
# Montana State Library

## Geographic Information Work Plan FY2015

## Final Draft (July 25, 2014)

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## Introduction

MSL Management and the Geographic Information staff is currently working on a Vision document that will describe where we are right now (how we meet MSL larger goals?) and where we would like to be by the close of FY 2017. While we complete this visioning process, we also need to identify specific work tasks for the Geographic Information team that will be accomplished in fiscal year 2015. A core premise of the draft vision is that a team oriented structure will result in more efficient management and better prepare the program for the succession of staff nearing retirement age. The remainder of this document identifies the tasks and success measures for work that will simultaneously move us toward meeting goals already established in the draft Vision document. **Our 50% draft Vision document is submitted for your reference.**

We respectfully submit this work plan as a way to more holistically address all the following MSL goals as related to Geographic Information:

1. The MSL Geographic Information Program will acquire and manage relevant quality geographic information that meets the needs of users
2. The MSL Geographic Information Program will provide our partners and patrons with convenient, high quality and cost effective access to geographic information
3. The MSL Geographic Information Program will provide appropriate trainings and training resources so that the best use can be made of the resources offered
4. The MSL Geographic Information Program will provide consultation, leadership and training for the development and use of geographic information and spatial technologies
5. The MSL Geographic Information Program will promote partnerships and encourage collaboration both within and beyond the spatial technology community.
6. The MSL Geographic Information Program will insure sustainable success through efficient and effective management of both geographic data and staff resources.

By completing the tasks set forth within this work plan we intend to efficiently and effectively fulfill the mission of the Montana State Library and support the vision for Geographic Information in FY15.

## Land Information Team

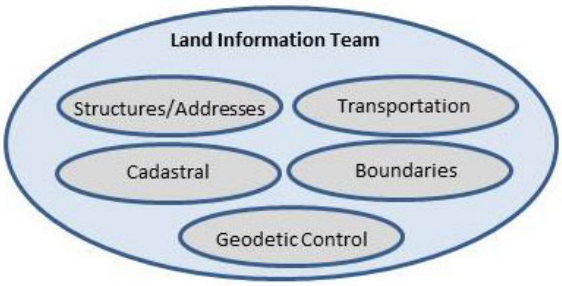


Fig. 1

MSL is the acknowledged steward for all MSDI themes identified in figure 1. so organization around a team concept should pose few problems. While general stewardship of these themes won't change radically, there will be concentrated effort to complete the following tasks. Completion will impact the way stewardship has been conducted in the past, removing the stove-pipe approach through staff cross-training.

1. Staff will be selected to participate on a land information team. The team may have a permanent or revolving leader depending on interest. Staff may participate on both the land and water (described later) teams as appropriate.
2. The team will complete documentation for Cadastral, Geodetic Control and Boundaries started under the FY14 CATSPAW project. The team will determine whether a general workflow documentation template will meet the needs of the entire program.
    - Success measure – Final workflow documentation is complete Cadastral, Geodetic Control and Boundaries. Draft documentation is complete for Structures/Addresses and Transportation.
3. Cross train staff in parcel and boundary adjustments and editing
    - Success measure – At least four staff members understand how to edit and adjust data within and outside of the parcel fabric. All feature classes in the parcel fabric will be vertically integrated
4. Cross train staff in address and road centerline integration and maintenance.
    - Success measure – integration and maintenance processes for addresses and road centerlines are shared by at least two staff members
5. Move a minimum of three feature classes from the Natural Heritage Managed Areas geodatabase into the parcel fabric
    - Success measure – three feature classes are migrated and maintained within the parcel fabric
6. Working in close conjunction with the GIS Manager at DNRC, the Land Information Team will link at least minimal attribution contained in the State Trust Land Database with state trust lands in the cadastral database.

- Success measure – additional information on state trust lands, beyond what are carried by the Department of Revenue, is available to patrons.

7. Complete a Land Ownership section of the annual Land Information Plan, the MSDI Work Plan and the FY16 MSL work plan.
    - Success measure – Under the direction of the program manager, and working with relevant stakeholders, staff will write these sections in FY15.
8. Archive all associated relevant data currently contained in the appraisal folders
    - Success measure – No land information data associated with the five MSDI themes remain in the appraisal folders

Measurable Impact- Many of these tasks are focused on internal work flows and can be measured in the future by the time saved and minimal loss of institutional memory through well planned transitions as older staff retires. Staff will gain leadership skills as they take on more planning and coordination activities.

## Water Information Team

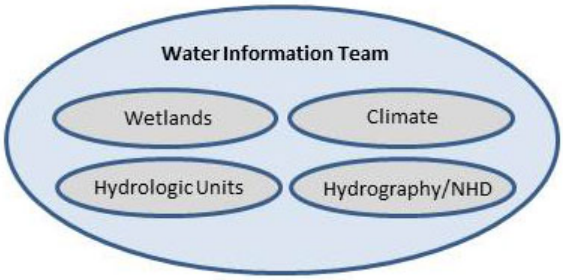


Fig. 2

Under the coordination of the Water Information System Manager, work will be conducted to improve data quality and data coordination. Similar to what is being proposed for land information, in FY 15 the MSL Geographic Information Program will initiate a Water Information Team. The team will consist of a minimum of four Geographic Information staff members however the team will reach out as needed to appropriate MSDI stewards including MTNHP wetlands staff to accomplish the following tasks.

1. Staff will be selected to participate on a water information team. The team will be led by the Water Information System Manager.
2. The team will complete documentation of editing practices including using wetland/riparian data, aerial and satellite imagery, high-resolution elevation data, and conflation techniques to update the hydrography dataset.
    - Success measure – current documentation
3. Cross train staff in Montana hydrography dataset editing.
    - Success measure – At least four staff members understand how to edit data within the National Hydrography Dataset (NHD) data model
4. Complete a hydrography web application for submitting revisions and viewing completion status. Additionally, provide training to the Hydrography Working Group and core water-related State agencies.
    - Success measure – Core state agencies and the public use the web application to view where editing is happening and also to submit revisions. Transparency to hydrography stewardship is improved.
5. Document procedures to efficiently process incoming NHD update requests submitted through the hydrography web application.
    - Success measure – Staff are able to process the backlog of requests (currently estimated at 350) as well as handle new incoming requests. Most requests are completed within a few months and no edits sit in the queue for longer than six months.
6. Complete systematic hydrography revisions in three subbasins (8-digit Hydrologic Unit Code) and document the process, including identifying how subbasins will

be prioritized for editing and a timeline for when additional subbasins may be completed.
    - Success measure – Agency partners agree that the data in these subbasins meets their business requirement (even if they are not able to switch over and start using it until the full state is complete).
7. Work with the Montana Climate Office to package climate products by watershed or other hydrologic units.
    - Success measure – Climate datasets and/or maps are packaged by basin or watershed and made available through the Water Information System or, if climate products are not ready in FY15, then a process for making them available through the WIS in the near future is identified.
8. Hydrologic units and the hydrography dataset are currently separate MSDI themes; yet, the hydrography geodatabase includes the hydrologic units. The update schedule for both themes should be evaluated to ensure identical boundaries are provided.
    - Success measure- The update schedules for hydrologic units and the hydrography dataset are synced. Theme webpages clearly explain that the boundaries provided are the same.
9. Work with partner agencies and the Hydrography Working Group to identify what hydrography-related data layers or NHD subsets are needed, including determining the NHD features of most value to partner agencies.
    - Success measure- A published list of supported hydrographic feature types and available data layers.
10. Complete a Water section of the annual Land Information Plan, the MSDI Work Plan and the FY16 MSL work plan.
    - Success measure – Under the direction of the program manager, and working with relevant stakeholders, staff will write these sections in FY15.
11. Archive all associated relevant data currently contained in the appraisal folders
    - Success measure – No water information data associated with the five MSDI themes remain in the appraisal folders

Measurable Impact:

1. In the long term, adoption of MT Hydrography by DNRC, DEQ and FWP, the three core water-related state agencies, would be the goal. This could enable water related data, of which there are volumes, to be linked together through common database elements. Additionally, the same internal impacts to be reaped by the Land Information Team, namely the time saved, minimal loss of institutional memory, and the development of leadership skills.

## Information Clearinghouse/User Engagement Team

The traditional role of MSL as the statewide GIS clearinghouse is being re-thought and re-branded into a broader set of GIS coordination, outreach and stewardship and data access roles. This part of the draft vision remains incomplete however it is recognized by both management and staff as a critical part of the mission. As an example of a task that would logically fall under the purview of this team we list our current effort to re-engineer the Digital Atlas. Staff and management will identify and prioritize other projects that will be managed by this team in FY 15.

Clearinghouse tasks:

1. The purpose of this project is to research options and make recommendations for replacing the functionality of the current Digital Atlas application. This includes documenting the current Digital Atlas application functionality, the most used functionality based on website and application statistics, and what functionality is important for MSL to continue to provide users. This project will examine the current concept of a "digital atlas" or collection of online maps, and how that might be implemented given current trends and technologies. This project will develop a list of functional requirements and examine what existing technologies that might be used to meet those requirements. The final deliverable for this project will be a report containing recommendations for replacing the Digital Atlas. Sun-setting the current Digital Atlas application with no replacement is an acceptable alternative.
    - Success measure –the evaluation of alternatives for the current digital atlas is completed before October 2014. If replacement is the preferred alternative that product (or products) is completed by July 1, 2015.

Measurable Impact: Providing that sun-setting the current Digital Atlas with no replacement is not the preferred alternative, usage of the atlas, measured in page views, should increase 5% within 6 months of roll-out. More broadly a cross program team focused on understanding user's needs, and delivering data and services in ways that better meet their needs will benefit staff by providing a broader understanding of the services we provide. It will benefit MSL through greater opportunities for integrated workflows. It will benefit our users who will have access to a broader range of tools and resources to meet their needs.