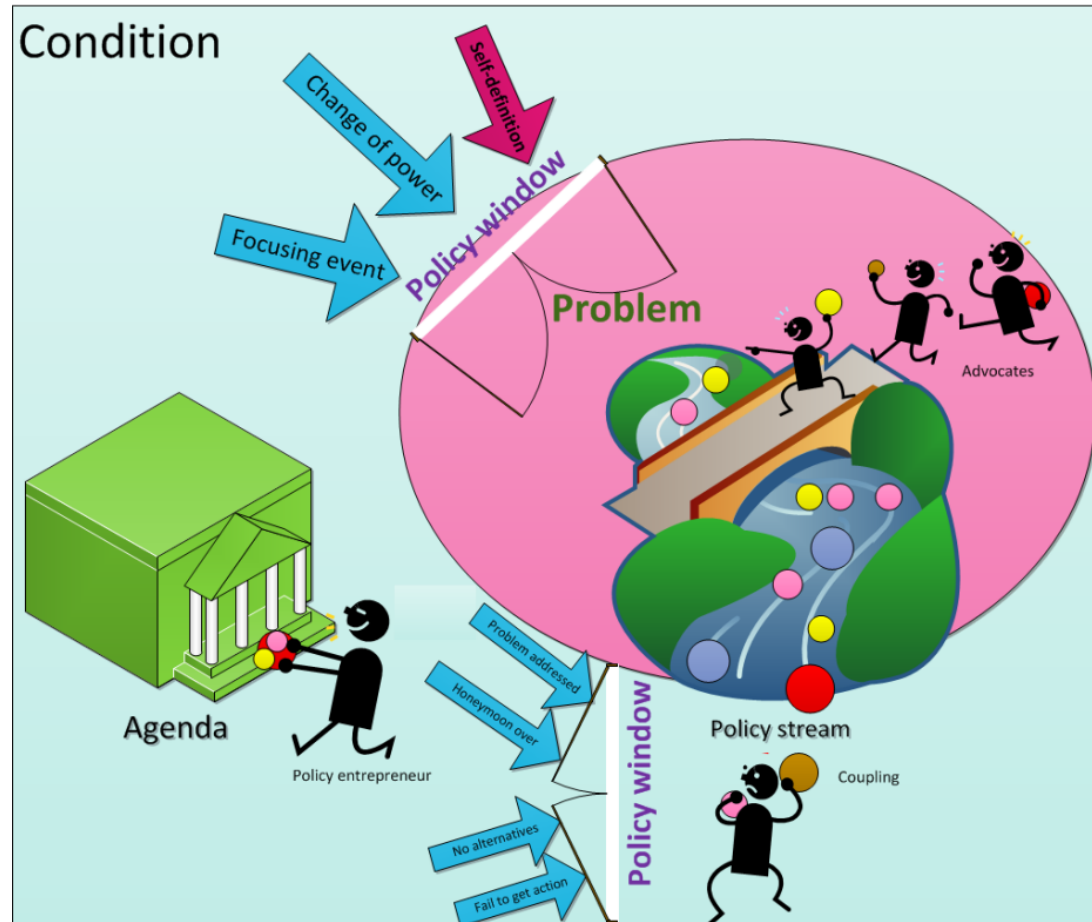
Advocacy Coalition Framework (Sabatier and Jenkins) defines three levels of policy beliefs and how information can influence them:

- Deep core beliefs: basic orientation to the role of government
  - Hard, maybe impossible to change, regardless of information
- Policy core beliefs: preferences for types of policies
  - Resistant to change, but possible with policy-oriented learning
  - Change happens *within coalitions* to **produce strategies**
- Secondary beliefs: based on operational experiences
  - Easiest to change, informed by the nitty-gritting of operationalizing policy
  - Creates cross-coalition learning
  - Can “trickle-up” to policy core beliefs

# Policy windows and process

- **Conditions** must become **problems** for policy change
- Policy windows open with new information or events
- Coalitions pitch policy solutions
- Policy entrepreneurs negotiate policy beliefs
- Act quick to get on the agenda before the window closes!

Kingdon, John. (1984). *Agendas, alternatives, and public policies*. Interpretation by Samantha Becker.



# Take-aways

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- Public services need to be substantively valuable, operationally feasible, and politically legitimate.
- Policy change happens when a condition becomes seen as problem. Focusing events, changes in leadership, and new information can open up policy windows where coalitions and policy entrepreneurs can work to change policies.
- People and coalitions involved in policy making come with deep core beliefs that are very hard to change. Information can sometimes change policy core beliefs. Working across coalitions to implement policy can produce information that changes beliefs.
- An effective public manager defines the problem for policy makers, acts as a policy entrepreneur to work across coalitions, and gathers and provides information that leads to better decision making.

# Evaluation!



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WHERE'S ALL THAT INFORMATION GOING TO  
COME FROM?

# Evaluation is policy learning

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# Theory of change

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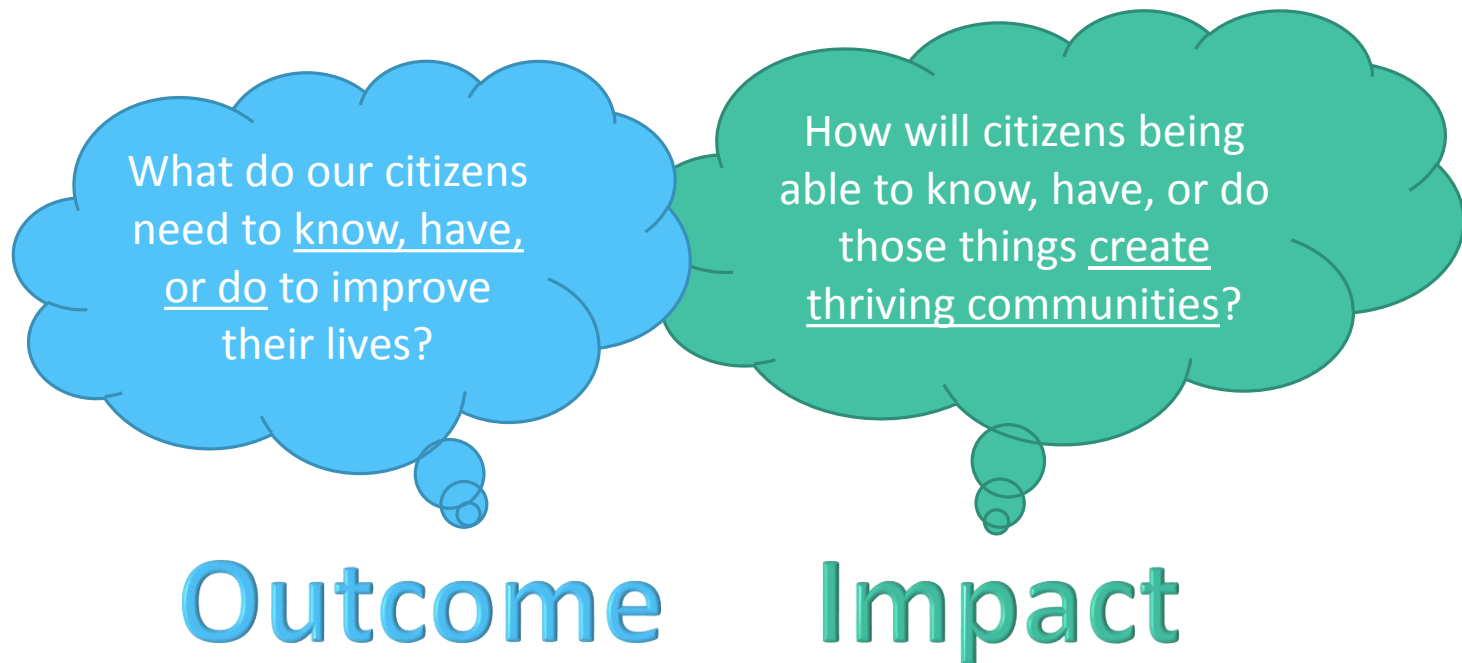
DISCOVERING AND MAPPING OUTCOMES

# What are you trying to accomplish?

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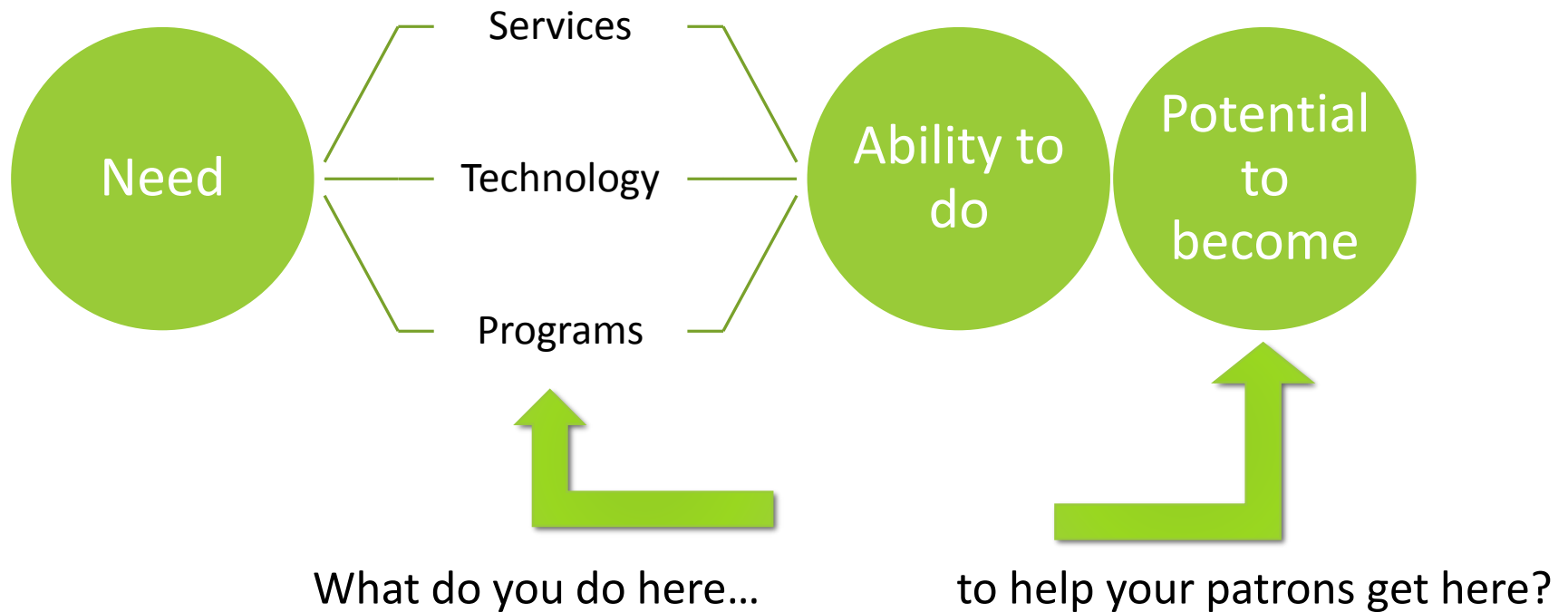
Montana's vision:

Libraries are leaders in creating thriving communities.



# How do you think it works?

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**Why and how do you think it helps?**

# Let's do this!

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- Choose a program, activity, service, or resource
- List all the outcomes you can think of that might come from use or participation
  - Think about changes in knowing, being, doing
  - Take it from the first step to the last
  - Connect to the mission of the library. How does it contribute to the library's impact?
  - Think about other organizations and how your work might contribute to theirs
  - Think about outcomes as they're related to the strategic triangle
  - Keep going until you can't think of any other outcomes
- Arrange the outcomes in a logical progression starting with early outcomes and ending with impacts

# Theory → Evaluation

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Does the theory underlying your program make sense?

Analyze the logical reasoning

- Is there evidence (scientific theory, social theory, research, evaluation) that the program works the way you think it does?
- What are your assumptions about how program works for which you don't have evidence?

It strengthens the evaluation when your theory of change has external validation. Where you're not sure yet is where you insert evaluation.

Evaluation around theory of change should be built into program implementation.

# Logic models

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THE NEXT STEP IN DEVELOPING DATA

A solid green horizontal bar at the bottom of the slide.

# A theory of change walks into a logic model...

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We provide this..

Inputs

Activities

So that patrons can do this..

Outputs

So that patrons can know this..

Early outcomes

So that patrons can have/be this..

Intermediate outcomes

So that communities can become..

Impact!

# Indicators

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FIGURING OUT WHAT TO MEASURE



# What should indicators do?

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- Provide information to measure *how well* programs are leading to specific goals
- Focus staff and boards on valuable and achievable goals and help prevent *mission creep*
- Collect information to help better allocate resources and improve services
- Organize evidence to show the value of services to funders and other stakeholders

# Designing indicators

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Indicators should be:

- Valid and reliable
- Specific and unique
- Observable and measurable
- Cost effective to collect
- Understandable and relevant
- Time bound

(Hatry, 2006)



# Let's do this!

---

- Turn the outcomes from your theory of change into indicators.
- Think about what you would need to know to know whether an outcome had occurred.
- Don't worry right now about whether you can collect data for the indicator.

E.g. Access to databases helps students complete homework.

- Number of students who access databases
- Number of students who find relevant resources
- Number of citations students use in term papers
- Grades of students who use databases for homework
- Satisfaction of teachers with the rigor of academic papers

Can you critique these indicators against the criteria?

# Data collection

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# Choose your methods

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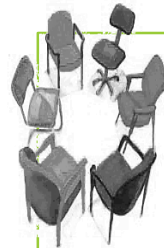
Observation



Logs



Interviews



Focus groups



Surveys

# Let's talk about bias...

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**“I believe that the operational principle for most programs is that it is better to be roughly right than to be precisely ignorant.”**

**--Harry Hatry**

Hatry, H. P. (January 01, 2002). Performance Measurement: Fashions and Fallacies. *Public Performance and Management Review*, 25, 4, 352-358.

# Decision-making

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# Reflective practice

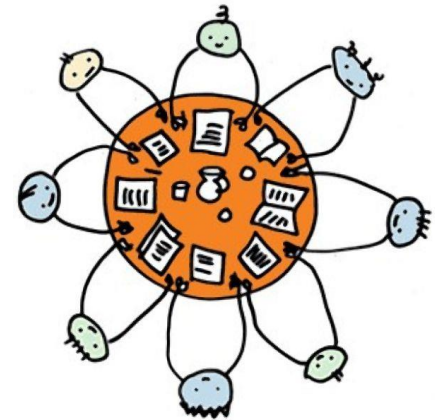
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Core set of questions guide the conversation

- Are we meeting or exceeding our goals? Why/why not?
- What are the programmatic implications?
- What specific recommendations does this team have for tweaking the program activities to increase our impact?

Generate results – Use what you've learned

Document discussion & decisions





# Communicating with stakeholders

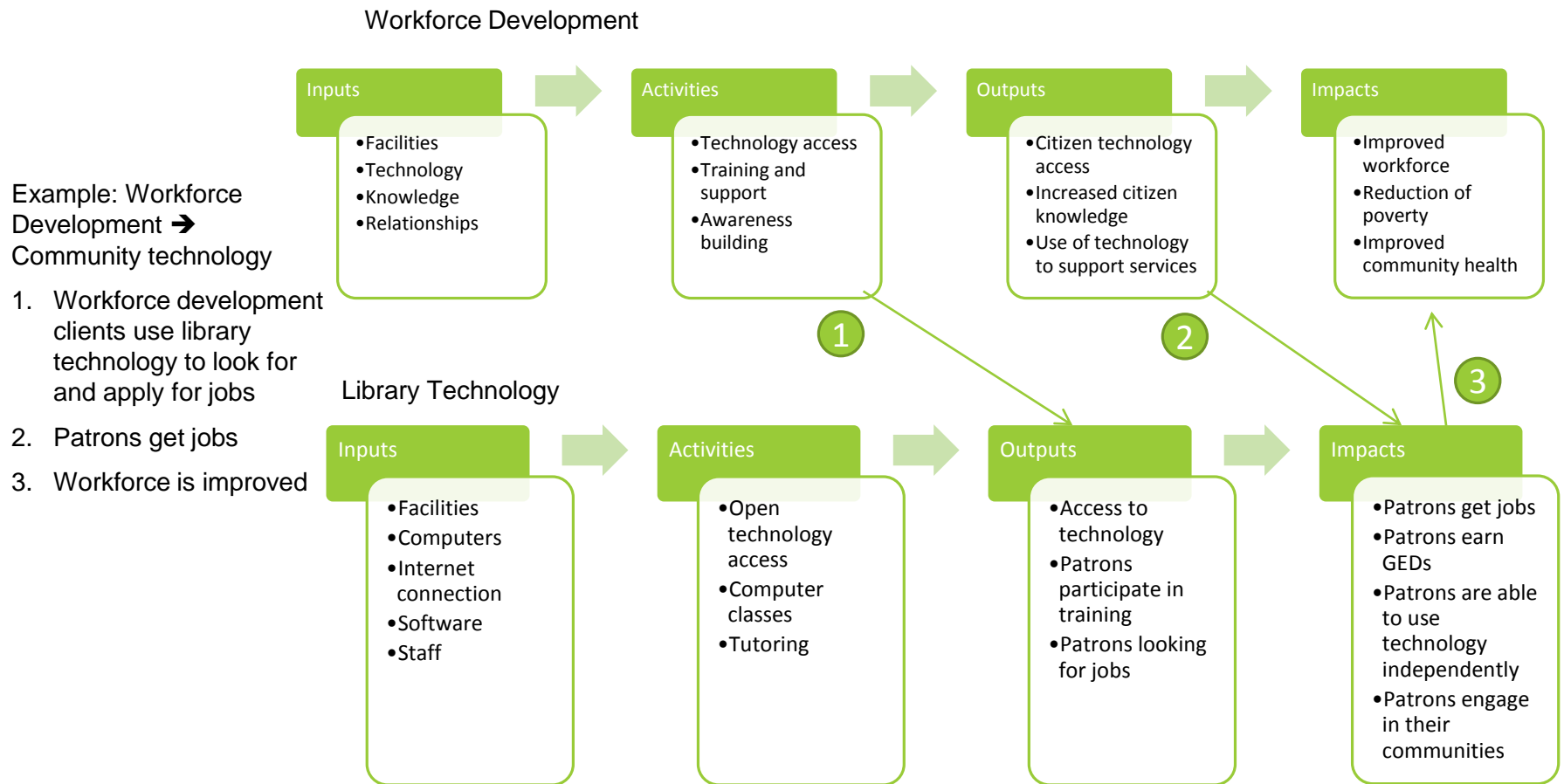
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- Let your key stakeholders know what you've learned from your data collection and how that has informed your programming
- Let program participants know that they have been “heard”
- Demonstrate to your board and funders that your organization is a learning organization, outcomes-oriented, and strategic

# Partnerships & advocacy

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# The situated logic model: map your change to your partners



# Lobbying Tips

## I. Prepare. Know What You Are Talking About

## II. Presenting Your Testimony

A. **Introduce yourself** - name, title, representation

B. **Be formal.** Address the chair and members of the committee.

C. **Keep it short** and to the point. Members may not appreciate long rambling testimony.

D. **Have your testimony in writing and hand it to the clerk of the committee after you speak.** If you hand it to them before you speak they will read it and not look at you while you talk. Having your testimony in writing also provides that if they run out of time and cut off testimony, you can turn in written testimony.

E. After your testimony, you may be asked questions. If you do not know the answers, **do not bluff.** Tell the Committee you will find out and get the information to the committee--then follow-up.

## III. Be Honest and Accurate.

**If you ever provide a legislator with inaccurate information, they will never rely on you again for information.** If you mistakenly provide inaccurate information, as soon as you discover your mistake, inform the legislator. **Trust is paramount in the legislative process.**

## IV. Develop Personal Relationships.

One of the most important lobbying techniques is to develop personal relationships with individual legislators. Such relationships develop in many ways. Attending social events, or meeting with them periodically to discuss your issues. Working closely with certain legislators on particular issues and seeing them through to a successful conclusion always works to establish relationships. Engaging local officials and library users to assist in lobbying on particular issues is always beneficial.

It is also important to establish personal relationships with members of the legislative staff. It is important to know key members of the legislative fiscal information staff and bill writing staff.

## **V. Give Legislators the Credit.**

**Thank legislators for their work on your bills**, even if they were not successful. Write them thank you notes, and acknowledge their help in public. **Appear to testify and support the legislator when your bill is being heard. Be flexible** if amendments need to be added. Do not adopt the “If I can’t have it all I don’t want any” attitude.

## **VI. Do Not Burn Bridges.**

There are many issues that come up during legislative sessions. A particular legislator may be on the library side on one issue and against it on another. Be careful not to scold a legislator too much if s/he is against you on a particular issue. S/he may support you on the next issue - but not if s/he has suffered much of your wrath.

## **VII. Establish Good Communication with State Library Staff.**

Effective communication with library staff is a must. Let them know if and when you will be available to testify. Ask questions of the State Librarian if you are uncertain about a bill. The State Library will send regular email updates to Commission, librarians, and staff to keep you informed during the legislature. Read these emails and keep up to date. Things change very quickly during the session.

If you have communication with a legislator about a bill, inform State Library staff. If you send or fax letters to legislators, provide the State Library with a copy.

## **VIII. Involve County Officials, Libraries, and Library users.**

Coordinate your legislative efforts with your other county elected officials, library staff and library users. Stand up and support their bills and ask them to return the favor.

## **IX. Develop Media Relationships**

The importance of developing good personal and professional relationships with members of the media who cover the legislature cannot be overstated. It is very important to be accessible to reporters covering the legislature and even more important to know how to respond to their questions. How you respond to questions from representatives of the media can have a tremendous impact on how your position is related to the public. Like relationships with members of the legislature, **relationships with members of the media are based on trust and respect and are developed over long periods of time.**

The State Librarian and the Communications Coordinator are the primary points of contact during the Legislative Session. You may defer questions from the media to them. If you are contacted by the media, please notify MSL staff so they may follow up appropriately.

#### **X. Stick With State Library Policy**

Once the state library commission has adopted a legislative agenda, respect it. Do not sabotage the state library and the commission if you do not like a bill. When commissioners oppose their own bill, legislators become confused, and then disregard the importance of the state library