

# Montana Geodetic Control and HMP Meeting Agenda

**June 22, 2009** 10:00 A.M. to 12:00 P.M. at Montana Department of Transportation (MDT) headquarters, Helena, Montana in the ISD Conference Room (basement). ☎ Phone-in conferencing provided by MDT.

## Participating Members

- ☎ Diana Cooksey, Montana State University
- Dave Davis, MDT
- ☎ Todd Ferris, Inland GPS
- Dave Hoerning, MDT
- ☎ Stu Kirkpatrick, DOA
- Bryce Larsen, MDT
- ☎ Steve Niday, Missoula County
- Curt Smith, NGS
- Greg Thurston, City of Kalispell
- Rj Zimmer, DJ&A

## Members Not Present

- Michael Sweet, University of Montana
- Celinda Adair, DNRC
- Tony Bachman, USFS
- Bill Grayson, BLM
- Gerald Pavlick, Morrison Maierle, Inc.
- Bill Weber, Northwestern Energy

## General Agenda

1. Geodetic Reference Center report.
2. Montana control point database application development update.
3. Montana CORS and implementation plan.
4. Outreach materials such as Executive Summary, MTHMP brochure.
5. Upcoming events and target dates.
6. Action items / responsible party / due dates.
7. Next meeting.

## Reports

Preview Mt. Geodetic Control Web site: [http://giscoordination.mt.gov/geodetic\\_control/msdi.asp](http://giscoordination.mt.gov/geodetic_control/msdi.asp) and MDT Web site for Montana Height Mod: <http://www.mdt.mt.gov/mdt/heightmod.shtml> to refer to past committee meeting minutes, reports, and other information.

### **1. Geodetic Reference Center report.**

We discussed how to move the creation of the Geodetic Reference Center (GRC) along. State agencies and Universities were identified, each associated with one of our members to provide a list of contacts as identified below:

<u>Agency/University</u>	<u>Member</u>	<u>Potential Contacts Provided</u>
MSU Bozeman	Diana Cooksey	Rick Lawrence, MSU Spatial Sciences Center Doug Smith, MSU Civil Engineering Brett Gunnink, MSU Civil Engineering–Dept. Head
MSU Northern	Diana Cooksey	Thomas Welch, College of Technical Sciences
UM Missoula	Michael Sweet	(to be provided – target July meeting)
UM-Montana Tech	Michael Sweet	(to be provided – target July meeting)
Flathead CC	Steve Niday	(to be provided – target July meeting)
MDT	Bryce Larsen	(to be provided – target July meeting)
NRIS	Stu Kirkpatrick	(Evan Hammer, NRIS Manager, MT State Library)
Base Map Service Center	Stu Kirkpatrick	(Robin Trenbeath, GIO, MT Dept. Admin.)
DNRC	Celinda Adair	(to be provided – target July meeting)
MACO	RJ Zimmer	Harold Blattie 444-4360

Diana described the contacts she made for MSU and MSU Northern. Although she reported there was interest and support of concept for the GRC her contacts could not offer support for the creation of the GRC due to space limitations, lack of qualified personnel, and budgetary limitations.

We decided to increase outreach in order to enlist a host for the GRC. We will contact the state GIO, Mr. Robin Trenbeath, to solicit his assistance in contacting potential host agencies. We will then send a small group of delegates to discuss the GRC and its requirements. These meetings could be done individually to provide background information and to address concerns. If there is interest by more than 3 parties we would use a forum approach to expedite the presentations.

To help promote and inform potential partners, we identified the need to present our brochure for the GRC and the HT MOD executive summary. In addition, we should compile a list of frequently asked questions and concerns and a list of technical experts on our committee for people to contact with technical questions and concerns regarding the Geodetic Reference Center.

## **2. Montana control point database application development update.**

The Montana Control Point Database (MCPD) development is still progressing on schedule. There are a few technical issues, such as the state moving to a new server design, but the developers are progressing as planned. There will be an initial test of the new application by those working close to the project followed a week or so later by a more general group test and demonstration.

The application will include NGS control data, GCDB data, as well as Montana control point database data. It will provide a number of search and query modes and is currently looking pretty good.

One remaining issue discussed in detail centered on batch loading of multiple control points. Most vendor software provides various output formats and the question remains how the application will handle the batch load process. Vendor output imported into the control point spreadsheet for loading into the MCPD or directly into the MCPD via the application Web interface. We decided at this point to test current capabilities and address processes and identify limitations when trying to match application input format.

## **3. Montana CORS and implementation plan.**

Dave Hoerning reported on the progress of the CORS being installed at the MDT headquarters site in Helena. Several items need to be completed including: pulling cable through existing conduit, determining a final location for the receiver, installing the receiver and setting up a computer. A stand alone, separate computer needs to be set up for the CORS eliminating data interruptions.

CORS establishment priority was determined to be:

- A. Lewistown – complete equipment and monumentation.
- B. Richland County – split cost of pillar monumentation.
- C. Montana Resources, Butte – full cost of pillar monumentation.
- D. Havre – update existing receiver to 5800 (Inland GPS) purchase Zephyr Geodetic Antenna.
- E. Flathead Valley CC – update existing receiver to 5800 (Inland GPS) purchase Zephyr Geodetic Antenna.
- F. Eastern Montana – Wolf Point, Miles City, or Plentywood – complete equipment and monument.
- G. Choteau – check with U.S.F.S. for FY09 funding or FY10 funding.
- H. Hamilton – check with Ravalli County and U.S.F.S for possible funding.

We are developing a CORS type pillar monument cost – materials and labor - based on similar installations. This can be used to facilitate cost sharing and other planning.

#### **4. Outreach materials such as Executive Summary, MTHMP brochure.**

We addressed the need to renew our efforts in the development of the MTHMP by developing a 1-page summary for the general (non-technical) audience. This document would provide enough background information to hopefully encourage support for the MTHMP and could be made available at general meetings and as a focus for further information.

#### **5. Upcoming events and target dates.**

The FY09 MTHMP grant use is currently scheduled to end September 30<sup>th</sup>.

#### **6. Action items / responsible party / due dates.**

- A. Contact those in our group who have volunteered to seek contacts for the Geodetic Reference Center and provide guidelines for requesting information including: contact name, agency, position, contact information, and their initial level of interest/support in establishing the GRC. / Zim / June 26.
- B. Compile list of contacts and information from Action Item A. and create a list of frequently asked questions/concerns as well as technical questions/concerns regarding creation of the GRC. / Zim / July 28 meeting.
- C. Review and update current GRC plan. / Everyone – forward comments to Zim / July 28 meeting.
- D. Initial meeting with Geographic Information Officer (GIO) to inform him of the MTHMP status and enlist support, guidance, and direction in the pursuit of establishing the GRC. / Zim, Curt, and Stu / July or August.
- E. Work with surveyors to determine how current processing software packages can produce output data in a format that could be imported into the Geodetic Control Point spreadsheet and determine what it would take to make this work efficiently for batch processing. / Zim, Steve Niday, Dave Davis / Anytime.

- F. Complete installation of Helena MDT CORS. Antenna cable in place, instrument location finalized and mounted, stand alone computer identified and located, software installed, site completed. / Dave Hoerning with support from Todd Ferris / Mid July.
- G. Research current pricing for Trimble R5 and R3 dual frequency base stations. Research pricing for Trimble Zephyr antennas to add to potentially upgraded Trimble 5800 CORS receivers for Havre, Montana and other? / Todd Ferris will contact Bryce Larsen / June 26.
- H. Finalize schematic for CORS pillar mount and approximate price schedule for materials and installation. / Dave Hoerning / June 26.
- I. Check with U.S. Forest Service on availability of FY09 funds and if not available FY10 funds to purchase and install a CORS in Choteau. / Todd / July 28 meeting.
- J. Check with Ravalli County to enlist renewed interest in establishment of a CORS in the Hamilton area and to provide possible financial support for the equipment. / Steve / July 28 meeting.
- K. Improve MTHMP 1-pager with emphasis towards non-technical audience. / Curt, Celinda / July 28 meeting.
- L. Determine MDT requirements, limitations, and timeframe for purchasing proposed CORS equipment and monumentation with MTHMP grant funds. / Bryce / July 28 meeting.
- M. Determine feasibility of extending current MTHMP grant spending into next fiscal year due to there not being FY10 funds and relieving pressure to spend money by September 30 deadline. Bryce / July 28 meeting.
- N. Include MTHMP Budget review at every future meeting. / Bryce – MDT / Ongoing.

## **7. Next Meeting.**

The next meeting is scheduled for Tuesday, July 28, 2009 beginning at 10:00 A.M. and ending 12:00 P.M. at the ISD conference room MDT headquarters, Helena Montana.

Phone-in conferencing will be available for out of town participants. If you are requesting a local call-in number please let Bryce know as early as possible as local numbers are a separate request for phone conferencing and do not cost as much as the toll-free numbers.