

NMGIC Formally Recognized as FGDC Cooperating Group

The Federal Geographic Data Committee (FGDC), in an effort to build a cooperative network of communication and support among all parties with an interest in the development of the National Spatial Data Infrastructure (NSDI) and to further the development of the NSDI, has established a program creating a formal network of partnerships. The NMGIC Board, upon consideration of the responsibilities placed upon such partners and the advantages that accrue to the partners, recently sought and were granted formal recognition as an FGDC Cooperating Group.

The position of FGDC with regard to the partnerships is that the FGDC supports cooperation among all parties with a stake in the development and use of geospatial data. Cooperating groups, formed on the basis of policies and procedures that enable all parties to participate in, and contribute to, the NSDI in those areas of their strength and expertise, are considered to be effective and cost efficient mechanisms for the establishing a National Spatial Data Infrastructure. In recognition of the broad scope and extent of geospatial data, in most cases no one group will cover all interests within a geographic area. Therefore, any number of cooperating groups may be recognized within a geographic area as long as each meet the criteria. The FGDC will notify new Cooperating Groups within a geographic area of the existence of previously identified groups. Cooperation among Federal, State, local, private, and academic sectors should be based on shared responsibilities, shared commitment, shared benefits and shared control aimed at improving the geospatial data delivery system. Contributions of value include: establishing forums for communication, facilitating access to data, building framework and thematic data sets, developing educational and training programs, and fostering partnerships for data production and sharing.

The responsibilities that fall upon NMGIC as a cooperating group include the following:

- Promote the use of FGDC-endorsed standards for geospatial data transfer, content, collection, and quality control among Cooperating Group members.
- Participate in the National Geospatial Data Clearinghouse.
- Coordinate data collection and sharing within the geographic area and for data categories of interest to the Group.
- Participate in the development of a National Geospatial Data Framework.
- Encourage participation among all levels of government, the private sector, academia, and the not-for-profit sector.
- Actively participate in developing, reviewing, and implementing standards.
- Represent FGDC at meetings as appropriate and mutually beneficial.
- Participate in FGDC meetings and activities as appropriate, including an annual meeting with the FGDC Steering Committee.

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From the President

It is an honor to be able to address NMGIC as your President again. I want to thank Amy Budge for the wonderful job she did as President of NMGIC. Under her leadership we grew to our largest membership ever. It will be a real challenge for me to keep up the standards that she set during her tenure as President of NMGIC.

As Geography and GIS professionals, I feel that we have some very interesting and exciting times ahead. There is an evolving trend toward the use of geographic information in everyday applications. Many of the new office software suites are desktop mapping aware. GIS and desktop mapping advertisements are showing up in "PC" magazines with increasing regularity. The major GIS and desktop mapping software vendors are producing tools for the use of geographic information on the Internet. The relative cost of the hardware and software to support GIS has dropped dramatically. Along with this drop, there has been an overall improvement in the usability and functionality of GIS and desktop mapping softwares.

As a direct result of improvements in software, there is another very interesting trend evolving in the GIS industry. There is beginning to be a much heavier emphasis on the programming skills of GIS professionals. Many of the new desktop mapping packages make complex GIS analysis processes available within their software. Now the GIS *Guru* is expected to make customized applications to give the casual user simple access to the tools he/she needs. Instead of only writing code to assist in his or her own job, the GIS professional is also being asked to write code to assist everyone else in using spatial data in their jobs too.

Professionals who are involved in the day to day use of spatial data today are faced with the challenge of constantly learning and applying new skills. That is why an organization like NMGIC is so valuable. It gives us all a chance to get together and find out what is going on in our GIS community. I am very proud to be elected President of such a dynamic and diverse organization as NMGIC. I will do my best to continue to build and improve the Council to meet the needs of its membership.

Rich Friedman, President

AGIS Distribution Service for GIS Data

The City of Albuquerque Planning Department is providing a new distribution service for valuable geographic database files maintained by the AGIS (Albuquerque Geographic Information System) Division. Under the New Mexico Inspection of Public Records Act, NMSA 14-2-1, the city is obligated to provide copies of existing digital files which it maintains.

AGIS maintains geographic layers or *themes* for the Albuquerque area including subdivisions, zoning, land use, and addresses. These files are avialable for electronic transfer via *File Transfer Protocol (FTP)*. Since these files are public information, the consumer is only required to pay a service charge for the cost of data transmission.

In order to simplify the process, AGIS is creating single shape files or, export files, from each of its major data layers maintained in the ARC/INFO LIBRARIAN file structure. Any agencies or businesses using outdated or second-hand AGIS files would be well-advised to order new data straight from the original source.

Submitted by Neal Weinberg AGIS, City of Albuquerque

SWUG '97 GIS / A Common Framework

Plans have been progressing for the 1997 ESRI Southwest User Group (SWUG) Annual Conference, scheduled for October 20-22 in Albuquerque at the Sheraton Old Town Hotel.

Events

Monday, October 20

AM: ESRI preconference workshops PM: ESRI preconference workshops

Tuesday, October 21

AM: Plenary Session
 ESRI Doctor's Office
Lunch: Luncheon Speaker
PM: Technical Sessions
 ESRI Doctor's Office
 Posters & Vendor Exhibits

Evening: Social, Exhibits

Wednesday, October 22

AM: Technical Sessions
ESRI Doctor's Office
Posters & Vendor Exhibits

PM: Technical Sessions Technical Tours ESRI Doctor's Office Posters & Vendor Exhibits

Regular registration is \$95 (payable by September 26, 1997)
Late registration is \$125 (after September 26, 1997)

Contacts:

- Bill Baillargeon (committee chair) 505-827-2047 (v) bbaillargeon@state.nm.us
- Gar Clarke (presentations) 505-984-6603 (v) gclarke@ci.santa-fe.nm.us
- Jessie Rossbach (posters)
 505-761-4437 (v)
 jrossbac@nm.nrcs.usda.gov
- Amy Budge (exhibits)
 505-277-3622, ext 231 (v)
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Check SWUG '97 website for more information at http://www.state.nm.us/swug

Geographic Names Committee Report

Steins Mountain, near Steins Pass and the ghost town of Steins, all in Hidalgo County, is not likely to be renamed Steens Mountain, following the May meeting of the NMGIC Geographic Names Committee (GNC).

A person living outside New Mexico had proposed changing the mountain's name to reflect the correct spelling of the eponymn's surname, US Army Major Enoch Steen. But the sparse public response weighed in against the change, as well as the Hidalgo County Commission. Furthermore, the GNC felt that changing the name of one Steins feature while leaving the names of other nearby Steins features unchanged would result in confusion. And finally, the GNC chair was moved to paraphrase the oft-repeated words of Roger Payne, Executive Secretary of the U.S. Board on Geographic Names (USBGN): Seeking historical accuracy is not in and of itself a sufficient reason to change a well-established name.

In another issue, the canine community took a hit when the committee voted five to one against the name Perra Peak in the Sangre de Cristo Mountains. A couple living near Taos originally had proposed the name Cheever Peak for a supposedly unnamed 11,000-foot summit, to honor their dog, Cheever, who had accompanied them on hikes there. The proposal was amended when the name Cheever was opposed by the Taos County Commission, but the GNC scuttled the name Perra Peak as well.

There was some concern about having the specific and generic of the name, Perra Peak, in different languages, but more importantly the committee noted the complete lack of local support for the proposal; the few comments received all were in opposition. Furthermore, one person from Taos suggested that the peak already had a local name, Kiowa Peak; while this hasn't been verified, it is



at least plausible, given the peak's proximity to the historic Kiowa Ranch. As one GNC member remarked, "A peak this large has got to have a local name."

Regarding the longstanding proposal to change the name San Acacia to San Acacio, to reflect the correct gender of the saint mentioned, the GNC deigned to make a recommendation, as there seems to be considerable legitimacy to the proposal, as well as local support. But in the absence of a clear consensus and in the face of opposition from the county commission, the GNC agreed it isn't viable at this time and told the USBGN that if they wanted to clear this from their dockets, then rejecting the proposal would be warranted.

And finally, the committee voted unanimously to recommend approval of the names proposed for El Malpais National Monument: Cerro Candelaria, El Calderon, Encerrito, and Lost Woman Crater. Letters to the county commission and the local newspaper elicited no response, but the chairman's personal familiarity with the features and their names reassured the committee that these are indeed the names long-established in local use.

So...as of now, the dockets of the USBGN are clear, or almost clear, of New Mexico names issues.

Bob Julyan, Chair Geographic Names Committee

Updated Geodetic Control Available on CD-ROM

The National Geodetic Survey distributes National Spatial Reference System (NSRS) geodetic control point information on CD-ROM. For purposes of distributing this information, the nation is broken into five regions. New Mexico falls in the South Central region, along with Colorado, Utah, Arizona, Nevada, Texas, Oklahoma, Louisiana, and Arkansas. The latest edition of the South Central region CD-ROM was issued in March 1997 and, for the first time, occupies two CD-ROMs. For each state, digital data sheets are organized by county, and consist of descriptive and coordinate information for all horizontal and vertical control points that comprise the NSRS. Also included on each CD-ROM is software that provides for searching and extracting desired data. Searches can be performed by geographic area, station name, station accuracy, suitability for GPS, and other criteria. Updates from previous issues of the South Central CD-ROM include additional high accuracy stations at airports around the state, GPS Continuously Operating Reference Stations (CORS) information, updates to coordinates for some stations that have been included in additional surveys, and certain reset stations. The cost for the CD-ROM is \$50 per region, or \$200 for the entire nation. They can be ordered from the National Geodetic Survey in Maryland at 301-713-3242. For more information contact Bill Stone, National Geodetic Survey, at 505-768-3606 or by email at stone-ngs@cabq.gov.

> Bill Stone, Chair GPS Committee



NGS Programs in Jeopardy

(From Progress & Perspectives, an Affirmative Action for Surveying and Mapping, May - June 1997)

Surveyors' programs sponsored by the National Geodetic Survey (NGS) are in immediate jeopardy. Although NGS has been taking a number of budget hits, having lost 90 full-time employees over the past four years, and although a few surveyors have already protested to Congress on behalf of NGS, it is now more urgent than ever for the surveying community to speak out.

Unfortunately, in terms of congressional budget allotments, survey control has not been classified as a vital public service related to environmental concerns. Any programs not deemed environment-related stand to lose their funding.

Not only is the classification incorrect, but NGS has so far been unsuccessful in convincing Congress otherwise; legislators do not want to hear about it from the agency itself. The public, and especially the surveying community, must cry out instead.

Marc Cheves first sounded the latest alarm in the April issue of *Professional Surveyor*. As editor, he devoted much of his monthly column to providing examples of the environment-related, high-precision, public minded surveying required of NGS in the recent past.

Soon, say experts in intelligent vehicle navigation, we should be able to robotically guide trucks to safety, relying upon GPS. Yet, highways must then be located to the precise standard that only NGS can develop.

Unlike USGS, Cheves said, where much of the payroll from 500 lost jobs went to private contractors and partnering endeavors, most of the NGS payroll savings were simply lost, having been reallocated to other agencies for other matters. On the plus side, what partnering has occurred through NGS has been valuable to the agency.

The American Congress on Surveying and Mapping (ACSM) is working hard to relay surveyors' messages to Congress. The traditional NGS exhibit, so relied upon by surveyors looking for the latest geodetic information, was missing from ACSM's April conference in Seattle. Several NGS staffers, who traditionally participate with ACSM in technology transfer on behalf of the surveying community, either were not in attendance or were forced to leave the conference early.

The funding for Continuously Operating Reference Stations (CORS) has been excluded from FY98, meaning that any improvement or enhancement to CORS, planned or unplanned, will cease next year. To date, no one has educated Congress on the critical nature of the CORS effort with regard to the public's increased need for accuracy of positioning.

Send Your Letter To:

Dr. Stanley Wilson Assistant Administrator for Ocean Services National Ocean Service, NOAA 1305 East-West Highway Silver Spring, MD 20910

Copy Your Letter To:

ACSM Government Affairs 5410 Grosvenor Lane, Ste. 100 Bethesda, MD 20814

The ACSM CORS committee received the bad news at the April conference in Seattle. CORS had promised to be one (Continued on page 8)

NMGIC Members Elect New Board

Rich Friedman Elected to Another Term as President



The results of the 1997 election for NMGIC Board members were announced at the Spring meeting, April 25th. Six candidates were on the ballot for four

positions. The new members are Bobby Creel, Assistant Director of the NM Water Resources Research Institute in Las Cruces; Robert Czerniak, Chair of the Geography Department, NM State University; and Neal Weinberg, GIS Manager at AGIS, City of Albuquerque. Rich Friedman was relected to the Board.

At its first Board meeting since the election, new officers were selected. According to NMGIC Bylaws, the offices of president and vice-president are elected by the Board. Secretary and Treasurer are appointed by the new president. The Board elected Rich as President and Bob Bewley as Vice-president. Robin Ransom was appointed to continue as Secretary, and Denise Bleakly was appointed as the new Treasurer.

The remaining five Board members each have assigned responsibilities. Amy Budge is the Public Relations Coordinator; Bobby Creel is the Workshop Coordinator; Robert Czerniak is the Elections Coordinator; Rick Watson is the Meetings Coordinator; and Neal Weinberg is the Speakers Coordinator.

Please refer to page 15 for contact information on the Board and Committee Chairs.

FGDC News

FGDC Adopts Two New Standards

The FGDC Steering Committee, on December 17, 1996, formally adopted as FGDC Standards the "Cadastral Data Content Standard" and the "Classification of Wetlands and Deepwater Habitats of the United States." Copies of the these standards may be obtained from the FGDC Web site (www.fgdc.gov) or by contacting FGDC (contact information below).

Draft Standards Available for Review

Three draft standards currently are available for review. Two of the draft standards, the "Content Standards for Digital Elevation Data" and the "Content Standards for Digital Orthoimagery," relate to the definition of two of the themes that form the national geospatial data framework as envisioned by FGDC. In addition, a revision of the "Content Standard for Digital Geospatial Metadata" is available for public comment.

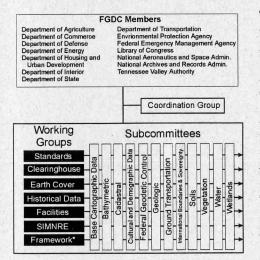
The revision of the metadata standard is limited to three areas: 1) establishing guidelines for creating "user-defined" metadata elements, 2) establishing guidelines for creating a customized metadata profile, such as those for cultural or demographic data sets, and 3) refining the standard's production rules

for easier implementation. This revision does not address requested changes to specific metadata elements which, if adopted, would affect existing implementations of the standard.

The comment period for the draft metadata standard ends on July 9, 1997. The comment periods for both the draft orthoimagery standard and the draft elevation data standards end on August 8, 1997. The FGDC particularly seeks comments from state, local, and tribal goverments and from academia and the private sector. Copies of the draft standard are available from the FGDC Web site (www.fgdc.gov) or by contacting Bill Baillargeon (505-827-2047, billb@gsd.state.nm.us). Further information on procedures for submitting comments on the draft standards may be obtained from the same sources.

FGDC Contact Information

FGDC Secretariat (attn: Jennifer Fox) U.S. Geological Survey 590 National Center 12201 Sunrise Valley Drive Reston, VA 20192 703-648-5514, voice 703-648-5755, fax fgdc@www.fgdc.gov



The Federal Geographic Data Committee (FGDC) was formed to respond to President Clinton's Executive Order 12906 regarding making spatial data available to the public via the Internet. Chaired by the Department of Interior (Secretary Bruce Babbitt), the committee has 13 other federal agency members (see diagram). Twelve subcommittees and seven working groups, which bisect all the subcommittees, are the foundation of the Committee. These activities are overseen by a Coordination Group. Visit the website at http://fgdc.er.usgs.gov/ to get information on FGDC programs and activities.

State Mapping Advisory Committee Report

The State Mapping Advisory Committee (SMAC) met February 21st to respond to USGS's Middle Rio Grande Basin Solicitation Package. USGS was seeking input on desire for, and priority of, seven data layers for the study area, including orthoimagery, 10m DEMs, hydrography, transportation, boundaries, PLSS, and The Committee's manmade features. response reflected interest in the entire study area for orthoimagery and DEMs, but indicated a higher priority for the following 7.5' quads: Collier Draw, Cerro Conejo, Bernalillo NW, San Felipe Mesa, Arroyo de Las Calabacillas, Loma Machete, Bernalillo, Placitas, Hagan, Benevidez Ranch, The Volcanoes, Los Griegos, Alameda, Sandia Crest, and Sandia Park. These quads are mainly north of Albuquerque and include Rio Rancho and other growth areas. Also of high priority are eight quads in the Belen area, including: Dalies, Los Lunas, Belen, Tome, Veguita, Turn, Abeytas, and La The highest priority is for the digital orthophoto quarter quads (DOQQs).

Limited updates to the DLG data (hydrography, PLSS, transportation, boundaries, and manmade features) are useful as proposed by the study, but SMAC members did not express the need to request additional or updated data.

Other state and federal agencies also submitted responses to the Solicitation Package. USGS's review of these recommendations is a bit behind schedule, but an announcement on the outcome should be forthcoming in July.

On another front, NAPP photography has been acquired during 1996 for southern parts of New Mexico, and the 1997 acquisition for northeastern New Mexico is underway. See related article on page 7.

Mike Inglis, Chair SMAC

RGIS News

Data collections in the RGIS Clearing-house are growing with contributions from the GAP Data Analysis Program, Bureau of Land Management, and the US Army Corps of Engineers. Several of these new datasets are listed below.

GAP Data Available for New Mexico:

The New Mexico Gap Analysis project is complete, and the data have been submitted to the National Gap Program office. The New Mexico RGIS Program is distributing these data on 2 CD-ROMs, which include all the data and the final report. In an effort to make these data available as quickly as possible, they are offered in ARC/INFO coverage format only. Some files are vector, some are GRID. Most files are statewide in extent and very large. For some users this format may limit access to the data. The files are not available in ARC/Export format at this time. For this reason, and to standardize Gap products nationwide, the U.S. Department of Interior, Gap Analysis Program will be creating a standard Gap data product which should reduce data format problems. The CDs can be ordered from the RGIS Clearinghouse at \$100 per set.

For the most current information on the progress of the New Mexico release, contact the National Gap Home Page at http://www.gap.uidaho.edu/gap.

Updates to BLM Land Status Files

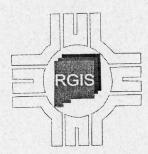
The RGIS Clearinghouse has received updated files from the Bureau of Land Management for four 1:100,000 scale maps. These are: Alamo Hueco Mountains, Animas, Taos, and Wheeler Peak.

Winter Issue

1995 Digital Orthophotos

The US Army Corps of Engineers has contributed digital orthophotos to the RGIS Clearinghouse for an area along the Rio Grande between Albuquerque and Belen. The Belen Unit of the Rio Grande Floodway project follows the Rio Grande for about 30 miles, from Albuquerque at the Rio Bravo Bridge, south to the town of Casa Colorado at the natural gas line crossing, five miles Each digital orsouth of Belen. thophoto covers a rectangular area approximately 1.5 miles, north to south, by approximately 3 miles, east to west. Aerial photography obtained in 1995 at a scale of 1:30,000 was scanned to create the digital orthophotos. foot pixel size was used. The digital orthophotos are available in grayscale TIFF format and can be obtained through the RGIS Clearinghouse. The collection is on 2 CD ROMs and is available at \$100 per set.

RGIS Clearinghouse Contact:
Amy Budge
505-277-3622, ext 231 (v)
505-277-3614 (f)
abudge@spock.unm.edu



Make Plans to Attend NMGIC's Fall Meeting

October 10, 1997 Albuquerque, NM

Watch for details.



(Continued from page 1)

FGDC responsibilities in the partnership are as follows:

- Provide "train-the-trainer" technical workshops to explain the origins, purpose, and strategies for implementating FGDC-endorsed standards.
- Help the Cooperating Group use the National Geospatial Data Clearinghouse to locate sources of data, training, and expertise.
- Link the Cooperating Group World Wide Web Home pages to the FGDC NSDI Internet World Wide Web Homepage.
- Offer qualified Cooperating Group members the opportunity to participate on Working Groups and Subcommittees, as appropriate.
- Regularly inform Cooperating Group members of FGDC-sponsored activities and initiatives.

For more information about NMGIC's role as an FGDC Partner, contact Bill Baillargeon at 505-827-2047 or bbaillargeon@state.nm.us.

The Map Legend 1997-98 Publication Schedule and Deadlines

Fall Issue Deadline for articles: Sept. 15, 1997
Publication date: October 15, 1997

Deadline for articles: January 15, 1998

Publication date: February 15, 1998

NMGIC Scholarship Recipient's Project to Aid Huichol Reforestation Program

A project using aerial photos, satellite imagery, and GIS to help Mexican Indians re-establish sacred forests has received scholarship support from NMGIC.

Timothy G. Baugh, a master's student in the UNM Department of Geography, was this year's recipient of the \$500 NMGIC scholarship. He will use the money to purchase aerial photographs of the Santa Catarina District in Jalisco, Mexico, where he plans to map the ecozones and deforested areas of the region and thus delineate the best zones in which tree saplings can be planted.

The Huichol Indians inhabiting the mountainous area consider oaks sacred. In 1985 the Huichol agreed to allow limited logging of the area's pines, sparing the oaks, but loggers girdled the oaks and later returned to cut the dead trees. By 1993, the Huichol had become aware of the violations; they canceled the logging contract and initiated a reforestation program.

Baugh has traveled to Guadalajara twice in the last six months to meet with Sr. Torres Contreras and other members of the Departamento de Geografia y Ordenacion Territorial at the Universidad de Guadalajara, who have been assisting the Huichol in their efforts. They have agreed to cooperate with Baugh in his research.

In his study, Baugh will use ARC/INFO to develop a series of digitized maps of the Santa Catarina district to investigate the boundaries of the various ecological zones, which range from tropical forest in the canyon bottoms to coniferous forest in the upper elevations. The aerial photography will be used to: 1) establish a baseline of forest conditions prior to logging by using mylar to overlay and map the forest, 2) examine vegetation differences, and 3) train Huichol natives in aerial photo interpretation.

"This project will enable me to learn the analytical techniques of ARC/INFO for the identification of a problem and how to solve it," said Baugh. "Furthermore, it will provide me with an opportunity to learn more about digital image processing using ERMAPPER and GIS in general."

NMGIC GIS Chair Attends FGDC Steering Committee Meeting

Once each year, representatives from each FGDC Cooperating Group are asked to attend an FGDC Steering Committee Meeting. The second such meeting was held April 30, 1997 in Washington, DC with Bill Baillargeon attending as the NMGIC representative.

The purpose of these annual meetings is to focus on those issues of concern to the Cooperating Groups and to discuss the means by which FGDC and the Cooperating Groups can best work in concert to achieve mutually beneficial ends, such as implementation of the National Spatial Data Infrastructure. The representatives of the Cooperating Groups, in preliminary meetings, agreed to focus on three issues:

- 1) participation of state and local representatives in the collaborative development of national geospatial data standards,
- 2) improvement of federal field/regional office understanding of, and participation in, NSDI and in local spatial data coordination and development, and
- 3) increases in resources for developing foundational data sets to enhance collaborative decision-making and concommitant changes in federal policy to permit the use of program-specific funding mechanisms more broadly in the development of such infrastructural data.

For more information regarding the discussions surrounding these issues and the action items that emerged as a result of these discussions, please contact Bill Baillargeon. Draft minutes of the meeting may also be obtained from the FGDC Web site (www.fgdc.gov).

Update on NAPP for New Mexico

As you may recall, the cover story in the Winter 1997 issue of *The Map Legend* announced availability of 1996 National Aerial Photography Program (NAPP) coverage for the New Mexico portion of the US/Mexico border region. The photos are quarter quad centered at a 1:40,000 scale. Some photos are black and white; some are color infrared. Many of these photos are available for purchase. The digital orthophoto quads that will be made from this photography, are not yet available.

The article also mentioned NAPP coverage to be acquired during the 1997 flying season. Some photography has been acquired and is available for project 9712, which covers the northeastern quadrant of New Mexico. These black and white photos are also at a 1:40,000 scale. Preliminary indexes have been sent to EDAC.

Contact New Mexico's Earth Science Information Center (ESIC) office at EDAC if you would like more information on these photos (505-277-3622, ext 230).

(Continued from page 4)

of the surveying community's most revolutionary and beneficial outgrowths of real-time differential GPS, storing high accuracy observations 24 hours a day, and making them available at no cost to the user for online downloading. With the central data facility for CORS located at NGS in Silver Spring, MD, funds are needed for its maintenance, perpetuation, and back-up.

In March of this year, Cheves reported that the federal CORS system was being accessed by over 300 users a month. NGS Chief Geodesist Bill Strange said that state DOTs are the primary driving force behind new station demand, and survey accuracies of 1 to 2 centimeters are being easily achieved. The ultimate goal of the CORS system, he said, is to provide 3D access to the National Spatial Reference System, accurate to within two to three millimeters.

With the movement toward worldwide acceptance of the International Terrestrial Reference Frame, NGS plays the key role in steering American surveying, navigation, and meteorology toward the same coordinate system. Another key role played recently by NGS was the development of GEOID96, which will further improve vertical accuracies in GPS adjustments. Ever since GPS-derived heights became a demanded reality, the surveying community has been relying upon NGS to develop height

modernization. Again, the surveying community has not yet convinced Congress that surveying accuracy depends upon NGS, and that public welfare depends upon surveying accuracy.

Fortunately for surveying in the short term, geodesists remaining at NGS have the expertise to proivde the standard and to perpetuate the database. However, there are no new geodesists in the NGS pipeline. When most of the current geodetic staff retires within 1 to 10 years, there will be few or no trained NGS geodesists to carry on. Not only may the standard then fail to be updated and maintained, the NGS historic database may also be lost.

It is apparent that Congress will not listen solely to a professional association, to a government agency, or to form letters. The best way for legislators to learn of the devastating effect that NGS losses have on the surveying community is for a large number of surveyors themselves to write letters on their respective company letterheads.

It may be helpful to remind Congress that since surveyors are required to be licensed by their respective states, surveying is considered a matter of public interest. It therefore follows that since surveyors must rely on NGS, so must the public.

Printed with permission from Wendy Straight, Editor

20th Annual Applied Geography Conference

November 12-15, 1997 Albuquerque, NM

Since their inception in 1978, the Applied Geography Conferences have provided a forum for exchanging and discussing information related to applying geographic concepts, data, and methods to human and environmental problemsolving. The Conference brings together practitioners, academicians, and other professionals who seek geographic solutions to problems in the private and public sectors. The Board of Directors of the Applied Geography Conferences and the conference co-sponsors, including Kent State Unviersity, the University of North Texas, and the University of New Mexico, invite you to participate in our 20th Annual Conference.

Attendance at the Conference averages 300 people per year. This size offers an ideal setting for new professional geographers and students to gain speaking experience and to share ideas with geographers in business, government agencies, and academic institutions. In addition to paper sessions, the Conference also features exhibits, poster presentations, field trips, and special events.

This conference is being held jointly with the Southwest Association of American Geographers (SWAG). Conference registration is \$65, which covers both meetings being held concurrently at the Albuquerque Marriott.

Abstracts for papers for SWAG are still being accepted; due date is September 15, 1997.

For more information, contact:

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Albuquerque, NM 87131
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bcullen@unm.edu



Wanted: Articles for *The Map Legend*

Please share information on your programs, projects, meetings, job opportunities, and other interesting tidbits with your peers by submitting articles for publication in *The Map Legend*. These should be submitted to Amy Budge at EDAC, by deadlines listed on page 6. Amy's contact information is on page 15.



An Infrastructure for Framework Data In New Mexico

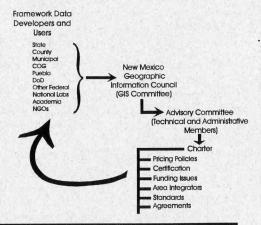
The Earth Data Analysis Center and its collaborators, City of Santa Fe, Doña Ana County, and the State Land Office, have been working on an FGDC grant to develop a model for implementing an infrastructure for creating and sharing framework data in New Mexico. The project is one of seven funded under the Framework Demonstration Projects Program (FDPP).

Framework data are seven themes of data that FGDC, through meetings with national and local GIS users, has identified as being basic to most GIS applications. These themes are: hydrography, transportation, geodetic control, digital orthoimagery, elevation, cadastral, and governmental units. In addition to technical consid-

erations, the project team is also examining administrative requirements for implementing and maintaining an infrastructure in New Mexico. Such issues as certification, distribution, integration, agreements, and maintenance are being considered.

To ensure that all parties are included in the process, the team has intiated an advisory board, consisting of people from state, county, city, federal, and other offices from throughout the state. The first meeting of the Board was held May 22nd at which some of the basic issues were introduced. The Board would like to be housed within NMGIC, and will make a proposal to the NMGIC Board of Directors at their next meeting.

The diagram below, is a proposed model for the relationship between the Framework Advisory Board and NMGIC. Questions can be directed to Amy Budge at EDAC (505-277-3622, ext 231 or abudge@spock.unm.edu).



Calendar

Annual ESRI User Group Conference, San Diego Convention Center, San Diego, CA, July 7-11, 1997. Contact: ESRI, Inc., 380 New York St., Redlands, CA 92373-8100. Telephone: 909-793-2853, ext 11363. Email: uc97@esri.com Website: http://www.esri.com/headlines/uc/97uc.html

URISA '97, 35th Annual Conference and Exhibition, Toronto, Canada, July 20-24, 1997. Contact: URISA, 900 Second St. NE, Suite 304, Washington, DC 20002. Telephone: 202-289-1685. Email: training@urisa.org

GIS in the Rockies, 1997 Conference: "Connecting to the Future", Holiday Inn, Denver, CO, September 15-17, 1997. Contact: GIS in the Rockies, PO Box 280117, Lakewood, CO 80228-0117. Telephone: 303-441-3887 or 970-490-7904. Website: http://www-gis.cudenver.edu/~gisitr/

NACIS XVII, North American Cartographic Information Society Annual Meeting, Lexington, KY, October 1-4, 1997. Contact: Pat Gilmartin, Department of Geography, University of South Carolina, Columbia, SC 29208. Telephone: 803-777-2989. Email: gilmartin-pat@sc.edu

NMGIC Fall Meeting, Albuquerque, NM, October 10, 1997. Contact: Rick Watson, Meetings Coordinator, San Juan College, 4601 College Blvd, Farmington, NM 87401. Telephone: 505-599-0373. Fax: 505-599-0385. Email: watson@sjc.cc.nm.us

SWUG '97, GIS: A Common Framework, ESRI Southwest User Group Annual Conference, Sheraton Old Town Hotel, Albuquerque, NM, October 20-22, 1997. Contact: Bill Baillargeon, GSD/ISD, PO Drawer 26110, Santa Fe, NM 87502-0110. Telephone: 505-827-2047. Fax: 505-827-2325. Email: bbaillargeon@state.nm.us Website: http://www.state.nm.us/swug

Border Energy Forum IV, Las Cruces, NM, October 21-22, 1997. Contact: Texas General Land Office, Stephen Austin Bldg, Rm 620, 1700 N. Congress Ave, Austin, TX 78701-1495. Telephone: 512-463-5039.

GIS/LIS '97, Cincinnati Convention Center, Cincinnati, OH, October 28-30, 1997. Contact: ASPRS, 5410 Grosvenor Lane, Suite 210, Bethesda, MD 20814-2160. Telephone: 301-493-0290. Fax: 310-493-0208. Email: asprs@asprs.org

20th Annual Applied Geography Conference, Albuquerque Marriott, Albuquerque, NM, November 12-15, 1997. Contact: Dr. Brad Cullen, Department of Geography, University of New Mexico, Albuquerque, NM 87131. Telephone: 505-277-3643. Email: bcullen@unm.edu

Applied Geologic Remote Sensing, Practical Solutions for Real-World Problems, Twelfth International Conference and Workshops, Denver Marriott City Center, Denver, CO, November 17-19, 1997. Contact: Nancy Wallman, ERIM, PO Box 134001, Ann Arbor, MI 48113-4001. Telephone: 313-994-1200, ext 3234. Email: wallman@erim.org

job board

Position Available:

Title: Effective:

Geographic Information Systems Coordinator

August 1, 1997 or when position is filled

Salary:

\$23,594 minimum

NOTE: Employment beyond first year contingent upon available funding.

Qualifications:

• Academic: Master's degree in Geography, Geology, or related field with emphasis in hydrology or environmental sciences.

- Experience: Minimum of two years experience with ARC/INFO and ArcView geographic information systems (GIS) software tools operating on Unix systems, database software systems. Global positioning systems (GPS) skills required. Experience with PC-windows GIS application useful, but not essential.
- Responsibilities: Manage Geographic Information System Lab, including supervision of student and other employees as required; project planning; project development; project scheduling; coordination with NMWRRI research projects; production of GIS products for projects; and developing project reports. Responsible for GIS data storage, retrieval, and archival activities. Evaluate and recommend requirements for computer hardware, software, and training. Assist with developing, implementing, assessing, and maintaining adequate Quality Assurance Project Plans. Position reports to the NMWRRI Assistant Director.
- Abilities: Able to communicate and establish effective working relationships with a wide range of individuals, including co-workers, university faculty and students, governmental agency representatives, and the general public. Must also be able to use independent judgment and initiative to develop strategies and procedures related to project planning and development.
- Benefits: State educational retirement, workers' compensation and unemployment compensation coverage, annual and sick leave, optional group health, group life insurance, and group dental insurance available.

Applications: Submit letter of application, detailed resume, transcript, and names, addresses, and telephone numbers of three references to Bobby J. Creel, New Mexico State University, NM Water Resources Research Institute, Box 30001, MSC 3167, Las Cruces, NM 88005. For questions or more information, call 505-646-4337, or email bcreel@wrri.nmsu.edu

DEADLINE FOR APPLICATIONS IS JULY 1, 1997

New Mexico State University is an EEO/AA employer. Offer of employment contingent upon verification of individual's eligibility for employment in the United States. NMSU is prepared to provide reasonable accommodations to individuals with disabilities, upon self disclosure and request.

Political Correctness in Geographic Names...Where Will it End?

That topic is among several to be discused at this year's Western States Geographic Names Conference (WSGNC) to be held September 23-27 in Flagstaff. Already several states whose geographic names authorities participate in the conference are grappling with legislation mandating that all names containing the word Squaw must be changed, and other emotionally charged names also will certainly be called into question in the near future.

Also at this year's conference will be a workshop on "How Place Names Get on State and Federal Maps," facilitated by persons from the Oklahoma Geological Survey and the USGS Rocky Mountain Mapping Center.

At the annual conference, representatives of state names authorities, such as the NMGIC Geographic Names Committee, and federal land-management agencies, as well as interested citizens, gather to discuss specific geographic names issues, as well as emerging trends and problems.

The meeting is attended by the members of the U.S. Board on Geographic Names (USBGN), and a feature of the conference is observing one of the formal monthly meetings of the USBGN and watching the process by which names decisions are made.

Anyone interested in this year's WS-GNC—attending or bring up an issue—should contact Bob Julyan, NMGIC Geographic Names Committee chair, c/o EDAC, 277-3622 Ext 233, email: bob@spock.unm.edu.



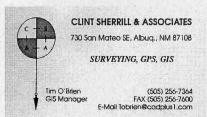
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TRC Mariah provides professional environmental services to assist clients in achieving cost-effective regulatory compliance. We offer responsive, innovative solutions to environmental compliance problems. Since 1976, our team of professionals has been serving major industrial and governmental clients throughout the western United states. Our clients' projects (ranging from fossil fuel extraction and power transmission to waste management) benefit millions of Americans. We at TRC Mariah take pride in assisting these projects in an environmentally responsible manner. Our innovative, practical approach not only achieves cost-effective compliance, but also provides those crucial additional values and benefits that naturally accrue to forward-looking clients who develop their projects with environmental sensitivity.

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- Cultural resource site documentation
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Global Systems Modeling Limited (GSM) was incorporated in the State of Arizona in January 1988. Our primary goal is to solve client problems by providing Geographic Information System (GIS) and Relational Data Base Management System (RDBMS) application solutions. We have additional expertise in Remote Sensing and in Document Image Management systems.

Consulting: We are a consulting firm. Our goal is to solve our client's problems in the most efficient and cost-effective manner; usually, but not always, involving the use of computers. In the GIS area we offer: user needs assessments; custom software programming; spatial feature representation and capture; data conversion, automation, and acquisition; image processing; data base design; pilot projects; and system integration and training. Our work with RDMBS applications has been extremely varied. GSM has created a number of data base applications for clients in government, Native American nations, and in the private sector, including consulting, engineering, and planning firms.

Software Sales: In 1988, GSM was one of the first four PC ARC/INFO distributors authorized by ESRI. Since then, GSM has added distribution rights to ArcView and ArcCAD (ESRI), EASI/PACE and OrthoEngine (PCI), Tracer and Recognizer (Hitachi), and other related GIS software packages. In addition, we are resellers for a number of RDBMS packages, including FoxPro (DOS and Windows), Paradox (DOS and Windows), Clipper, dBase, and others. We have recently added EFS and RetrievalWare from Excalibur Technologies, the leader in applying adaptive retrieval technology to client/server document image management.

Hardware Sales: GSM's emphasis has been on the PC platform, and increasingly, with client/server systems built around Unix and Windows NT servers. We have also installed ARC/INFO on the Sun SPARCStation platform. We sell a wide variety of peripheral equipment, including digitizers, plotters and printers, and scanners. In addition, we are Artisoft LANtastic peer-to-peer Local Area Network distributors, and have installed a number of LANs. We are experts at putting together complete systems that are optimized for GIS and data base applications. We also offer ongoing hardware support for the equipment we sell.

Training: GSM offers GIS software training. We can combine training with consulting during the execution of a project. We also conduct the formal ESRI-authorized "Introduction to ArcView" and "Introduction to PC ArcCAD" courses.



NMGIC is grateful to its eighteen 1997 corporate sponsors for their support of the Council.

Thank You!



Cool Internet Web Sites

To continue the series of mapping and GPS related web sites, we have found the following sites that may be of interest to the NMGIC membership. As always, if you come across something you think the rest of the membership might find useful, please contact Denise Bleakly at 505-284-2535, or email to <code>drbleak@envc.sandia.gov</code> to let me know and I will add it to the list for the next <code>Map Legend</code>. NMGIC Corporate Sponsors, if you have a web site, please contact me. I will be compiling a special list of our corporate sponsors for a future edition.

The following sites were compiled from various trade magazines, submissions from members, and sites found by surfing the web. They are listed in no particular order.

 Business Geographics Magazine/GIS V 	World
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GIS Jobs at the GeoSearch Inc. Website

American Business Information Inc. (ABI) has launched a
website for internet sales leads and a mailing list service.
This will be useful for those getting into the GeoBusiness
GIS market.

Trimble Customer Support Website

 SPOT Imagery Via the Web (direct access to the SPOT DALI catalog is available on the SPOT Image Corporation's website)

 The Earth Observing System Data and Information System (EOSDIS), part of NASA's Mission to Planet Earth program, has created a website labeled as a Gateway to over 1800 Earth science data products and services.

 National Imagery & Mapping Agency (NIMA) (Formerly the Defense Mapping Agency)

NIMA—Products and Services

 NIMA—GEONet Names Server Query Form

National Park Service and GIS

Alexandria Digital Library
 A distributed digital library
 for geo-referenced information.

http://www.geoplace.com

http://www.geosearch.com

http://www.lookupusa.com

http://www.trimble.com

http://www.spot.com

http://harp.gsfc.nasa.gov/v0ims

http://www/dma.gov/index.html

http://154.124.2.33/products

http://164.214.2.53/gns/html/index.html

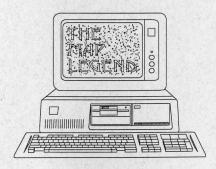
http://hands.nrrc.ncsu.edu/npsgis

http://alexandria/sdc.ucsb.edu/





THE MAP LEGEND



Editors: Amy Budge Bob Julyan Stan Morain

The Map Legend is published by the New Mexico Geographic Information Council and is a benefit of membership in NMGIC. The opinions expressed are those of the contributors and do not necessarily represent the views of the New Mexico Geographic Information Council, except where specifically noted. Use of trade names or products does not constitute an endorsement by the NMGIC. Members are invited to send articles and announcements of interest to Amy Budge. Please direct all correspondence to:

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NMGIC

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