Montana Land Information Plan

Effective January 15, 2010 to January 14, 2011



Produced by the Montana Department of Administration, Information Technology Services Division in coordination with the Land Information Plan Subcommittee of the Montana Land Information Advisory Council

Pursuant to Section 4 (c) of the Montana Land Information Act (Senate Bill 98) and Administrative Rule IV of the Montana Land Information Act.

Final Draft – December 1, 2009

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1. PURPOSE

The objective of this plan is to establish achievable goals and objectives that will further the purposes of the Montana Land Information Act (MLIA). The stated purpose of the MLIA (MCA-90-401) is:

To collect, maintain, and disseminate information (in digital format) about the natural and artificial land characteristics of Montana.

To ensure that digital land information is:

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

2. ORGANIZATIONAL APPROACH AND IMPLEMENTATION

To fulfill the purpose of the MLIA, the Montana Department of Administration (the Department) has the following fiscal, administrative and coordination duties:

- 1) Serving as administrator of the MLIA account
- 2) Working with federal, state, local, private, and tribal entities to develop and maintain land information
- 3) Preparing an annual Montana Land Information Plan (MLIP) that includes a proposed budget organized by annual goals and objectives, and that describes land information and prioritizes land information:
 - Collection needs
 - Maintenance needs
 - Dissemination needs
- 4) Establishing (by administrative rule) the application and granting processes required to distribute MLIA funds
- 5) Reviewing grant applications for implementation of the MLIP and giving preference to intergovernmental partnerships that meet requirements of the MLIP
- 6) Monitoring the use of MLIA grant funds to ensure compliance with the MLIA
- 7) Coordinating the development of technological standards for land information data creation
- 8) Serving as the primary point of contact (POC) for national, regional, state, and other GIS coordination groups to:
 - Channel issues
 - Channel projects
- 9) Providing administrative support to the MLIAC and paying MLIAC expenses
- 10) Preparing an annual budget corresponding to duties performed
- 11) Reporting to the governor and legislature on the progress made to collect, maintain, standardize and disseminate land information.

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To fulfill these responsibilities the department or any recipient of MLIA funds may contract with a public or private entity. Where appropriate, the products of the grants shall be in compliance with general State information technology (IT) and geospatial data standards and/or policies as defined by the Montana Information Technology Act (MITA) and the Federal Geographic Data Committee (FGDC).

The MLIA also created the Montana Land Information Act Council (MLIAC) and assigned it the responsibility to advise the Department regarding:

- 1) GIS issues and land information
- 2) Priority land information and data layer development
- 3) The content of the MLIP
- 4) The MLIA grant development and grant management process
- 5) The management and distribution of MLIA funds
- 6) Identifying, evaluating and prioritizing requests to develop, maintain GIS and land information services

The Council also has the duty to:

- 7) Promote coordination to minimize duplication of effort, facilitate documentation and facilitate data distribution and exchange
- 8) Advocate for the development of consistent policies, standards and guidelines for land information

At mid-year (June) and at the end of plan year (December), the Department will report to the MLIAC the status of the plan's priority tasks and measures of success. The objectives of this plan will be implemented in accordance with the duties and responsibilities outlined in the MLIA and administrative rules.

One purpose for this plan is to give direction for stakeholder groups within Montana wishing to collaborate and apply for MLIA grants that target goals and objectives contained within the plan.

The Department and the Council do not have the authority to mandate the actions of other stakeholders and recognize that accomplishing the purpose of the MLIA, and the goals and objectives of the 2009/2010 MLIP will require the unified cooperation of current and future users of digital land information, both public and private. To that end the Department has created the Montana Base Map Service Center (BMSC) and appointed the State of Montana Geographic Information Officer (GIO) as its head for, among other responsibilities, the purpose of being the State's focal point for internal and external coordination of geospatial activities.

This plan will be in effect from January 15, 2010 to January 14, 2011.

The annual Montana Land Information Plan should minimally provide goals that:

- Support standardized and sustainable methodologies to collect, maintain, and disseminate land information,
- Improve and encourage partnerships and collaboration,

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- Encourage and support appropriate integration of geographic information systems technology and geospatial data into business processes and public policy, and
- Foster professional development in land information systems, and assess workforce needs and opportunities.

3. PROGRAM GOAL - STATE FISCAL YEARS 2009/2010

Goals from last years plan involving funding and organizational structure have been updated to reflect the progress that the GIO and MLIAC have made with these goals.

GOAL 1: A statewide set of MSDI framework layers that are consistently collected, accurately maintained, and made commonly available.

Objective 1.1 – Funding and administrative support for local, tribal, state and federal data collection efforts that will help develop and maintain multi-jurisdictional MSDI framework layers.

<u>Section 5</u> summarizes funding recommendations and priorities identified by the Department, and by theme stewards in the MSDI annual reports. MSDI framework layer annual plans are available at http://giscoordination.mt.gov/MiniPlans.asp. This information is provided to assist the Department and the Council in prioritizing work for the coming year, as well as assisting theme stewards and stakeholders in synchronizing needs and opportunities for MLIA grant applications.

Milestone 1.1.1— Funding available from the MLIA account for MSDI framework layers will be prioritized and provided to grant applicants through the MLIA granting process

Milestone 1.1.2 – Continue to refine and improve overall MLIA theme stewardship and implement appropriate review and support processes that benefit theme stewards and leads as well as the GIO, Council and framework data users.

Goal 2 – Permanent and secure funding for the consistent collection, accurate maintenance and common availability of MSDI framework layers.

Objective 2.1 – Identify, develop, and propose secure funding mechanisms for the consistent collection, accurate maintenance, and common availability of all MSDI framework layers

Milestone 2.1.1 - A proposal for long-term funding for each of the MSDI framework layers and the associated geospatial coordination costs that were not identified as base MLIA coordination costs. This proposal will include justification, preferably in the form of

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return on investment, and evaluate alternatives that compare the use of MLIA funds to support framework layers with other funding options.

Milestone 2.1.2 - A recommendation from the Council of actions necessary to provide long-term secure funding for the long-term support for each of the MSDI framework layers.

Objective 2.2 – Fulfill the administrative and fiscal responsibilities assigned to the Department in the MLIA while supporting other GIS coordination needs.

Milestone 2.2.1: The Department will prepare and present to the Council a summarized annual funding report for overall MLIA administration costs.

Milestone 3.2.2 – With advice from the Council, the GIO and the Department will develop and propose to the Governor, and with the Governor's approval to the 2011 Legislature, a funding model that will fairly distribute geospatial coordination costs between administration of the MLIA and other statewide GIS coordination activities.

Milestone 2.2.2 – With advice from the Council, the GIO and the Department will review and if necessary, revise the MLIA administrative rules to address the land information plan schedule as it relates to the State fiscal calendar.

GOAL 3: Improved quality and efficiency in the business processes of stakeholders through leveraged partnerships, consistent availability of relevant critical land information and the use of GIS technology.

Objective 3.1 – Integrated uses of geospatial data in the business and decision-making processes of state policy makers.

Milestone 3.1.1 – The completion of one or more projects demonstrating how MSDI framework layers, GIS tools and technology, and other digital land information can be used to support priority core business processes and efficiently answer critical land information questions.

Milestone 3.1.2: A presentation of the results of one or more demonstration project complete with maps, tabular reports, and other appropriate analytical results to the Council, the Department and the Governor.

Milestone 3.1.3: The development of communication outreach materials to support funding requests and other efforts to promote the collection, standardization, maintenance and distribution of digital land information.

Objective 3.2 – Encourage partnerships that bridge the technological divide through inter-sector collaboration.

Milestone 3.2.1: The implementation of at least one regional GIS center that promotes a federated approach to Montana GIS by providing technical and policy approaches that

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expand GIS opportunities. A regional GIS center must include local and/or tribal partners.

Milestone 3.2.2: The implementation of at least one partnership project between tribal jurisdiction and a state or local agency.

Milestone 3.2.3: At least two partnerships between data producers and the Montana GIS Portal at the Montana State Library are established and standardized metadata records are registered at the portal. All grants with a data component shall be required to register that data with the Montana GIS Portal.

Milestone 3.2.4: A continued federal/state partnership effort enabling two-way data exchange of geographic name information continues to be supported..

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4. ANNUAL PROGRAM COST AND BUDGET

The attached budget projects the Department's estimated allocation and expenditure of 2010 MLIA funds. It is organized to display expenditures by the Department's coordination and administrative responsibilities and anticipated MLIA grant applications. This proposed budget will not be impacted by any GIO/MLIAC new funding proposal as that, if successful, would be implemented in FY 2012.

		FY 2010 Bu	dgeted So	urces	
	MLIA Funding	Other Grants	ITSD Rates	Other	Total
Expenditures					
General Coordination - 66413 & 66415 (2 FTE)					
Personal Services	158,206	0	17,578		175,784
Operating	81,794				81,794
MLIA Council Budget	3,100				
Sub-total Sub-total	240,000	0	17,578	0	257,578
Estimated Cadastral - 66414 &66441 (1.2 FTE)					
Personal Services	82,254		8,225		90,479
Operating	21,624				21,624
Sub-total Sub-total	103,878	0	8,225	0	112,103
Estimated Transportation - 66410 (1 FTE)					
Personal Services	66,097		7,344		73,441
Operating	17,552		, -		17,552
Sub-total Sub-total	83,649	0	7,344	0	90,993
Estimated Structures/Addressing- 66416 (1 FTE)					
Personal Services	67,314		7,479		74,793
Operating	17,876		,		17,876
Sub-total Sub-total	85,190	0	7,479	0	92,669
Estimated Boundaries - 66441 (.8 FTE)					
Personal Services	37,420		4,157		41,577
Operating	9,937		,		9,937
Sub-total Sub-total	47,357	0	4,157	0	51,514
GIO **					
Personal Services	0		126,354		126,354
Operating	0		15,000		15,000
Data/Application Hosting			225,000		
Sub-total	0	0	366,354	0	141,354
ESTIMATED DOA BUDGET AS OF 11/01/2009	560,074	*	411,137	0	971,211

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Est. 2010 MLIA Available Funds - Account balance as of November 1, 2009 plus anticipated income less existing obligations	930,813
Estimated DOA Budget as of 10/1/1009	560,074
Anticipated MLIA Funds Available for non-BMSC steward funding, MSDI local/other, Metadata, Regional GIS or other projects	
	370,739

^{*} While presently having no other grant funds than MLIA, the Base Map Service Center is continually seeking additional sources of funding. BMSC is negotiating a new assistance agreement with BLM as well as pursuing additional funding for addressing through the broadband mapping effort.

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5. ANALYSIS AND RECOMMENDATIONS

Goal 1 - Analysis and Recommendations

Based on information provided by MSDI theme stewards, four of the thirteen MSDI framework layers - Elevation/Hypsography, Hydrologic Units, Soils and Orthoimagery were primarily funded in FY 2009/2010 by federal agency budgets, other than the MLIA Orthoimagery matching funding. We are not anticipating any FY2011 MLIA funding requests from these themes at this time All the remaining MSDI themes may require some funding for various stewardship tasks as well as raw data collection. The following spreadsheet summarizes the expected need at this time. The spreadsheet does not take into account the possibility that Stewards may acquire additional funding from other sources that may reduce the MLIA ask. For example this year the BMSC was awarded an FGDC CAP Grant for Transportation that enabled them to cut their MLIA ask in half and a small amount was added in to an existing grant for Structures. For simplicity there are only two columns included here, last year's award and this year's expected ask, however MSDI funding needs are much more complex and eventually need to be dealt with on a more granular level by the GIO, with input from the Stewards. For example a plethora of real costs associated with data hosting and data caching are not examined or accounted for here, but need to be in any broader funding proposal such as is outlined in Goal two.

FY 2010/2010 MSDI Theme Stewards Funding Needs as of 10/1/2009										
	FY 2011 MLIA Anticipated Ask	FY2010 Award								
Cadastral	\$103,878	\$105,029								
Elevation	\$0	\$0								
Geodetic Control	\$50,000	\$0								
Geology	\$0	\$0								
Governmental Units	\$47,377	\$48,755								
Hydrography	\$15,000	\$7,500								
Hydrologic Units	\$0	\$0								
Land Use/Land Cover	\$35,000	\$30,945								
Orthoimagery	\$0	\$300,000								
Soils	\$0	\$0								
Structures/Addresses	\$85,190	\$77,190								
Transportation	\$83,649	\$48,328								
Wetlands	\$80,000	\$74,758								
Totals	\$500,094	\$692,505								

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Recommendation 1.1 - MSDI theme steward's MLIA grant applications should be reviewed carefully and funded to an appropriate level to enable them to accomplish reasonable stewardship that may include collection, integration, standardization, maintenance and dissemination of MSDI themes.

Recommendation 1.2 — Proposals from those that contribute data that is integrated by Stewards into MSDI themes, for example local and tribal governments should be strongly supported as well, provided that the proposal has support of the appropriate Theme Steward.

Goal 2 Analysis and Recommendations

As we enter our fourth year of (presumably) continued funding of basic stewardship functions for many MSDI themes, it is time to undertake the difficult but necessary actions that will finally provide long-term stabilized funding to most, and preferably all, MSDI Stewards according to reasonable and documented needs. The GIO and the Council must move forward with the resolve of the original Montana Geographic Information Council as they put their weight behind the Montana Land Information Act.

Recommendation 2.1 – The GIO, with advice of the MLIAC Funding Subcommittee and the Council as a whole should move with immediate and decisive action to finalize a long-term funding proposal and start that proposal though the budget process for approval in the next legislative session. There should be no higher priority for the GIO

Goal 3 Analysis and Recommendations

As important as it is to keep the MSDI stable, other projects are deserving of MLIA support as ultimately they work to strengthen the MSDI from the bottom up. Regional centers, business critical applications, and a stronger GIS portal all contribute to a robust Montana GIS enterprise and warrant MLIA consideration.

Recommendation 3.1 – Should an appropriate grant application be submitted, prioritize one grant that proposes an application that integrates MSDI data in the business decision making process as per milestone 3.1.1 through 3.1.3

Recommendation 3.2 – Should an appropriate grant application be submitted, prioritize one grant that encourage partnerships that bridge the technological divide through inter-sector collaboration. An per milestone 3.2.1 and/or 3.2.2

Recommendation 3.3 – Should appropriate grants be submitted, prioritize two grants that directly add to data discovery through the Montana GIS Portal at the Montana State Library

Recommendation 3.4 – Support continued state/federal partnerships to exchange geographic names data

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