State Mapping Advisory Committee (SMAC) Meeting

Meeting Notes

March 9, 2005 Location U.S. Bureau of Land Management, Nevada State Office Peavine Room, 1340 Financial Blvd. Reno, Nevada For further Information please contact Ron Hess Nevada Bureau of Mines and Geology (775)784-6691 Ext. 121 or Email: rhess@unr.edu

10:00 AM: OPENING REMARKS and Welcome by Jon Price, Committee Chairman

Review of SMAC. The Governor of Nevada established the State Mapping Advisory Committee (SMAC) in 1983 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. The Governor named the Director of the Nevada Bureau of Mines and Geology as the chair of SMAC. Membership in SMAC 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

Report on National Agriculture Imagery Program (NAIP) Nevada Project 2006, by Tom Sturm, USGS:

The National Agricultural Imagery Program (NAIP) acquires imagery during the agricultural growing seasons in the continental U.S. A primary goal of the NAIP program is to enable availability of digital ortho photography (DOQ) within a year of acquisition. NAIP imagery can be acquired under two sets of specifications: A one-meter ground sample distance (GSD) with a horizontal accuracy that matches within three meters of a reference ortho image, and a two-meter GSD image that matches within 10 meters of reference ortho imagery is mosaicked digital ortho quarter quads (DOQQs) that were used to digitize United States Departement of Agriculture (USDA) Farm Services Agency (FSA) common land unit boundaries. For Nevada this will be USGS DOQs.

NAIP imagery products are available either as quarter quad tiles or as compressed county mosaics. The mosaics are generated by compressing digital quarter-quadrangle image tiles scanned from natural color positive or color infrared positive aerial film into a single mosaic. The mosaic may cover all or portions of an individual final product. Each individual image tile within the mosaic covers a 3.75- x 3.75- minute quarter-quadrangle plus a 360-meter buffer on all four sides. All individual tile images and the resulting mosaic were rectified to the UTM coordinate system, NAD 83 and cast into a single predetermined UTM zone. Imagery is flown with a 10% or less cloud cover requirement per quarter-quad tile.

There is a good chance that with significant cooperative funding NAIP could fly and provide state-wide DOQQ coverage for all of Nevada, except for the Nellis Air Force Range and DOE Nevada Test Site, in 2006. The most recent statewide aerial photography over Nevada dates from 1999. While some of the existing DOQs were created from this imagery many of the DOQs in Nevada were created from aerial photography flown in 1991 and 1994. This would be an excellent opportunity to obtain a complete natural-color DOQ coverage of Nevada in a single year.

It is estimated that 1-meter, natural-color, NAIP DOQ coverage for Nevada in 2006, excluding the Nellis Air Force Range and DOE Nuclear Test Site, will cost \$1.6 million.

Mike Turner believes that the Nevada Department of Transportation (NDOT) will be able to provide \$125,000 in funding to assure capture of imagery covering all of the quadrangles which contain State highway segments.

Craig Hale, Southern Nevada Water Authority (SNWA), believes that SNWA may be able to contribute up to \$225,000 towards NAIP.

Tom Sturm spoke with Washoe County earlier and believes that they will contribute \$50,000 to ensure coverage of Washoe County.

Chris Hoornaert, USDA Farm Service Agency (FSA), stated that his agency identifies 1,270 quarter quadrangles (approximately 318 7.5 minute quadrangles or almost 17% of the quadrangles) in Nevada as agricultural lands. The FSA will cover the cost of NAIP for these areas.

Sean Harwood, U.S. Forest Service, will try to obtain some year-end funds to contribute to the project.

Del Fortner and Mark O'Brien, both with the State Office of the Bureau of Land Management (BLM), are currently working on obtaining funds to contribute to the Nevada NAIP program. However, these funds will likely be dependent on availability of year-end funds.

Tom Sturm believes that his division of the U.S. Geologic Survey would be able to contribute between \$220,000 and \$500,000 toward the Nevada NAIP project.

The Nevada Division of State Lands supports the NAIP project and has several applications that would benefit from having NAIP imagery for Nevada but at present is unable to contribute funding assistance to the project. The Nevada Bureau of Mines and Geology also supports the project and has several ongoing geologic mapping projects that would benefit from having NAIP imagery but currently lacks funds to contribute.

It was suggested that DOE, U.S. Fish and Wildlife Service, and various agencies in Clark County might be interested in this project and are possible contributors. Tom Sturm will be contacting these agencies in the near future.

Clint Wertz will inquire whether the Department of Defense, which has interests around its bases in Nevada, is willing to contribute.

It was suggested that letters of support from the various agencies and from SMAC would be beneficial. Ron Hess will coordinate an effort to collect these letters.

It was suggested that a NAIP presentation be made at the annual Nevada State GIS conference to make more people aware of the NAIP project and its potential for Nevada.

Several agencies, including the BLM and U.S. Forest Service, will not know how large their financial contribution to the project will be until near the end of the Federal fiscal year. It was suggested that the next SMAC meeting be held near the end of the upcoming Federal fiscal year to find out the amount and status of their contribution to the project.

Linda Newman stated that the UNR DeLaMare Library, through the Keck Website (<u>http://keck.library.unr.edu/)</u>, would be the most appropriate site to house the completed imagery and that they would be willing to support that effort. The Keck Website is a general depository for resource type imagery and data sets covering Nevada.

There were some questions about which agency and what protocol will be used to transfer funds for the project from State and local agencies to the FSA. Mike Turner, Jon Price, and Ron Hess are going to explore these questions further. There may be a way to transfer the funds through NDOT, UNR, or the U.S. Geologic Survey.

It was the general consensus of the group that every effort should be made to ensure that the 2006 NAIP project for Nevada takes place.

Report on U.S. Geological Survey's National Mapping Discipline projects in Nevada, by Tom Sturm, USGS:

National Hydrography Database (NHD). The NHD program in Nevada is moving forward rapidly. Five of the six basin units identified as priority 1 last year are now in production. The U.S. Forest Service has scheduled for production all of the remaining basin units that cover Forest Service lands in Nevada. The remaining non-completed basins, in the northwest and north-central parts of Nevada and one basin in Lincoln County, should go into production in 2007 for complete 1:24,000-scale hydrography coverage of Nevada in 2008.

Ten-meter digital elevation model (DEM) data for Nevada are now complete. After several production delays the remaining quadrangles were completed this February, and the last of the 10-meter data should become available by no later than this May on the National Elevation Data (NED) website. The NED data and many other USGS data sets can be downloaded from the USGS web site "http://seamless.usgs.gov ".

Open discussion and comments.

The Keck Website (<u>http://keck.library.unr.edu/)</u>, a depository for various types of state-wide digital data sets, was discussed and people urged to check it out.

Digital Globe, a high resolution satellite imaging company, has collected imagery covering the DOE Test Site and the Nellis Air Force Range in Nevada. This imagery can be purchased directly from Digital Globe.

The Nevada Department of Transportation (NDOT) Website (<u>http://www.nevadadot.com/traveler/maps/</u>) was also discussed. The NDOT site has pdf file versions of their highway map, quad maps, and many of the historical highway maps of Nevada.

**** ACTION ITEMS FROM MEETING ****

A NAIP presentation with a review of efforts to make the 2006 NAIP project for Nevada happen should be made at the annual Nevada State GIS conference. (After meeting note - Arrangements for a NAIP session at the Nevada State GIS Conference have been made.)

The next SMAC meeting should be held near the end of the upcoming Federal fiscal year to update participants on the cooperative efforts towards the 2006 NAIP project for Nevada.

Mike Turner, Jon Price, and Ron Hess are going to explore various funding mechanisms that will allow State and local agencies to transfer funds to the Farm Service Agency for the 2006 NAIP project in Nevada.

Clint Wertz will inquire whether the Department of Defense, which has interests around its bases in Nevada, is willing to contribute to the NAIP project.

Tom Sturm will contact DOE, various agencies in Clark County, and the U.S. Fish and Wildlife Service to see if they are interested in contributing to a state-wide NAIP project.

Ron Hess will coordinate an effort to collect letters of support for a 2006 state-wide NAIP project..

12:00 Noon ADJOURN

If you have questions please contact Ron Hess, Executive Secretary, Nevada State Mapping Advisory Committee at (775) 784-6691 x 121 or Email rhess@unr.edu. State Mapping Advisory Committee Web Page http://www.nbmg.unr.edu/smac/smac.htm

Virtual Clearinghouse of Nevada Geographic Information Web Page http://www.nbmg.unr.edu/geoinfo/geoinfo.htm

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MEETING ATTENDEES

NAME AGENCY

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EMAIL/PHONE

Jon Price	Nevada Bureau of Mines and Geology
Ron Hess	Nevada Bureau of Mines and Geology
Tom Sturm	USGS National Mapping Discipline
Holly Smith	Nevada Division of State Lands
Mark O'Brien	Bureau of Land Management
Del Fortner	Bureau of Land Management
Sean Harwood	U.S. Forest Service
Chris Hernandez	Nevada Division of Forestry
Craig Hale	Southern Nevada Water Authority
Matt Dillon	Nevada Division of Water Resources
Mike Turner	Nevada Department of Transportation
Mervin Wright	Pyramid Lake Piute Tribe
Clint Wertz	Nevada Division of State Lands
Linda Newman	University of Nevada, Reno, Delamare Library
Ryan Cooper	USDA National Resource Conservation Service
Deb Prevost	USDA National Resource Conservation Service
Chris Hoornaert	USDA FSA
Ted Angle	Bureau of Land Management

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