Geographic Information Program Report
April and May 2015

Prepared for the June 23rd, 2015 Commission meeting
by Stu Kirkpatrick, State GIS Coordinator

This report represents accomplishments of the Geographic Information Program (includes Natural Resource Information System and Water Information System) staff: Keith Blount, Bob Holliday, Troy Blandford, Gerry Daumiller, Maya Daurio, Michael Fashoway, Duane Lund, Diane Papineau and Meghan Burns.

Goal One—Content

1. MSL Geographic Information Program will acquire and manage relevant quality geographic information that meets the needs of users.
1.1. The team will complete documentation for Cadastral, Geodetic Control and Boundaries started under the FY14 CATSPAW project. The (landownership) team will determine whether a general workflow documentation template will meet the needs of the entire program.
(Originally reported April 2015) The landownership team has adopted Microsoft One-Note as a standard for documenting workflows. Documentation for loading geodetic control into the Multi-state Control Point Database (MCPD) was completed in March. Documentation of the boundaries workflow is 75 percent complete.

(Update: June 2015) Progress on the boundaries workflows has resumed with the hiring of new GIS Analyst Meghan Burns on May 4th. Work on the CadNSDI adjustment work flow has started with the goal of completion by July 31.

1.2. Move a minimum of three feature classes from the Natural Heritage Managed Areas geodatabase into the parcel fabric
(Originally reported April 2015) Staff member Daurio is leading this project. The team has met three times and is in the process of determining the format in which the data shall be maintained and an assessment of what data from the managed areas geodatabase is maintainable in the long term. Actual migration of the data will occur this spring in time to prepare our annual public and private landownership maps in August.

(Update: June 2015) It is the determination of the team working on this project not to put the various land management themes in the parcel fabric. However they will be separated out with an individual work flow attached to each theme for maintenance.

1.3. Complete a Land Ownership and Water sections of the annual Land Information Plan, the Montana Spatial Data Infrastructure (MSDI) Work Plan and the FY16 MSL work plan.
(Originally reported April 2015) Staff member Papineau has been charged with developing the FY16 MSDI work plan. All fifteen MSDI theme stewards have been interviewed and the plan is in draft form. The plan should be ready to submit to the Montana Land Information Council in May and for final Commission approval in June.

(Update: June 2015) The MSDI work plan is complete and was well received by the Montanan Land Information Advisory Council at their May 28th meeting. A FY16 MSL work plan will be presented to the Commission in August. The next land plan will come in fiscal year FY16 and be part of next year's MSL work plan.

1.4. Complete a hydrography web application for submitting revisions and viewing completion status
(Originally reported April 2015) The Water Team continues to process edits submitted through the online Hydrography Edit Request Viewer. In February and March, staff member Daurio completed over 400 edits in the Bitterroot subbasin. Edits were also made in the Flathead and a subbasin of the Yellowstone. The queue of pending revision requests is currently 180. **This task is considered complete.**

1.5. Document procedures to efficiently process incoming hydrography update requests submitted through the hydrography web application.
(Originally reported April 2015) The Water Team adopted Microsoft One-Note as a standard for documenting workflows. Documentation for processing proposed hydrography revisions and updating the statewide MSDI Hydrography dataset was completed in February. **This task is considered complete.**

1.6. Work with the Montana Climate Office to package climate products by watershed
(Originally reported April 2015) Staff members Blandford and Fashoway met with Michael Sweet from the Montana Climate Office via GoToMeeting in February to identify which and how climate products will be added to the GIS Data Bundler and Data List.

(Update: June 2015) The list of climate related products to be added to the Data Bundler and the Data List have been identified. Completion of that work will occur in June.

1.7. Work with partner agencies and the Hydrography Working Group to identify the hydrography features of most value to partner agencies.
(Originally reported April 2015) A survey asking partners to identify the hydrography dataset features and attributes of most importance to their agency was sent to the Hydrography Working Group. Survey results were discussed at a follow-up working group meeting in February. Gathered information is being used to identify MSDI Hydrography and Water Information System work tasks for FY16 and beyond. **This task is considered complete.**

1.8 Cross train staff in parcel and boundary adjustments and editing – At least four staff members understand how to edit and adjust data within and outside of the parcel fabric
(NEW - Update: June 2015) We are at the point where three staff members understand adjustments and editing within and outside of the parcel fabric

Goal Two—Access

2. The MSL Geographic Information Program will provide our partners and patrons with convenient, high quality and cost effective access to geographic information

2.1. Re-engineer the Digital Atlas
(Originally reported February 2015) In January MSL management signed a project charter empowering at team made up of MSL IT and Geographic Information staff to implement the recommendations compiled by the Digital Atlas Replacement Options Team last fall. A Digital Atlas Replacement Team will be tasked with implementation of the core map, table and report, data download and other functionality contained in the original investigation. The team will be meeting to develop a project time line with intentions of completing the project within the calendar year.
(Originally reported April 2015) The digital atlas replacement team has been formed. It has documented over twenty user stories (use cases) that, after prioritization, will form the core requirements. Prioritization of the user stories is scheduled for the last week of March.

(Update: June 2015) Work is underway, being managed under the "AGILE" project management concept. Much of the programming to set up the mapping components has been completed and fulfilling the report requirements is the next step. This project appears ahead of schedule and a prototype may be released this fall.

2.2 Archive all associated relevant data currently contained in the appraisal folders.
(NEW - Update: June 2015) A snapshot of all MSDI themes was archived in January. We continue to appraise and archive the backlog of data contained in the appraisal folders

Goal Three – Training

3.1 ArcGIS Online Training
(NEW - Update: June 2015) The Geographic Information Program has been working with Esri to organize an appropriate Library wide training that would allow staff to make better use of ArcGIS Online functionality like story maps. An example of a potential use of story maps to highlight the outreach of the State Librarian is here:
http://montana.maps.arcgis.com/apps/MapJournal/index.html?appid=cd0af8465e5f4437b5b8b0aac00150bb
We have provided Esri with a suggested agenda for two day training and are hopeful this will take place in the June/July time frame.

Goal Four—Consultation and Leadership

4. The MSL Geographic Information Program will provide consultation, leadership and training for the development and use of geographic information and spatial technologies

4.1 **(Originally reported February 2015)** The program worked with State House Representatives Jenny Eck (HD79) and Tom Steenberg (HD99) to create House Joint Resolution Number 7 http://leg.mt.gov/bills/2015/billpdf/HJ0007.pdf requesting an interim study of next generation 9-1-1 in Montana. This resolution recognizes the criticality of including GIS planning as part of implementing the technology that will drive the 9-1-1 systems of the future.

(Originally reported April 2015) Staff members Fashoway and Kirkpatrick have worked with Representative Tom Steenberg (HD 99) to finalize the language contained in HJ 7, a bill to form an interim legislative committee to study next generation 9-1-1. Staff met with representatives of the telecommunications industry to address their concerns and adopt some compromise language. In the process a dossier of documents and internet links to next generation 9-1-1 topics was developed and will be provided to local 9-1-1 providers to assist them in making informed decisions in the future. HJ 7 passed third reading in the House on 3/14 and will likely be referred to the Senate Energy and Telecommunications Committee.

(Update: June 2015) HJ 7 was passed by the legislature and also received a priority status that will allow an interim legislative committee to study the issue. Additionally Jennie Stapp met with the State CIO and Director of the Department of Administration in order to get GIS representation on the re-formed 9-1-1 Advisory Council.

4.2 **(Originally reported April 2015)** Staff member Kirkpatrick, along with MSL CIO and Digital Information Manager Evan Hammer, attended the NSGIC Mid-year meeting in Annapolis, Maryland. They visited the offices of Senators Daines and Tester to explore ways MSL and their office could share mapping resources available at MSL. They also gained valuable information related to imagery and next generation 9-1-1 that will be shared with the Montana GIS community. **This item is considered complete.**

4.3 **(NEW - Update: June 2015)** The MSL Geographic Information Program has been awarded an Esri Special Achievement in GIS award for its work in the land records arena. That award will be accepted at the Esri User Conference in July.

4.4 **(NEW - Update: June 2015)** The FY'16 MLIA grants were prioritized by the MLIAC Grant Review Subcommittee, approved by MLIAC, and forwarded to the Commission for final approval. **This task is considered complete.**