Nevada State Mapping Advisory Committee

Meeting Notes

Wednesday, June 23, 2010

Location: Sam's Town Hotel & Gambling Hall Conference Area 5111 Boulder Highway Las Vegas, Nevada 89122

The meeting was held in conjunction with the 20th Annual Nevada Geographic Information Society (NGIS) 2010 State Conference in Las Vegas, Nevada.

For further Information please contact Ron Hess, Nevada Bureau of Mines and Geology (NBMG), 775-784-6692, Email: rhess@unr.edu or Jon Price, NBMG, 775-682-8746, Email jprice@unr.edu.

2:45 PM, MEETING CALLED TO ORDER

Welcome and review of the Nevada State Mapping Advisory Committee by Jon Price (NBMG), Committee Chairman.

The Governor of Nevada established the State Mapping Advisory Committee (SMAC) to advise the U.S. Geological Survey (USGS) on state priorities for map products and to inform map users about the status of mapping programs and the availability of map products. In its early years SMAC advised the USGS on priorities for completion of 1:24,000-scale, 7.5-minute topographic maps throughout the state. With all these maps having been printed by about 1990 and with development of digital maps and Geographic Information Systems, SMAC evolved. The USGS no longer explicitly seeks the advice of the state with regard to its mapping priorities but does request input from bureaus within the U.S. Department of Interior. SMAC now serves as a forum for discussion and review of state, local, and federal agency and private sector priorities for mapping.

Membership in SMAC and its subcommittees is open to anyone interested in mapping in Nevada. Participants have included representatives of numerous local, state, and federal agencies, community colleges and universities, and the private sector.

OLD and NEW BUSINESS

Tom Sturm (Nevada State Liaison, U.S. Geological Survey) reviewed the 2010 National Agricultural Imagery Program (NAIP) mission for Nevada, which is now underway. The overall NAIP program has been accelerated over the last two years by additional funds obtained through a Congressional earmark. It is unclear if the earmark, which would provide for full coverage of the lower 48 states on a three year cycle (the original plan was 5 year cycle) will remain in place. Due to the success of obtaining co-operative funding from a variety of State, local, and Federal agencies this year, the NAIP deliverable for Nevada will be a 1-meter, 4-band product including the 3 natural color bands (R,G,B) and a color infrared band (CIR).

The NAIP imagery currently being flown over Nevada will form the image base for the new 1:24,000 scale series of topographic maps that will be coming out in 2012. The current beta series of these maps are based on 2006 imagery and do not have complete coverage of Nevada. Maps over U.S. Forest Service areas, Nellis Air Force Range, and the nuclear test site were not produced. The new series of maps, which will be released in 2012, will include elevation contours, hydrography (stream channels), and the public lands survey system (PLSS, township, range, and sections) all three of which do not appear on the beta version of the maps.

Discussion among meeting participants made it clear that SMAC should send a letter of support for the new 1:24,000 scale image map series and make it very clear that PLSS needs to be included on the new map series. In a public lands state, being able to locate areas by township and range is a significant public and agency requirement for this product.

The U.S. Geological Survey is in the process of scanning all of the historic topographic maps that have been produced by their agency over the years. This includes earlier editions of 1:24,000, 1:62,500, older 1:125,000, and other not so well known map scales that have been published over the past 100+ years in a variety of topographic mapping programs. If they can maintain their schedule, these maps should be released along with the new image map series in 2012. They will be scanned at 600 Dpi, and provided in Geotiff and pdf file format.

The Beta release of the new National Map Viewer is now operational. The Web address is http://viewer.nationalmap.gov/viewer/. More detailed information is contained on the attached information brochure about the system. General information about the new system and the legacy systems it is replacing can be found at http://nationalmap.gov/viewers.html.

Eric Warmath (GIS Manager, Nevada Department of Transportation) reviewed ongoing Mapping and GIS projects at the Nevada Department of Transportation (NDOT). The agency's enterprise software has moved to the ESRI platform. Over the last 18 months, 70 people have been trained on the ESRI platform. NDOT has an ongoing effort to standardize various digital data sets. More field data collection is being done in the Arcpad collection environment. NDOT is migrating its digital imagery collection into the Oracle SDE data management environment.

NDOT will be releasing a new, color version, of the State Atlas book. All the maps will be in color and have a shaded relief background. The atlas should be out before the end of the year.

NDOT is one and a half years away from a new, complete digital roads network. A new Federal requirement may make it mandatory for counties to submit road network reports and maps in digital format to NDOT.

NDOT contributed Nevada's portion of the cooperative funds needed for this year's NAIP program and also contributed a portion of the amount needed for the buy-up to 4-band color infrared (CIR) imagery.

NDOT has utilized LiDAR at very high resolution for a few highway construction projects. The detail derived from the LiDAR was impressive, but the data sets are large and cumbersome to process.

NDOT is looking at the possibility of scanning the previous or historic editions of their 30' quad map series. These older maps are useful when looking at how long various roads have been in existence.

Mark O'Brien (GIS Manager, Nevada State Office, Bureau of Land Management) reported that the Bureau of Land Management (BLM) is pushing for the development of a wide variety of databases to support efforts to study the causes and consequences of global warming. These data sets will be somewhat standardized and encompass the Western United States.

A west-wide GCDB data set, with State boundaries, should be released in the next 2-3 months. The BLM is looking at harvesting a variety of data sets, such as their allotment data layers, and making them available via the data.gov Web site (http://www.data.gov/).

The BLM is looking at replacing the GeoCommunicator Web application. It is out of date and difficult to maintain. The GeoCommunicator is sponsored by the Bureau of Land Management and the U.S. Forest Service. GeoCommunicator is the publication site for the Bureau of Land Management's National Integrated Land System (NILS). The Web address is http://www.geocommunicator.gov/GeoComm/index.shtm.

The Oregon office of BLM is working on a statewide elevation contour coverage of Nevada based on 10 meter digital elevation model (DEM) data. It will be out later this year and it will be made available for GIS applications through the Nevada State office of the BLM.

Tod Colegrove and Zachery Newell (DeLaMare and Ansari Map Library, W.M. Keck Web Site, University of Nevada, Reno) reviewed ongoing development activities at the W.M. Keck Web site and map library. The address for the Keck Web site is http://keck.library.unr.edu/. The W.M. Keck Earth Sciences & Mining Research Center has undergone a complete redesign to enhance usability and functionality. Most of the datasets now include an interactive map and an alphabetical search list. The old version of the Keck site is still available at http://keckdev.library.unr.edu/. Through the new Web portal you can access the new GeoPDF maps, geologic maps, NAIP imagery, digital orthophoto quads (DOQs), digital raster graphic (DRG) format topographic maps, Aster and Landsat data, NDOT historic highway maps and much more. The main purpose of the Keck Web site is to assist with the release of products that consist of large data sets, make them available to the Web, searchable, and locatable by a variety of agencies and individuals that benefit from access to these data sets. Currently the site is using a quad-based search engine that is very efficient, easy to merge various data sets into, and fast. The library is eager to work with everybody to make more data available and useable.

Historic maps that were scanned and georeferenced in past projects at the library and currently contained in the Content DM application located at

http://www.delamare.unr.edu/maps/digitalcollections/nvmaps/
will be migrated to the new Keck web site shortly. New scanning and plotter equipment has been moved into the DeLaMare Library, Mackay School of Mines Building, on the UNR campus to better support customer needs in the Map library and support ongoing data conversion for the Keck Web site.

Open discussion and comments.

Jon Price announced the Geologic Mapping Subcommittee of SMAC will have a meeting at 9:00 a.m. to 2:00 p.m. on Monday, August 23, in the conference room at the Great Basin Science Sample and Records Library, 2175 Raggio Parkway, Reno, Nevada 89512. The building is located on the west side of the DRI campus in Reno.

Jon also announced release of the Nevada Bureau of Mines and Geology latest publication "A Geologic and Natural History Tour through Nevada and Arizona along U.S. Highway 93, with GPS Coordinates, Special Publication 35" available for order on the NBMG Web site at http://www.nbmg.unr.edu/sales/pbsdtls.php?sku=SP35.

Jordan Hastings and others at the **Nevada Bureau of Mines and Geology** will be working on the National Geothermal Data System project. This project will develop a comprehensive geothermal data base for the Western States. A comprehensive PLSS layer (based on the BLM GCDB data), wilderness boundaries, surface management areas, and historic map data will all play a role in this project.

The **Nevada Division of Minerals** has funded a project at the UNR Geography Department to develop a set of GIS layers that will model land ownership change in Nevada through time.

Craig Hale, Southern Nevada Water Authority, announced that they have been successful in obtaining air photo over-flight permission during July for several areas of the Nellis Air Force Range that will fill several gaps in the coverage from the 2006 NAIP mission. Craig wants to work with the Keck Web site to house and make available the imagery. He also announced that they will have 6-inch LiDAR data of a large part of the Vegas Valley and Henderson available this fall. They have also flown 8000 square miles of LiDAR covering many of the basins in eastern Nevada. However, it has not been processed and is still in raw data format. It is a voluminous amount of data and will require a significant amount of processing time. At present there is no scheduled time for delivery of the processed product.

4:48 PM: MEETING ADJOURNED

Additional information about the Nevada State Mapping Advisory Committee can be found on the Web at: http://www.nbmg.unr.edu/smac/smac.htm. If you have questions please contact Ron Hess, Executive Secretary, Nevada State Mapping Advisory Committee at 775-784-6692 or Email rhess@unr.edu.

NEVADA STATE MAPPING ADVISORY COMMITTEE

JUNE 2010 MEETING ATTENDEES

Jon Price NV Bureau of Mines and Geology NV Bureau of Mines and Geology Ron Hess Eric Warmath **NV** Department of Transportation U.S. Bureau of Land Management Mark O'Brien Tom Sturm U.S. Geologic Survey Mapping Liaison Art Ehrenberg Southern Nevada Water Authority Craig Hale Southern Nevada Water Authority NV Bureau of Mines and Geology Gary Johnson Eric Ingbar Gnomon, Inc. U.S. Fish and Wildlife Service Don Harper Richard Wells City of Las Vegas

Jordan Hastings NV Bureau of Mines and Geology

No a Mara

Steve Mesa NGA

Evan MacDougall U.S. Forest Service Haroon Stephen UNLV/GIS RS Lab

Todd Gilmore U.S. Fish and Wildlife Service

Chris Springer UNLV

Zachery Newell UNR/DeLaMare Library Tod Colegrove UNR/DeLaMare Library

Xuan Wang NV Department of Transportation

Caroline Erickson U.S. EPA

Malcolm Adkins Michael Baker Jr. Inc.

Fou Duke MDEP Lucas Wiseley NRCS

Moni Fox Washoe County
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Brooks Wilson U.S. Bureau of Land Management

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The National Map is modernizing its visualization capabilities, download toolset, and viewer user experience.

Managed by the United States Geological Survey (USGS) National Geospatial Program (NGP), *The National Map* is transitioning its data assets and viewer applications to a new visualization and delivery environment which will include an improved viewing platform, base map data, and an integrated data download service.

This new viewing platform is based on the National Geospatial Intelligence Agency (NGA)'s PalanterraTM x3. This shared investment provides a solid technology foundation for navigation and basic GIS functionality which allows *The National Map* to focus on implementing improvements in data services, functions, and data download capabilities.

Key Features

- Fast, cartographically designed base maps using National Atlas and The National Map datasets
- WYSISWG preview and download for all *The National Map* data and new US Topo maps at one Web site
- Interoperable services with popular viewers such as Google Maps, Bing! Maps, and Google Earth using WMS, KML, or ArcGIS
- Easy mash-up of map services from The National Map and other sources as KML, WMS, RSS, ArcGIS, or ArcIMS
- Popular GIS tools to identify features, change coordinates display, measure, reverse geocode, and search by keyword or spatial extent
- Advanced features such as collaborative annotations and query/filter among many others

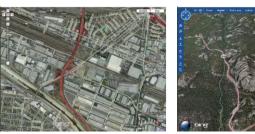
Beta Release in December 2009

The National Map beta viewer will replace existing viewers in several National Map subsystems. The initial release of the viewer to the public is at the 125th Anniversary of Mapping in the USGS on December 3, 2009, at USGS Headquarters in Reston, VA. Once stabilized and enhanced, this viewer will replace the existing The National Map viewers as the primary distribution point for The National Map data and services.

Visit http://www.nationalmap.gov/viewers.html



Easy to navigate, foundational base maps



Use services in *The National Map* Viewer or your favorite viewer



Have a "what you see is what you get" experience when downloading products and data



Add your services and make your own view