Western Association of Map Libraries

"... to encourage high standards in every phase of organization and administration of map libraries. ..."
The Western Association of Map Libraries is an independent association of persons. The Membership has defined its Principal Region for meeting locations as: the Provinces of Alberta and British Columbia, and the States of Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington and Wyoming.

Membership in WAML is open to any individual interested in furthering the purpose of the Association, which is "to encourage high standards in every phase of the organization and administration of map libraries." Membership includes receipt of all issues of the Information Bulletin and Electronic News & Notes (if an email address is provided), mail announcements of WAML meetings, voting privileges and receipt of WAML ballots.

Dues are US$30 per year and all memberships begin July 1. You may join any time of the year by sending your name, address, phone, fax, email address and US$30 to the WAML Treasurer at the address below. Make checks payable to "WAML" or the "Western Association of Map Libraries." Lifetime membership is open to any individual for a one-time payment of US$300. In addition to all membership privileges listed above, Lifetime Members also receive a copy of each volume published in the WAML Occasional Paper series. For more information about WAML, its purpose, meetings and membership, see the WAML Web site at http://www.waml.org or contact an officer listed below.

WAML and its Information Bulletin operate on a membership/volume-year basis. Subscriptions begin July 1 and end on June 30 the following year. Mid-year joiners/subscribers will receive back issues for that year. Back issues of the Information Bulletin are available for US$10/volume, or portion thereof, from the Subscription Manager.

Subscriptions to the Information Bulletin are US$35 per volume year. The Information Bulletin is issued three times each year: Issue #1 in November, Issue #2 in March, and Issue #3 in July. In addition to the subscription cost, US$3 is charged for postage to Canada and US$10 is charged for mailing to countries outside of the US and Canada.

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# Western Association of Map Libraries

**Volume 34, No. 3**

**INFORMATION BULLETIN**

**July 2003**

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Instructions for Authors

The Western Association of Map Libraries Information Bulletin publishes feature articles, photoessays, association business and selected news and notes related to all forms of cartographic information, including maps, spatial data, GIS, and all aspects of map librarianship. Articles are invited that will address the interests of the publications' audience. Individuals are encouraged to submit unsolicited articles for consideration.

Length: Articles should be submitted to the Information Bulletin editor via email or on disk in either Microsoft Word or ASCII text format. Submissions should be accompanied by a printed copy which is no more than 20 double-spaced printed pages. Do not include any special formatting, such as page breaks and indentations in the article. Paragraphs should be separated by two line breaks. When submitting articles on disk, please note the author(s) name(s), the word processing program, a brief title of your article and the file name(s) on the disk. Cartographic information is, for the most part, a visual medium, so illustrations should be included whenever possible. Note the approximate location of illustrations by inserting a separate sentence in the text of the article:

Insert Figure 1 Here

The Production Editor will place the image based on the text flow and page layout of the article.

Illustrations: Illustrations and graphic material should be submitted in scanner-ready or computer-readable form (gif, jpg or tiff). If it is absolutely impossible to submit scanned images, photographic prints and photocopies may be submitted. All photocopies, even copies of black and white illustrations, should be copied on a color copy machine, as they have a higher resolution than standard black and white copiers. Tables should be word processed and saved as a separate file on the disk.

References: References should be included in the text in Author Date format (Jones, 1998). References Cited should be listed at the end of the article in a separate section titled REFERENCES CITED. Citations should be listed alphabetically and written in Author Date style. References to web sites should be written:

Author's Last Name, First Name, Month, Day & Year Updated. Title of the web site. <URL> (Date site accessed).

Author Information: The author should include a brief title before the text of the article. Information about the author(s) should also be included: author's name, position, address and e-mail address, if available.

Editing: The editors reserve the right to make minor copy-editing changes.

Acceptance of manuscripts: The WAML Information Bulletin editors reserve the right to accept or reject articles.

Book, Atlas & Media Reviews

Atlas and book reviews and reviews of digital cartographic products, software and data are welcome. Contact the Atlas & Book Review Editor, Kathy Rankin or the IB Editor. For more information on atlas and book reviews, see the instructions for reviewers in the Book Review section of the Information Bulletin.
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Electronic News and Notes contains information on: Benchmarks (major events related to people or Map Libraries, specifically map library events in or about the principal region), Canadian News, Cataloging News, Conferences and Classes, Digital Spatial Data, Employment, General News, Internet Resources, New Publications and cartographic materials, Periodical Articles and news from US Federal, State and Local Government agencies related to map librarianship and the principal region. Submit items to the News and Notes Editor or the appropriate State or Province editor at any time for inclusion in WAML Electronic News and Notes.

E-N & N is a monthly publication that is compiled and posted on the WAML web site at http://www.waml.org. The E-N & N Editor appreciates receiving contributions via e-mail, but will accept regular mail as well. Please flag time-sensitive items in the subject line. Back issues of E-N & N can be viewed on the WAML Web site. Selected E-N & N items also appear in the Information Bulletin. Potential sources for news items include: communication with colleagues, listservs (please acknowledge original author and list), Web sites (use search engines to search for maps, atlases, cartography, geospatial data, GIS and your state, county or city), automated notification services, journals and newspapers, vendor publisher and agency catalogs, newsletters and conference announcements.

E-N & N includes the regular feature “New Mapping of Western North America.” Submit citations for new print and digital maps and atlases of the western United States and Canadian Provinces to Ken Rockwell, New Mapping Editor. Include ordering information if possible.

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President’s Message
Howdy Fellow WAMLites!

As usual we are drowning in the rains of summer here in central Florida and most of the southeast. Sure do wish I could send y’all a foot or so.

The folks at Stanford did their usual excellent job of providing the locale for the WAML Spring Meeting, March 26-29. Many thanks to Charlotte Derksen, Julie Sweetkind-Singer and Jane Ingalls for their efforts in organizing and conducting the meeting. Speakers gave presentations on a variety of topics of local, academic and general interest in the well rounded program. Attendees had a chance to sample Stanford’s historic African map collection. The field trip to Filoli House and Garden and to Hakone Garden offered a delightful spring floral experience and a chance to socialize with other members and friends.

As I complete my term as WAML President, I would like to thank all of the WAML members who gave of their time and energy to keep our organization on a strong footing. A special thanks to all of you who have held past meetings and have offered to hold future meetings for the society.

I hope you will continue your active support for the organization, as Sue Haffner assumes the leadership role for 2003-2004. I’m sure we are all looking forward to the WAML Fall Meeting that Cynthia Jahns is preparing at U.C. Santa Cruz, September 10-13.

Thank you again for your support.

—Rich
WAML President
NovoPrint USA, Inc. Maps and their Codes

by

Angie Cope
American Geographical Society Library
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NovoPrint USA, Inc., headquartered in Milwaukee, Wisconsin, is a producer of the next generation of high quality, folding community maps in the United States. Most map librarians will recognize the name of NovoPrint’s founder, Mr. Josef Mitterhuber of the German map publisher Stadte-Verlag E. von Wagner & J. Mitterhuber, GmbH. Incorporated in 1994, NovoPrint USA, Inc. started with three employees and has grown to include 20 today with annual earnings in the millions of dollars. NovoPrint USA builds relationships with local Chambers of Commerce across the United States, selling advertisements to local businesses and then producing color visitor’s guides, atlases and maps distributed to the public for free. To date, NovoPrint has made maps for over 180 communities in 21 different states. The staff consists of cartographers, graphic designers, photographers, sales and marketing professionals and other office personnel.

NovoPrint has a strong presence in the map and library communities with membership in the North American Cartographic Information Society (NACIS) and the International Map Trade Association (IMTA). It also has memberships in state and local Chamber of Commerce organizations. Of special interest to map librarians, NovoPrint USA, Inc. sends copies of all maps produced to the Newberry Library in Chicago, the Library of Congress in Washington, D.C., and the American Geographical Society Library in Milwaukee.

In the grand tradition of any good road or community map, NovoPrint maps include a code. The code appears at the bottom of the map along the inside of the neat line and can be deciphered easily. Consisting of a hyphenated number between six to nine digits, the second number is an inventory number used in-house by NovoPrint. Of more interest to map librarians, the first set of numbers reveal the date of publication. Either three or four digits, the date is interpreted by reading the first and last digits backward to determine the year. The center number represents the month. For instance, the map of Port Washington, Wisconsin (see p. 119) has the code 310-17. This particular map (17) was printed in January of 2003. If a four-digit code is given, for example: 3110-17, this would indicate that the map was printed in November of 2003. Fairly simple and sure to stand the test of time in the annals of road map code deciphering.

![Figure 1: Close-up of code from map](image)

NovoPrint USA, Inc. maps are a useful addition to any library. The information represented is clear and accurate. Often, historic and tourist information and photos are provided on the verso along with a county or regional map. OCLC cataloging records are available for most NovoPrint maps because the items are given to one of the three libraries mentioned earlier. These maps are competitive against any of the larger map producers in the country.

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**Preliminary Agenda**

**WAML Fall Meeting**

**Santa Cruz, CA**

- **September 10, 2003**
  - Early Bird Picnic

- **September 11, 2003**
  - Morning: WAML Executive Board Meeting
  - Afternoon: Presentations

- **September 12, 2003**
  - Presentations
  - Business Meeting
  - Sounding Board
  - Banquet

- **September 13, 2003**
  - Field Trip

All meetings will be held at the Seymour Marine Discovery Center in Santa Cruz.

The Norman Y. Mineta San José International Airport (SJC) is the closest airport to Santa Cruz. It is a 45-60 minute drive to Santa Cruz. The San Francisco International Airport and the Monterey Peninsula Airport are two other possible airports to fly into. The San Francisco Airport adds about 1.5 hours to your drive to Santa Cruz. The Monterey Peninsula Airport is small and flights are more expensive. Plan to take the Santa Cruz Airporter or rent a car. A taxi ride will be too expensive.

**Santa Cruz Airporter:**

A shuttle bus service that will take you directly to your hotel, UCSC, or the Seymour Center. They pick up from both San Francisco Airport (SFO) and San Jose Airport (SJC). Reservations are necessary.

Reservations:
- Toll-free: 1-800-497-4997
- Local contact: (831) 423-1214
- FAX: 831-423-2855

Must be prepaid. Only major credit cards accepted.

More information on speakers, topics, and the local area is available at the conference website:

[http://library.ucsc.edu/maps/waml/](http://library.ucsc.edu/maps/waml/)
Spring 2003 WAML Conference
Stanford, CA

Pictures from the Spring WAML meeting and field trips to Filoli house and gardens and Hakone Gardens.
Images submitted by Julie Sweetkind-Singer and Bruce Sargeant.
WAML Business Meeting Minutes
Spring 2003 WAML meeting, Stanford, CA

WAML President Richard Spohn opened the meeting at 3:40 pm.

The Minutes of the November 7th meeting in Hawaii were approved as distributed.

Secretary Andrew Nicholson summarized the minutes of the March 27th Executive Board Meeting.

Treasurer Cynthia Jahns presented the financial report indicating that WAML is in good shape. Money is coming in, including $295.90 from the Hawaii conference. WAML also added 7 new members to bring membership up to 151.

Sue Haffner informed members of future WAML meetings. The next meeting will take place September 10-13th at UC-Santa Cruz. Cynthia Jahns added that the webpage is being updated. A geologic field trip is being considered. The Spring 2004 meeting will be with Kathryn Womble at California State Library. The Fall 2004 meeting will take place at the new Seattle Public Library. Spring 2005 will be at Chico State. The Fall 2005 meeting will take place at the University of Alaska-Fairbanks. John Kaula added that the meeting would likely take place in late August or Early September to take advantage of the weather and tourist attractions. To suggest future meetings, contact Sue.

Julie Hoff presented the Business Manager’s report. $511 in sales was made, and an additional $4 was spent on postage. Discussion of the microforms set took place and it was decided to remove them from the web page and the IB if WAML will not sell them anymore.

Jim O’Donnell announced that WAML has 158 subscriptions. The IB is a cash cow.

Lisa Sweeney reported that the March issue has been sent out. For the July issue, presentations from this conference will appear. If you have pictures, please send them to Lisa. A deadline for contributing to future issues has been set for early June. Linda Newman asked about electronic back issues of the IB. Jim O’Donnell remarked that Vol.1-20 are on microfiche but volume 21 and later are in digital (PDF image) format. Richard Huxford volunteered to make all volumes digital and searchable. Richard Spohn thanked Lisa Sweeney for volunteering to work on the IB. Thanks also to Linda Zellmer for all her work on the IB.

News & Notes – Linda Zellmer has been updating this page.

Archivist Report – There is no report

Committee Reports:

Membership/Hospitality – Yvonne Wilson reported that the committee appreciated Julie Sweetkind-Singer’s instructions; and the preparation for the Stanford conference went smoothly.

Nominating Committee – Richard Spohn announced that Andrew Nicholson has agreed to run again as Secretary. WAML is still looking for a Vice-President/President Elect

Publications Advisory – David Deckelbaum reported that the Richard and Robert Huxford would be making a presentation later in the meeting.

Representatives/Liaisons –
AACCCM – There is no report
ACMLA – There is no report
ALA/MAGERT – There is no report
CCISA – There is no report
CUAC – Meeting in Washington next month. No agenda has been released. Expect to see how agencies have been affected by the war with Iraq.
CSIS – Linda Newman reported that there will be meeting in Seattle in October
IFLA – There is no report
SLA/G&M – Will be meeting in New York in June.

Old Business
There was no old business
New Business
Richard Spohn announced that Matthew Parsons at the University of Washington has agreed to maintain the WAML listserv.

Sounding Board
Barbara Haner asked WAML members for advice regarding maps belonging to her family.

Julie Sweetkind-Singer asked if the IB could include at least one peer-reviewed article. Discussion ensued. Julie Sweetkind-Singer moved that the Executive Board set up an Editorial Board. Seconded by Ken Rockwell.

On behalf of WAML, Richard Spohn wished to thank Elizabeth Winroth for her contributions to the organization, and her role in supporting map librarianship in the Pacific Northwest. WAML members will always have fond memories of Elizabeth.

Thank you to Charlotte, Julie, and Jane for their work in hosting a wonderful conference.

The Business Meeting was adjourned at 4:25 pm.

Minutes respectfully submitted by Andrew Nicholson.

Attendees

Lisa Sweeney (Rice University)  |  Julie Hoff (Arizona State Library and Archives)
Katie Lage (UC-Santa Cruz)     |  Hillery Oberle (Arizona State University)
Sandy Tao (San Jose State Library School)  |  Robert Sathrum (Humboldt State)
Chris Brown (University of Denver) |  Bruce Sarjeant (Texas Tech)
Heidi Van Atta (University of Illinois) |  Julie Sweetkind-Singer (Stanford)
Jim O’Donnell (CalTech) |  Muriel Strickland (San Diego Historical Society)
Kathryn Womble (California State Library) |  Linda Newman (UNV-Reno)
David Deckelbaum (UCLA) |  Yvonne Wilson (UC-Irvine)
Phil Hoehn (Rumsey Collection) |  Wendie Helms (UC-Riverside)
Richard Huxford (EBAMCO) |  Cynthia Jahns (UC-Santa Cruz)
Bob Huxford (Mason Co.EBAMCO) |  Jane Ingalls (Stanford)
John Novak (Novacell Technologies) |  Vera Giles (San Jose State Library School)
Barbara Gasman (Novacell Technologies) |  Charlotte Derksen (Stanford)
Ken Rockwell (University of Utah) |  Barbara E. Haner
Ann Zald (University of Washington) |  Katherine L. Rankin (UNV-Las Vegas)
Matthew Parsons (University of Washington) |  Susanne A. Haffner (California State-Fresno)
John Kawula (University of Alaska-Fairbanks) |  Richard Spohn (Retired)
Harry Meserve (San Jose State) |  Andrew Nicholson (University of Oregon)
WAML Executive Board Meeting Minutes
Spring 2003 WAML meeting, Stanford, CA


WAML President Richard Spohn opened the meeting at 9:30 am.

Treasurer’s Report – Cynthia Jahns distributed the report to the committee. A check from the University of Hawaii for the surplus from the Fall conference is expected. Registration for the web domain has been renewed for two years. Both the checking and savings account balances are very healthy. A $5,000 Certificate of Deposit (CD) will be purchased from the Savings account this year, with another $5,000 CD purchased next year. These will have higher rates of interest. A payment still needs to be made for rooms at the WAML Fall conference in Santa Cruz.

Membership Report – Cynthia Jahns reported that WAML has 143 regular members, plus 8 life members totaling 151 members. 7 new members were added this year. Several members had not renewed. Board members discussed policies for dealing with this. It was agreed that no letters will be sent, but the Information Bulletin (IB) will cease being delivered. Extra IBs will be kept and sent to renewing members.

Secretary’s Report – Andrew Nicholson reported that the minutes of the previous meeting were submitted to the board. Feedback and edits were made in a timely manner. Minutes will be better formatted next year for ease of reading by members.

Business Manager’s Report – Julie Hoff distributed the report to members showing sales of the OP’s totaling some $511. Sanborn atlases have been popular. Some discussion took place on the future of the Microform sets. Many are incomplete and WAML seems unable to get new ones due to copyright restrictions. The Board decided that the issue should be raised in the Business meeting and the Publications Committee should also be consulted.

Subscription Manager’s Report – Jim O’Donnell reported that WAML was doing fine. 7 payments still need to come in. Only one subscriber was affected by the Faxon debacle. A total of $3,500 will be transferred to the Treasurer. Richard Spohn thanked Jim for his hard work in untangling the subscription disputes.

IB Editor’s Report – Lisa Sweeney began her report by addressing the practice of the WAML IB editor recording and transcribing WAML conference presentations for article submission in the Information Bulletin. She suggested having conference presenters submit their presentations to the IB editor. It was stated that presenters in the past have been unlikely to do this. Sue Haffner recommended the conference host speak to presenters about submitting their presentations to the IB editor in written form, before the conference. Lisa Sweeney noted some of the WAML web pages are out of date and the board agreed the work for such a large task should be spread around to multiple people. Lisa Sweeney asked the board to give her a clear idea of what was expected in the IB and if there were any changes the board would like to see made. It was noted that WAML financial statements should appear at the end of each fiscal year, and a full membership list, consisting of name, affiliation and email address, (not written address) should appear in the July issue. It was noted that WAML was still waiting to hear from Haworth press concerning the sale of its membership list.

Web Manager’s Report – Linda Zellmer emailed Richard Spohn to inform him that web updates are taking place as time permits.

Past President’s Report – Christopher Thiry emailed a list of recommendations for future WAML officers to Richard Spohn.

Membership/Hospitality Report – There was no report.

Book Review Editor’s Report – Katherine Rankin reported that the reviews are going well. Several new books are available for review.
**Future Meetings** — Cynthia Jahns reported the Fall 2003 WAML meeting will take place at UC-Santa Cruz. The web page is up and will be soon added to. The board discussed possibilities for future meetings, including Idaho/Eastern Washington. There was widespread agreement that the meetings needed to be spread around more.

**Publications Committee** — There is no report.

**Old Business**

**IRS and WAML**

John Stevens reported that the IRS has not responded to the documentation sent in to reinstate WAML as a tax-exempt organization. The documentation was resubmitted a couple of weeks ago. If no response is forthcoming, John Stevens will call the IRS in the next few days.

**Duties of WAML Officers**

Linda Zellmer had sent out a list of position descriptions compiled from previous IBs. Jim O'Donnell and Julie Hoff will also submit a description of their duties. These will be given to the WAML's ad-hoc committee (Bob Sathrum & Dorothy McGarry), which is studying position descriptions.

**New Business** — The WAML Executive Board was saddened to learn of the passing of long time WAML member Elizabeth Winroth. The Board agreed to make a significant monetary contribution to the Elizabeth Winroth Map Fund, which was recently established at the Oregon Historical Society. Future contributions to such funds set up for former and deceased WAML members will be made on a case-by-case basis.

The creation of a private database with biographical information of WAML members was discussed. It was decided this project would be too time intensive and it was unnecessary.

A policy for welcoming new members was discussed. Cynthia Jahns reported that new pins would be ordered for new members. A welcoming letter from the WAML President should also be sent out. Names of new members should also be sent to the IB editor. MAGERT's Baseline should also be checked for new western-based members. WAML should contact these people.

The board discussed the possibilities of setting up an electronic IB index. Apparently, ASCII copies of the IB exist at the University of British Columbia (UBC) Library. An index exists in fiche for volumes 1-10. Julie Hoff will check to see if there is an index for 11-10. Richard Spohn will contact Tim Ross at UBC.

Richard Spohn will follow up on the status of the WAML listserv that has been hosted by the University of Washington Libraries.

The Board listened to and then considered a proposal, by Richard and Robert Huxford of the Electronic Book and Map Company, to produce and market a multimedia version of the 1986 Occasional Paper by Riley Moffat. The digital version is titled "Map Index to Topographic Quadrangles of the United States 1882-1940". The board decided that the Huxford Brothers should contact the author as soon as possible and that the Publications Committee should have the final say.

The meeting was adjourned at 11:45 am.

Minutes respectfully submitted by Andrew Nicholson
Presentation Titles, Abstracts and Biographies
WAML Meeting, Spring 2003, Stanford University

Beginner’s Workshop on Cartographic Materials Collection Development Issues by Phil Hoehn

Abstract: Why is a collection development policy (CDP) for cartographic or geospatial collections necessary? What are the considerations in formulating a CDP and what should it include? Participants will collectively draft a sample CDP for a new university's cartographic materials collection. Finally, we'll briefly discuss some selection decisions likely to be encountered, e.g., digital vs. paper, obsolescent formats (microforms), web vs. CD, scanned vs. GIS-compatible files, etc. Throughout the session questions are encouraged.

Biography: Philip Hoehn is currently serving as librarian of the David Rumsey Collection in San Francisco.

Cartographic Competition: Indo-Pakistani Maps of Kashmir by Lucy Chester

Abstract: India and Pakistan have fought their ongoing conflict in Kashmir both on the ground and on paper, by issuing clashing cartographic representations. This paper explores two aspects of the Kashmir dispute: dissemination of cartographic material supporting governmental territorial claims, and state controls on cartographic materials.

This cartographic competition has historical roots. India, in particular, is determined never again to be the victim of "cartographic aggression," as Indian accounts term Chinese territorial claims preceding the 1962 Sino-Indian war. State control on maps takes two forms. The first reflects strategic needs and involves restrictions on the dissemination of maps of sensitive areas, including border regions. This practice has historical precedents; states and empires from the British Empire to the Soviet Union to the present-day United States have long sought to control the flow of cartographic information, even issuing misleading maps on occasion. In the South Asian context, the second form of cartographic control is more political, involving censorship of public maps that depict Kashmir in a fashion that does not reflect official territorial claims. Beyond the Kashmir conflict, however, restrictions on the flow of cartographic information damage Pakistani and Indian society.

Biography: Lucy Chester (PhD, History, Yale University) is a Postdoctoral Fellow at the Kennedy School of Government at Harvard University. Beginning in fall 2003, she will be Assistant Professor of History and International Affairs at the University of Colorado at Boulder. Her current book project focuses on the delineation of the Indo-Pakistani boundary during the 1947 partition of South Asia. Her research interests include imperial history, South Asian history, cartographic history, and gender studies. She has published articles on "Imperial Cartography in the End of Empire: Map Use During the 1947 Partition of South Asia" (forthcoming), "The Mapping of Empire: French and British Cartographies of India in the Late Eighteenth Century," and "Mapping Imperial Expansion: Colonial Cartography in North America and South Asia."

Maps on Stamps by Chaim Braun

Abstract: In this presentation I will discuss why countries put maps on their stamps, concentrating mostly on the political and military reasons for doing so. In discussing various countries I will concentrate on each of three former empires - The British, French, and the Soviet Union. I will then review the reasons some long-established states such as the United States, Venezuela, Monaco, as well as others issue map stamps, and further discuss why newly established states, such as those created after the breakup of the Soviet Union publish their maps on their stamps. My basic contention is, however, that map stamps are issued for their sheer aesthetic beauty.
The Stanford Geological Survey Access Project by Julie Sweetkind-Singer, Mike Powers, and Charlotte Derksen

Abstract: A two-year grant was received by Branner Earth Sciences Library & Map Collections to arrange, catalog, scan, and display over the Internet the maps and field notebooks from the Stanford Geological Survey. The project team has just passed the 18 month mark. At this point, all of the maps have been scanned and most of the field notebooks chosen for inclusion on the Web site. This talk will focus on the cataloging and metadata needs of the project as well as the technical aspects of scanning and creating the Web site.

Biographies:
Julie Sweetkind-Singer is the GIS & Map Librarian at Stanford University. She coordinates GIS data purchasing and outreach across the campus. She also manages the map collections, which are growing rapidly with the ongoing absorption of the Hoover and East Asia map collections over the next year. In her free time, she is the Vice President of the Northern California chapter of the California Map Society.

Mike Powers is the cataloger for the Stanford Geological Survey (SGS) Map and Field Notebook Access Project. He received his MLIS from San Jose State University, where he also worked as a music cataloger at the Ira F. Brilliant Center for Beethoven Studies. He has also done library work at Adobe Systems, Inc. and the College of Notre Dame Library.

Charlotte Derksen has been head of the Branner Earth Sciences since 1980. Her introduction to map librarianship and to field geology, came as an undergrad geology major and teaching assistant at Wheaton College back in the 60s. One of her assignments there was to mend/preserve the maps used in the geology department; another was to assist the faculty member in leading student field trips. Some of the techniques used to mend maps then are horrifying now.

Mapping with the Stanford Geological Survey by Bob Compton

Abstract: The Stanford Geological Survey lasted officially from 1903-1995. During this time, the students would go out into the field with the director of the survey and a group of assistants. The students learned to map the topography and geology of an area. This talk will detail that history and explain how the mapping was actually done.

Biography: Bob Compton is a Californian who attended Stanford from 1940 to 1943, earning a BA in Geology. He returned in 1946, after World War II, and completed a Ph.D. in 1949. He assisted Ben Page in teaching the Summer Field Geology courses in 1947, and then, starting in 1950, directed these courses during 14 summers. He retired in 1981. (Emeritus Professor of Geology, Stanford University)
Topos in your OPAC: Linking to the Online Version by Chris Brown

Abstract: This presentation demonstrates how you can automatically derive URLs for 7.5 minute USGS topographic maps from information contained in MARC records.

Biography: Chris Brown is Government Documents librarian at the University of Denver. He also is a member of the Penrose Library Reference faculty. He graduated from the University of Denver library school program in 1999, the first to graduate from the new program. He recently published the official bibliography covering 30 years of publications of the United Nations Centre for Regional Development, Nagoya, Japan.

GIS on campus by Meredith Williams and Ron Nakao

Abstract: GIS is used widely across the Stanford campus in over 30 departments or area studies groups. This talk will highlight the services offered to the Stanford community and will focus on the outreach strategies used to find new users. A discussion period will follow.

Biographies: Meredith Williams is the GIS Manager at Stanford. In this position, she coordinates activities and support related to GIS across campus. She has been at Stanford for about 4 years.

Ron Nakao is a Data Specialist in the Social Sciences Data Service of the Social Science Resource Center, Green Library. Ron’s duties include assisting Stanford faculty, staff, and students in their search for numeric data. He is Stanford’s representative to the Inter-university Consortium for Political and Social Research (ICPSR) and the Roper Center for Public Opinion Research.

The Romance of the Padres: A Brief History of the Making and Preservation of the El Camino Real by Bill Littmann

Abstract: My talk is a basic outline of the history of El Camino Real — looking at it as a product of the mission revival period in California culture between 1890 and 1930. While El Camino the roadway has existed since 1769 and the explorations of Portola—the interest in making it a historic highway only began around 1900. I’m interested in why a number of wealthy women Protestants from LA would be interested in preserving and creating a memorial to Spanish Catholics. In their effort to preserve the actual EL Camino around 1905, these women come to discover that there is no one route of El Camino—as the fathers changed routes often—and the stage coach route changed the highway after that.

Biography: Bill Littmann is finishing his doctorate in architectural history at UC Berkeley this spring. This year, he is teaching in the Art and Art History Department at Stanford. He just finished teaching a class on El Camino Real. His interest is in both the vernacular landscape and the way that the different histories of a single highway overlap and influence one another. His dissertation is about the architecture of American factories and the way that labor relations shaped the factory landscape we associate with mass production. He also is writing on the history of the American Factory Tour—an article on this is coming out this year in an edited volume called Perspectives in Vernacular Architecture.

Using GIS to Map Mono Lake’s Future by Paula Messina

Abstract: Mono Lake, a natural reservoir that feeds the Owens River in east-central California, has been the focus of environmental and political debate since 1941. In that year, the Los Angeles Department of Water and Power decided to divert Mono Lake’s tributary supply 350 miles to meet the growing water demands of southern California. In the years following the decision, lake level dropped as much as 15 meters, the volume of water was reduced to half its pre-1941 value, and the salinity of the lake doubled.

In 1978, a grassroots organization called the Mono Lake Committee brought the impending downfall of this unique ecosystem to the attention of scientists, politicians, and the general public. In 1994, a California Supreme Court ruling mandated that the lake be filled to a level of 6,392 above sea level; this recharge was expected to take about ten years. Despite record snowfall in the Sierras associated with subsequent El Nino winters, the lake has been filling more slowly than the predicted rate. Significant aeolian erosion has
taken place during the decades of the lake’s decline and recharge, so the exact location of the future shoreline was unknown.

At the request of the Mono Lake Tufa State Reserve, SJSU students mapped the area surrounding the current shoreline, under Messina’s supervision, using differential GPS. The data were imported into a GIS for analysis and comparison with the most recent Digital Elevation Model available from the USGS. Quite a disparity was discovered, emphasizing the need to maintain digital data sets, especially in locations where dynamic processes modify the topography.

**Biography:** Paula Messina is an assistant professor at San Jose State University. She has a split appointment between the Department of Geology and the Program in Science Education. Prior to coming to the Bay Area in 1998 and as a native of New York, Paula taught high school Earth Science in New York City for 20 years. While teaching in New York, she and her husband, Phil Stoffer—currently of the USGS—undertook doctoral study in Earth and Environmental Sciences through the City University of New York’s Graduate Center. Paula’s Ph.D. research focused on the sliding rocks of the Racetrack Playa in Death Valley, under the leadership of her dissertation adviser, Prof. Keith Clarke, now at UCSB. At SJSU she teaches Geomorphology, GIS and GPS Mapping Techniques, and online courses in Earth Systems Science for teachers.
Notes from the Beginner’s Workshop on Cartographic Materials Collection Development Issues

Led by
Philip Hoehn

This workshop is intended to bring out the major issues to be considered in preparing or revising a cartographic collection development policy. Much more information can be found in Mary Larsgaard’s *Map Librarianship: an Introduction*, chapter 1 “Selection and Acquisition”. There are a number of other useful publications. A few are listed in “References” at the end of this paper; Larsgaard cites many others.

Some practitioners make a distinction between an acquisition policy (a relatively brief statement of what a library collects and for whom) and a collection development policy (a more elaborate, often formally laid out plan or statement in the rigid structure of a conspectus or outline format). It may spell out the present collection strengths and the plan for current and future collecting. For this workshop, we’ll refer to both as collection development policies (CDPs).

Why have a CM CDP? It serves as a road map or a guide. Without one, how do you and others know where the collection is headed? It’s also a good place to record decisions, and can be a good communications vehicle (for users, donors/funding organizations, and your institution’s staff and leaders, including map collection staff).

Every CDP should open with a brief summarizing statement. For example:

The *Contra Costa History Center* collects cartographic materials covering Contra Costa County, California and its constituent parts. Materials, covering the San Francisco Bay Area and California, that help to illustrate the history of the County are collected on a highly selective basis. Material is collected in all formats (paper, volumes, microforms, digital, games, puzzles, etc.) from earliest times through the present.

If the scope of the collection is simple and straightforward enough, very little beyond this may be required. Most collections, however, will need to spell things out in more detail.

A successful CDP should be: clear and unambiguous; comprehensive; periodically reviewed; consistent with related library CDPs in the library (e.g., Earth Sciences, Engineering, Area Studies collections) as well as with partner libraries; and should include (or account for) supporting and related materials (e.g., gazetteers, atlases, cartographic and GIS monographs and serials, geocoded data, etc). It should state which library staff (e.g., the Map Librarian) make selection decisions.

The CDP should be written down, ideally in a public place, such as the map collection’s website. Some specific decisions (e.g., retention policy for USGS topo quad sheets) might be recorded on the catalog record for the set in addition to or instead of in the CDP.

The CDP should identify the user group for whom materials are collected. For example, “Cartographic materials are collected to support the teaching, research and study needs of the university’s students, faculty and staff; these users and others are expected to use their public libraries for recreational materials.” Obviously, it should mention the geographical areas and subjects covered. It should note the collection’s comprehensiveness (depth, completeness) and the time frame (e.g., “1900 to date”). Exclusions, perhaps indicating cooperative reliance on other collections, or subjects, areas, formats or time periods not collected, might be included. Finally, the CDP might mention non-cartographic materials, such as architectural plans, technical drawings, prints and posters, which are collected, not collected or for which the map collection provides a storage or custodial function.
A fairly lengthy list of the types of cartographic materials that are collected should probably be given — more for the benefit of those in other library units than for the map collection staff. This may stop the picture librarian from believing that cartographic bird’s-eye views and air photos are hers/his, or prevent the building manager from thinking that a world globe in a stand is furniture. Some examples are: general maps, city plans, plat maps, navigation charts, bird’s-eye views, cartographic views, profiles, diagrams, block diagrams, geologic sections, columnar sections, remote sensing images (air photos, satellite images, radar images, photo maps, etc.), and digital data. An exhaustive definition is in the opening paragraph of chapter three of the Anglo-American Cataloging Rules 2nd ed. It might be useful to also mention that equipment and software may be required to view, manipulate and print images.

Cartographic materials come in a variety of physical formats such as: flat, folded, rolled, computer printouts, photocopies, photographs, blueprints, physical volumes (including monographs, atlases, journals, map indexes), globes, 3D or raised-relief models, microforms, digital (Web, virtual library, FTP, CD-ROMs, DVDs, floppies, tapes), “cartofacts” (J.B. Post’s wonderful term for cartographic items such as games, puzzles, erasers, shower curtains, postcards, printing plates, etc.).

One of the most important factors to consider in formulating a CDP is how electronic format cartographic materials fit in. In a small number of collections these are the only format collected, although this may become commonplace in the future. The following partial quote from Chris Perkins encapsulates the issue:

“... The technological shift towards more user-oriented mapping, in a wide diversity of data formats delivered increasingly over the web, has taken place in the context of a globalizing world economy. The paper map continues to be available, if declining in significance ... [T]he dynamic of change in the map library, stemming from the technological transition in mapping, leads relentlessly towards access, rather than acquisition. Collections that fail to make this shift may jeopardize their long-term chances of survival.” (Parry and Perkins, 2001,173).

Rare maps, perhaps because of publication date, and unique maps, such as manuscripts, may need to be mentioned in your CDP. They are often housed in a special collections department rather than the map library, although the map librarian may be responsible for their selection and the CDP may define collecting responsibilities.

Scale is such a significant factor in collection because of its implications for acquisition costs and storage space. It is often, therefore, used as a limiting device on collection size and growth. The number of map sheets increases geometrically with scale. Contrasting examples in sheet numbers are the 1:1,000,000 scale Operational Navigation Chart, requiring fewer than 300 sheets to cover the land surface of the earth, versus 1:25,000 scale topographic maps, which would require over one million sheets to cover the same area (were they all available). Large scale map sets, therefore, are usually collected selectively.

Don’t write (or re-write) a CDP immediately. Wait a few weeks, or months, to get the “lay of the land.” What materials are being used and not used? Check circulation figures, if available, or map re-shelve piles, monitor reference questions and interlibrary loan requests. Perhaps, keep a log of what questions are asked for a month or so. Talk to map collection staff, librarians in other units in your library, faculty (take their advice cautiously as it can be terribly egocentric), and librarians at similar or nearby institutions for advice and possible collaborations. Make it fit in with the your library’s overall CDP or mission statement. Review the policy regularly, at least once every three years. Check for changes in: research and teaching interests, other institutions, budget situations, space, technology or other conditions. Modify the CDP when needed and publicize changes to users and other institutions.

APPENDIX A. Collecting Policies (Excerpted and Paraphrased)

Branner Earth Sciences Library and Map Collections, Stanford University. Collecting responsibilities are set forth in the Collaborative Cartographic Materials Collection Development Agreement among the Libraries at Stanford University and the University of California (see Appendix B).

1. Stanford collects worldwide geoscience maps, and San Mateo and Santa Clara counties - level 4 (Research Level)
2. Topographic coverage of the world at 1:200,000-1:253,440. Foreign topographic larger than 1:200,000 is usually not collected; larger scale titles in the collection should be considered for withdrawal or replacement by more current maps (if warranted)

3. USGS 7.5 and 15 minute topographic maps:
   - Keep 1 Keep latest ed. only for all states except CA and NV
   - Keep 1 of each ed. (or printing) for CA and NV
   - Keep 2 copies of each ed. (or printing) for S.F. Bay area (see map) and of latest eds. of Nevada
   - Keep 5 copies of latest ed. (or printing) for selected Bay Area quads [names them], 5 copies of each ed. (or printing) of Palo Alto quad. (10 copies of latest)

4. USGS 1:250,000 series: retain all eds. for CA and NV; retain at approximately 10-year intervals for other states

5. Foreign geologic and topographic map sets: retain latest editions only of each scale

6. Maps before 1800 are collected highly selectively and are generally housed in Special Collections (exceptions may be made for framed display items or items of high interest to Earth Sciences faculty)

7. California general and road maps: retain at 3-year intervals

8. A general map, road map, and subject maps covering major themes are collected for each country and each U.S. state and province, at approximately 10-year intervals

9. General and road maps are collected only for CA and NV counties, generally at 10-year intervals (except San Mateo and Santa Clara)

10. City maps for major cities, and for medium to large cities of California, are collected at approx. 10 year intervals (relying increasingly on web sources)

11. U.S. forest Service maps of National Forests are retained at 10-year intervals for CA. Latest ed. only is retained for other areas; CA State park maps are retained at ca. 10-year intervals. State park maps of other states are not retained

12. County park maps are generally retained only for San Mateo and Santa Clara counties

13. U.S. nautical charts (U.S. waters) are retained at approximately 20 year intervals (10 for CA). Latest editions only of nautical charts are kept for foreign waters

14. Ephemeral depository maps are retained for 5 years only (legal requirement)

University of California Library, Berkeley

Primary collecting responsibility for the following areas:
1. California, in general, and the San Francisco Bay area, the north coast, and the Sierra Nevada region (UC/Stanford Map Librarians Group)
2. Mexico and Central America (UC/Stanford Map Librarians Group)

Other areas of interest, in descending order of priority, include:
1. Western United States, i.e., Montana-Wyoming-Colorado-New Mexico-Texas west, including Alaska and Hawaii
2. Western South America
3. Western Canada, northern South America, Europe, Southern and Eastern Asia
4. Middle East and North Africa, Caribbean
5. Remainder of Africa, Asia and Oceania
6. Eastern South America and eastern Canada

Keeping these priorities in mind, the [collection] should acquire the following:

a. A considerable variety of general maps of the universe, planets, the moon, the world, all parts of the world (regions, continents, countries, states, provinces, departments and their sub-regions, and counties and equivalent administrative units). These are in the format of flat maps.

b. Topographic maps to cover the world on a scale of 1:250,000 (larger in selected cases). Preference is given to completing and maintaining up-to-date coverage on a scale of 1:250,000 (and smaller) before covering areas at 1:50,000. For most countries, if Stanford or another northern UC campus has 1:50,000 coverage, Berkeley will not duplicate. Exceptions will be made for high interest areas, such as Mexico, Central America and western South America, parts of Western Europe, etc. The intervals
between editions should reflect area priorities and rates of change in the cultural information.

c. City Plans of U.S. cities of 20,000 or more population and major foreign cities at 10 year intervals (and more frequently for high priority or rapidly changing cities). Special purpose city maps are acquired only for cities in high priority areas and those of major importance elsewhere (e.g., New York).

d. Road maps of regions, countries, states, provinces, departments, sub-state regions and counties are retained at 10-year intervals (and more frequently for high priority or rapidly changing areas).

e. Small scale special purpose maps, showing a country or larger area (or in the United States: a state; or a region or county in California) in all subjects, and special purpose sets of the U.S. at 1:250,000 or smaller are collected. Larger scale special purpose maps are collected very selectively.

f. Aerial photographs are collected for areas of California for which the collection has primary collecting responsibility. This includes medium and high altitude photography. Very low-level photography (large scale) is collected primarily for the Bay Area. Satellite imagery composites showing a country, state or province are also collected.

g. Nautical charts from the U.S. National Ocean Survey charts are received for California-Oregon-Washington only through the Federal Depository Program. Charts produced by foreign agencies are acquired on a highly selective basis.

h. Aeronautical charts are acquired selectively for their usefulness as topographic or physical maps. Sets produced by the NOS (NOAA's National Ocean Service) and NIMA (National Imagery and Mapping Agency) are preferred. State aeronautical charts are retained for California only. Latest eds. only retained for these depository items: Tactical Pilotage Chart, Operational Navigation Chart, Jet Navigation Chart, Global Navigation Chart, Sectional Aeronautical Chart, World Aeronautical Chart.

i. Old and Rare Maps are received primarily as gifts. They are purchased selectively to fill essential gaps in the collection. In general, rare maps are acquired only for California, Mexico and Nevada. Photo and micro reproductions should normally be acquired for other areas. Pre-1900 maps are housed in the Bancroft Library.

Classroom teaching aids needed on a regular basis are not acquired. These should be purchased by the academic departments themselves. The Geography Department is the campus center for classroom wall maps

Maps in East Asian languages published prior to 1900 and all atlases in those languages are collected by the East Asiatic Library. Maps in East Asian languages published after 1899 are housed in the Map Room.

APPENDIX B: Collaborative Cartographic Materials Collection Development Agreement among the Libraries at Stanford University and the University of California (July 1, 2002)

Excerpts — full document at: http://library.ucsc.edu/maps/ucsmg/agreements.html

The UC libraries at Berkeley, Davis, Irvine, Los Angeles, Riverside, San Diego, Santa Barbara and Santa Cruz and the library at Stanford University hereby establish a formal collaborative collection agreement for cartographic materials and geospatial data in all forms. . . .

The libraries agree that:

1. Specific collection development responsibilities will be listed in the document "UC/Stanford Primary Collecting Responsibilities for Cartographic Materials."

   . . .

2. Responsibilities accepted do not prevent collection development beyond commitment levels; each party develops collections at any level it deems appropriate.

3. Each party intends to acquire coverage in digital form at the same level as in hardcopy form where possible, depending upon cost, licensing, and other constraints.

4. This agreement will be in force until July 1, 2007. One year prior to that, it will be formally reviewed and modified, renewed, or cancelled as of the expiration date. Interim modifications can be made — particularly to the supplementary documents — upon mutual agreement of the parties.

5. Six month's notice will be given should any party be unable to sustain a commitment contained in the
agreement. The notification will be in writing and signed by Library's collection development officer.

6. Materials covered by the agreement will be processed in a timely fashion.

7. Lendable or distributable material will be available through expedited interlibrary lending procedures (mail, fax, ftp, etc. — normally from one map collection to another; material or a negative response will be dispatched within two working days; requests may be made in writing or by e-mail, or at the lending library's consent, by phone).

8. Map librarians from the campuses will meet annually to review and monitor the agreement. Any unexplained compliance problems should be reported to all directly affected map librarians and to the document's signatories as soon as they are discovered.

9. It is the intention to encourage additional collaborative arrangements between the parties and other libraries and institutions.

**PRIMARY COLLECTING RESPONSIBILITIES FOR CARTOGRAPHIC MATERIALS**

**LOCATIONS:**

<table>
<thead>
<tr>
<th>Location</th>
<th>City</th>
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<tbody>
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<td>B</td>
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<td>D</td>
<td>Davis</td>
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<td>I</td>
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<td>SC</td>
<td>Santa Cruz</td>
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<tr>
<td>SD</td>
<td>San Diego</td>
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<tr>
<td>SIO</td>
<td>Scripps Inst of Oceanography (SD)</td>
</tr>
<tr>
<td>SU</td>
<td>Stanford University</td>
</tr>
</tbody>
</table>

**COLLECTION LEVEL DEFINITIONS FOR CARTOGRAPHIC MATERIALS**

0—OUT OF SCOPE: The library does not collect in this area.

1—MINIMAL LEVEL: A collection in which very few selections are made beyond the most basic general maps and atlases of an area.

2—BASIC LEVEL: A highly selective collection which serves to introduce and define an area, and to indicate the varieties of materials available elsewhere. It includes selected general thematic maps, plans of capitals or major cities, and only the major atlases of the area. 
Topographical maps: physical maps at scales smaller than 1:250,000. **Remotely sensed imagery:** 1:1,000,000 or smaller scale satellite imagery.

3—STUDY LEVEL: A collection which is adequate to support undergraduate and most graduate course work; that is, one which is adequate to acquire knowledge of an area for limited or generalized purposes, of less than research intensity. It includes general thematic maps, plans of major cities, and national, state or provincial maps and selected thematic atlases of these areas. **Topographical maps:** small or medium scale topographic surveys at scales of 1:100,000 to 1:250,000. **Remotely sensed imagery:** satellite imagery and high altitude aerial photographs of medium scale, in the range of 1:60,000-1:120,000 scale or smaller.

4—RESEARCH LEVEL: A collection which includes the major source materials required for dissertation and independent research. It includes medium scale thematic maps at scales of 1:100,000-1:250,000 and plans of all significant cities. It includes a strong collection of general and thematic atlases including those of second and third order political divisions and of major cities. **Topographic maps:** scales of 1:50,000 or larger. **Remotely sensed imagery:** satellite imagery, and low altitude aerial photographs typically at scales of 1:50,000 or larger.

5—COMPREHENSIVE LEVEL: A collection in which a library endeavors, so far as is reasonably possible, to include all significant cartographic materials (manuscript and published), in all applicable languages, for a necessarily defined and limited area. This level of collecting intensity is that which maintains a "special collection". The aim, if not the achievement, is exhaustiveness.

**UC and Stanford Levels:**

3 Study (noted exceptionally; assumed that most collecting at this level or higher)
4 Research
5 Comprehensive

**Other:**
geosci Geoscience
RSI Remote sensing imagery
naut Nautical charts
topo Topographic maps

G3400-3612 Canada
B (4 topo)
LA (4 topo, naut)
SB (4 dig topo)
SIO (4 naut)
SU (4 geosci - Emphasis on Ont., B.C., Yukon)

G4360-4361 California
B (4 - Esp. North Coast, Siskiyous)
LA (4 - Esp. L.A. basin)
SB (4 dig topo, RSI)
SU (4 topo & geosci)

G4363.A3, A4, A5 Alameda, Alpine, Amador counties
B (4)

G4363.F7 Fresno County
B (4 - foothills, mtns.)
D (4)

G4363.M5 Merced County
D (4)

G4364.S5 San Francisco
B (4)

APPENDIX C: Workshop Exercise: Collection Development Ideas for the new University of California, Merced (UCM) Campus

Background Information
Opening in 2004 with 4,000 students, the student population will ultimately grow to 25,000 students. UCM’s first two research institutes, Sierra Nevada Research Institute and World Cultures Institute, will begin to define the campus as a research university of distinction. UCM’s research library of the 21st century will be a physical place on campus intertwined with a digital presence on student and faculty computers; both a building and a service. Some Library resources will be in physical packages that sit on shelves: books, paper archives, sound recordings, maps, photographs, and much more. Others will be in digital packages, such as online journal articles, data sets, and geographic information systems. Depository libraries nearby include: California State University, Fresno; Fresno County Free Library; Public Library of Stockton; California State University, Turlock. Map Collections nearby include: Merced County Courthouse Museum, Merced (600+ maps of the County, — official county, ownership, plat, subdivision, road, utility, planning, zoning, school, supervisory district, Sanborn fire insurance maps); Merced County Free Library; California State University, Fresno; California State Library; University of California, Davis; UC/Stanford Map Librarians Group consortium (assume they will join); includes very large cartographic collections at Berkeley, L.A., San Diego, Santa Barbara and Stanford and UCR’s Informine (a search engine to record web materials).

Brainstorming Session Ideas:
The UCM Library still needs topographic maps in paper form; digital alone isn’t sufficient.

It should be a depository library (if it can qualify). Perhaps very selective, basing item selections in part depending upon what is held in other nearby depository library’s collection.

Because of the stated interest in Mexican, Central American and Hmong immigrants, topographic maps of perhaps 1:250,000 scale should be collected for Mexico, Central America, Laos and Vietnam.

Geocoded data, particularly census data, to support the World Cultures Institute would be important.

Areas of concentration: San Joaquin Valley (maybe coordinating collecting with UC Davis and California State University, Fresno); Yosemite, Sierra Nevada (including eastern and western slopes). Try to get National Park Service and National Forest Service maps for these areas, perhaps including maps and digital data not part of the depository program. Maps on water issues, especially in the Sierra Nevada and San Joaquin Valley. Because of the interest in environmental studies, geoscience, Forest Service and Bureau of Land Management maps would be important.

Do not collect historical maps, but rely on the Web for them. Consider scanning for the collection (and the Web?) historic maps of the San Joaquin Valley and the Sierra Nevada from the Merced County Courthouse.
Museum, UC Davis, the State Library, UC Berkeley, etc.

Should join the UC/Stanford Map Libraries Group and participate in the shared collecting agreement.

Cataloging Web pages is a good idea — from the catalog records one can generate relevant Web pages.

Build up pseudo map collection by using an automatic MARC generator for topo maps on the Web — a temporary measure to create an instant collection while building the actual collection.

References:


Philip Hoehn is currently serving as librarian of the David Rumsey Collection in San Francisco.

philhoehn@juno.com
Topos in your OPAC: Linking to the Online Version

by

Christopher C. Brown

Library users have come to expect immediate access to online full text through licensed databases. This expectation extends to the online public access catalog (OPAC) as well, since users rely on the OPAC for access to e-books, online journals, and the many government documents that are online. At the University of Denver we have been aggressively adding URLs to every possible record in our online OPAC, especially to government document records. In the course of this process, we wondered if it was possible to add online links to records for topographic maps. To do this we would need to extract data for coordinates from each of the MARC records, and formulate a call to an online map service. Although not the same as examining a physical topo map, the online links would provide access to students and researchers who simply needed to consult the maps. With a growing number of distance programs and students, this is the way to go.

The United States Geological Survey (USGS) has partnered with several initiatives to make their topographic maps available online (http://mapping.usgs.gov/partners/viewonline.html). At least two of these services (Microsoft’s TerraServer — http://terraserver.microsoft.com/, and Maps a la Carte, Inc.’s Topozone — http://www.topozone.com/) provide services where users can retrieve maps at no charge. Maps can be retrieved by place name; decimal degrees; degrees, minutes, seconds; and UTM coordinates.

The question we posed regarding our existing MARC records for topographic maps was: Is it possible to derive information from the MARC records so that a call can be made to one of the topographic map servers to retrieve the online versions of the maps? The desired end result would be the insertion of the appropriate URL into the corresponding MARC record. We discovered that this was indeed possible, and the rest of this article will describe the process.

First of all, we needed to extract all the latitude and longitude information from the MARC records. This information is neatly stored in the 034 fixed field as follows: the westernmost longitude (subfield d), the easternmost longitude (subfield e), the northernmost latitude (subfield f), and the southernmost latitude (subfield g). The 255 variable length field also contains the same data, but it may take more work to extract the data properly. While catalogers are concerned with bounding coordinates (see AACR2R §3.3D.1.), online map servers need to know the center point of the map (figure 1).

![Web Server Perspective](image1.png) ![Cataloger's Perspective](image2.png)

Figure 1: Contrast of cataloger’s perspective with Web perspective.
It is possible to convert from one perspective to the other. This can be done by taking an average of W and E, and an average of N and S. This is best done after degrees, minutes, and seconds from the MARC record have been converted to decimal. Then this information can be used to derive the URL necessary to call the map from the Web map server.

In figure 2, using Microsoft Excel, columns B through E contain the values for bounding coordinates from field 034 given in degrees:minutes:seconds. Columns F-I correspond to columns B-E respectively, each cell converted to decimal by multiplying by 24 (e.g., the formula in F1 is: =B1*24).

![Microsoft Excel screenshot](image.png)

**Figure 2:** Deriving the averaged decimal values from the coordinates in MARC records.

Now that the decimal equivalents of the coordinates have been derived, the average of N and S and of E and W can be derived. Column J is the average of F and G; column K is the average of H and I. The values in these two columns are sufficient to derive the URL that makes a call to the online versions of the topographic maps. A properly formed URL linking to the Microsoft Terraserver is as follows:


In the above Terraserver URL, S=16 defines the size of the map, T=2 is the code for the topographic map (T=1 is for the image map; T=0 is for the relief map), and W=2 determines the width of the map.

Topozone is similar, but the encoding for size and scale of map differs:

http://www.topozone.com/map.asp?Lat=38.1875&Lon=-108.8125&s=50&size=1

Map sizing parameters: s=50 determines the scale of the map; size=1 is the code for a large sized map.

Microsoft Access queries can be used to “wrap” the server-specific information around the latitude and longitude data, as shown in figure 3. In the example below, the query for the field labeled “topo” was derived in the Access query as follows:

"&W=2"

![Microsoft Excel screenshot](image2.png)

**Figure 3:** Microsoft Access can be used to derive the URLs.
Once all of the URLs have been derived, they are ready to be inserted into the MARC records. This can be done individually, record-by-record; or the process can be automated using a utility such as MarcEdit (http://oregonstate.edu/~reese/omarcedit/html/).

What if you don’t want topos in your OPAC?

It is understandable if many libraries do not want individual MARC records cluttering their online catalogs. There is a nice workaround for this. This USGS topographic map Web site (http://mcmweb.er.usgs.gov/topomaps/) has lists of topographic maps by state (http://mac.usgs.gov/maplists/selectstatelist.html). These maps, however, do not contain links to the online versions. It is quite easy to take the information provided from the USGS Web site and enhance it with links to the online version.

**Colorado On-Line Map List**

1:24,000/1:25,000 Scale

(Maps With Name Beginning with Letter A)

To select another starting letter or map scale, please use the controls at the bottom of this page.

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<th>Longitude</th>
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<th>Version Year</th>
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</table>

**Figure 4: USGS state map list.**

Figure 4 shows the Colorado state list of topographic maps. Figure 5 shows how the USGS page can be enhanced with links to the online versions of these maps.

**Colorado On-Line Map List**

1:24,000/1:25,000 Scale

(Maps With Name Beginning with Letter A)

To select another starting letter or map scale, please use the controls at the bottom of this page.

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<th>Longitude</th>
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<th>Version Year</th>
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<td>103° 52' 30&quot;</td>
<td>1962</td>
<td>1964</td>
<td>Topographic</td>
</tr>
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</table>

**Figure 5: USGS state map list enhanced with online links.**

It is necessary to note that because the USGS references maps from the southeast corners, adjustments must be made to both the latitude and longitude so that when the Web server is addressed, the center and not the SE corner is the reference point (figure 6). To accomplish this, add 0.0625 to both latitude and longitude. This can also be done in the Access database (figure 7).
USGS Perspective

Figure 6 (left)
USGS Perspective with maps referenced from SE corner.

Figure 7 (below)
Using Access to adjust for Lat and Lon on USGS maps.

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<td>or:</td>
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</tr>
</tbody>
</table>

The final result will be a Web page with links to either the Terraserver or Topozone for each of the state topographic maps (figure 8).

Figure 8: Web page based on USGS state map list, with links to the online version.

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Stanford Geological Survey Access Project

by

Julie Sweetkind-Singer, Mike Powers, and Charlotte R.M. Derksen

Background

For almost 100 years Stanford University faculty and students went into the field during the summer in order for the students to learn how to map. This yearly endeavor was known as the Stanford Geological Survey (SGS). The Survey officially started in 1903 with a class entitled, "Field Geology," but the library holds maps from 1895 and field notebooks from 1893. The Survey was finally disbanded in 1995. During the course of 100 years, thousands of students participated.

The output, field notebooks and maps, was housed in the Geology Department attic, had just been put in order, and were being prepared for transfer to Branner Earth Sciences Library (Branner) when the 1989 Loma Prieta earthquake struck. The materials were thrown about, remaining trapped in the damaged building for months. In addition to the total lack of order, several items were damp and moldy by the time they were rescued.

Eventually, the materials were brought to Branner and slowly put into order by date and then into folders by year. Phil Hoehn, the map cataloger at that time, began working on the collection and cataloged over 130 records.

In January of 2001, Charlotte Derksen, the Head Librarian, and Julie Sweetkind-Singer, the GIS & Map Librarian, successfully applied for a Library Services and Technology Assistance (LSTA) grant from the California State Library. The first grant was received in October 2001 and a second and final grant was awarded in October 2002. The grant money is from the federal government and administered by the California State Librarian. In order for the grant to be approved, we were required to find matching funds rather than just "in-kind" contributions for 50 percent of our grant request. These funds were procured from Stanford’s School of Earth Sciences and the Stanford University Libraries.

The goals of the project were simple. We wanted to find out what was in the collection. The materials needed to be organized and cataloged. We wanted to identify and send the items that needed repair to preservation and conservation. And finally, we wanted to create access to the SGS collection for geologists, faculty, students, and the public.

Organizing the Output

The first person hired to work on the project was the staff assistant, Magda Rodriguez. Magda organized all of the work first by year, then by author or group. She tied the field notebooks and reports to the correct maps, cross sections and columnar sections. An Excel database was created to hold the tabular records of all pieces in the collection. There are now seven Excel worksheets, which are roughly broken up by decade. The database was completed by the end of the first year of the grant and has over 4,300 entries. Because it is the most extensive record of every piece held, it is referred to as the master database. The cataloger and scanning specialist attach the unique identifiers they create to these spreadsheets, thereby tying all of the work of the project together.

We were able to identify what areas were mapped after the master database was created. Although most of the areas mapped were in California (from Orange County up through Santa Barbara, and the Monterey and San Francisco Bay areas), some years field camps were held in other states. Areas mapped...
included parts of California (23 counties), Nevada (10 counties), Idaho (2 counties), and Utah (2 counties) (See Appendix A for a full list of counties covered by the Survey). Where the students mapped was often based upon practical considerations. For example, in the 1930s, they routinely mapped in the southern California oil-bearing coastal regions because oil companies were the major employers of geology graduates at the time. The faculty wanted to make sure the students were prepared for careers in the field where hiring was being done.

Once the items were organized, we were able to clearly define the output of the Survey. Included were maps (plane table, topographic, geologic), geologic folios, cross sections, columnar sections, triangulation books, geology field notebooks, field reports, and ledgers.

Cataloging

Mike Powers commenced cataloging in January, 2002. Socrates, Stanford's OPAC, contained about 134 records from the Survey at this point. It was decided that minimal level cataloging in MARC would be done in order to get through the work within the time frame of the grant. The items were cataloged in Sirsi's Workflows, the production system used as a back end for Socrates, using AACR 2 and MARC 21 standards.

Initially it was slow going as Mike found there was a great deal to learn about how and at what specificity things needed to be cataloged, how he should integrate his information into the master database, and how to manage the myriad of other tasks necessary to process the various parts of the collection. Throughout the learning process, adjustments were made as needed. Eventually longer and more complex records were created and smaller ones were eliminated; this was particularly true with respect to records involving geologic folios. After learning how to approach the various types of records, the process quickened and the cataloging moved forward much more rapidly.

Three examples of different types of cataloging records illustrate the process. The first (Appendix B, number 1) is a fairly simple record from 1902 in MARC format. Note that there are only two authors with one colored map, one manuscript map, one blueprint, and a field notebook. Coordinates are entered based upon the 1:62,500 USGS topographic 15-minute quadrangle in which the area mapped resides. The record has been entered into the National Geologic Mapping Database (NGMDB) as is noted in the 690 field.

The second example (Appendix B, number 2) is a more detailed record from 1929, which includes geologic folios, plane table maps, field notebooks, and field reports. This record contains eighteen geologic folios. The coordinates for the quadrangle covered by the area mapped are used for the whole record. Adding eighteen different coordinate areas would be unwieldy, confusing, and extremely time consuming. As with the previous record, there is an 034 field, consisting of the cartographic mathematical data, and a corresponding 255 field (as is the case with all of the map records). There are more and larger 500 notes, and an extensive contents note field (505) listing each folio by name and author. In addition, the eighteen authors of the folios are individually recorded in the repeating 700 fields.

The third example (Appendix B, number 3) is a field notebook record from 1925. This record contains all of the field notebooks that did not match any of the cataloged maps from that same year. The record has a title created by the cataloger. Again, the authors of the books are traced in the 700 fields allowing for each participant to be searched individually. Note that all three records have a 001 field with an "axxxxxxx" number in it. This field is automatically assigned by the Workflows system and is unique, allowing it to be used as an identifier in the master database and the image metadata database. This field is called the cataloging key, or ckey.

Indexing of the maps in the NGMDB is done by student assistants after the items have been cataloged in Workflows. Once all of the items have been fully cataloged, the scans and metadata completed, and the items added to the Web site, we will be able to link the URL to each of our records in the NGMDB.

Image Creation and Metadata

Specialized scanning equipment was purchased for the project. We acquired a large format feed-through scanner, by Contex, capable of scanning in full color up to 600 dots per inch (dpi) and to a width of 40
The scanner is attached to a Dell Optiplex, GX 110 workstation with an additional 120-gigabyte hard drive and a CD-ROM burner (Fig. 1). The computer is equipped with Microsoft Access for storage of the metadata files and Adobe Photoshop for image processing. It was critical to secure extra storage space for the imagery as we estimated that the project would require over 400 gigabytes of space when completed. Space was secured on a server housed in the central library. Images are also still being stored on the attached computer’s extra hard drive.

**Figure 1**
The scanner is attached to a Dell Optiplex, GX 110 workstation with an additional 120-gigabyte hard drive and a CD-ROM burner.

Miquel Fernandez, the scanning specialist, was responsible for determining the appropriate image specifications for the project. In conjunction with the Digital Preservation staff, it was decided that the maps would be scanned at 300 dpi as TIFF files and 400 dpi TIFF files for text (gray-scale and color, depending upon the original). He also worked with the Metadata Librarian, the Digital Preservation staff, and Julie to set up the metadata standards. Technical, descriptive, and administrative metadata is created for each image and is managed in a Microsoft Access Database. This database, designed by the Metadata Librarian, automatically creates a unique number for each image as it is entered. This unique number becomes the name of the image, e.g., SGS-00364.

Descriptive metadata describes the content of each image. It includes information such as the creator of the original work, the title, the publisher, the topic of the content, and information about where the item can be found. Over half of this data is populated from the MARC cataloging record in Workflows. Technical metadata includes information about the image itself, including the type of compression used, the configurations of the hardware and software, the orientation of the image, whether or not it is in color, etc. Much of this is extracted from the TIFF header. Administrative metadata describes the rights and permissions held by the creator and the publisher. (See Appendix B for examples of the descriptive and the technical metadata for one image.)

Each of the databases needs to be linked to the other relevant databases (Fig. 2). First and foremost is the master database of all items. Each item inhabits its own line in the spreadsheet. As part of the cataloging process, Mike creates a call number for the piece. This call number is entered into the master database to indicate that the item has been cataloged. As mentioned previously, Workflows creates a ckey for each new cataloging record. This ckey is entered into the Access database tying the cataloging record to the scanned image. The unique number for each image created by the Access database is added to the master database to indicate that the item has been scanned. When the images are ready to be added to the Internet interface, the Luna Insight Browser, the metadata and the cataloging records are imported, allowing the ckey to be the joining element of both databases.
Administration

Quite obviously, collaboration on this project is a necessity. Weekly meetings are held and attended by the librarians, the scanning specialist, the cataloger, student assistants, and, at times, various Stanford staff who are helping on specific parts of the project. Communication between the cataloger and the scanning specialist is essential, especially after a particular year is completed. They discuss the intricacies of each year before the metadata for the images is created. The master database is of paramount importance as it allows for the matching of the physical maps, field notebooks and field reports with their respective records in it.

Student assistants are a crucial part of the project. They index the records in the NGMDB. They add spine labels to notebooks and reports. Student assistant, Twila Patterson, was responsible for creating and sending out copyright approval letters to all of the participants of the Survey who had items in the collection. While we thought Stanford held the copyright to the items themselves, it was unclear who held the copyright to the digital derivatives we were creating. To be on the safe side, we decided to ask each author with output after 1923 for permission to scan and mount their work on our Web site. Hence, an Excel spreadsheet was created listing the names of all authors we could identify. Current addresses were retrieved from the School of Earth Sciences’ development office and a letter requesting copyright permission to digitize the output was sought. In the end, over 63% of the people responded and all of them agreed to be part of the project.

The two librarians at Branner, Charlotte and Julie have managed the project, with Julie handling the day-to-day project management. Other library staff who have given of their time include the Metadata Librarian, the Digital Preservation Staff, the Digital Library Staff, the Library Development officer, as well as Branner’s Operations Manager and the monograph specialist.

Early in the planning stages, it was decided that an Advisory Committee would be formed to help with the project and with questions as they arose. The committee consists of two former faculty leaders of the Survey: Jim Ingle and Elizabeth Miller (Stanford); two field geologists: Ted McKee (USGS) and Judy Smith.
Online Access

Access to the collection is through Luna Insight software, designed specifically for image collections (http://www.lunaimaging.com/insight/index.htm). Luna will be used both for image and text display. The initial Internet site will be accessible through a Java-based downloadable client. Eventually a Web interface will be added. On the opening page (Fig. 3), with the backdrop of geology of the Stanford campus by Ben Page, the first 50 images are shown in thumbnail size on the right side of the screen. The left side of the screen is where searching and data retrieval take place. By selecting an image and clicking on “data,” a larger thumbnail is retrieved and the cataloging information appears above it. By double clicking on the right-hand thumbnail, the image is brought into the image workspace (Fig. 4). Once here, one can zoom into a particular area, bring up the data record, and import other images for a side-by-side comparison of the information.

Figure 3
Stanford Geological Survey’s opening Web page has a backdrop of geology of the Stanford campus by Ben Page. The first 50 images are shown in thumbnail size on the right side of the screen.
Searching is done through the main screen. The user can search for a specific author, place, title, keyword, or subject. At this point, there is no geographic search feature allowing the user to click on an interactive map of all of the areas covered by the Survey pulling up relevant maps in the designated area. At some point, we hope to develop this feature. The SGS site is currently in beta-test and will contain about 475 images. Images and cataloging will be added at regular intervals after the initial release of the database.

Figure 4
Double clicking on a thumbnail image brings up the image workspace where one can zoom into a particular area, bring up the data record, and import other images for a side-by-side comparison of information.

The final stretch

We are now in the last six months of the grant. Miquel, the scanning specialist, is digitizing the few remaining field notebooks. Mike, the cataloger, has completed nearly 75% of the records. The student assistant, Jelanghir Malegam, is handling the quality control on the remaining images, entering the metadata and updating the master database for images, and is adding spine labels to the field notebooks. He is also handling the indexing in the NGMDB. Julie is working with Stanford’s Luna programmer to get the site up and running; the Preservation Department to archive the manuscript/original materials; and is writing the quarterly and annual reports for the state. Charlotte is busy promoting the project and the site to other librarians, the alumni, and geologists throughout the country. Everyone is beta-testing the Internet site.
At the end of the project, all of the physical pieces will be cataloged, although many not at the piece level. Creating complex bibliographic records for subsets of the materials made cataloging of the whole collection possible. Only selected items will be scanned due to the duplicative nature of some of the items, the time constraints of the project, and the varying quality of the work. Representative reports and maps will be available via the Web. The master database will be part of the permanent record as some data remains unique to this file. All documents will be archived off-site, but will be available to users who need them.

Conclusion and Suggestions

In conclusion, there are a number of factors that should be taken into account when starting a project like this. First, set your image standards early. You don’t want to have to rescan the images. It is time-consuming and expensive.

Find out if you need copyright permission and obtain it if need be. This process took over a year to complete. While it was labor intensive, it allowed us to publicize our work and created an excitement about the project as a whole. You will need more student help than you think. Students have handled everything from mundane tasks like shifting the books from one location to another to creating metadata and doing the final quality control steps on the images. Without their help, there is no way the project could have been undertaken.

It takes a lot of digital space to handle this much information. Try to secure this ahead of time. Figure out where you are going to store your imagery and how it will be structured in the database. Will the images be stored in folders by year or by cataloging record? Will you be able to house everything on the same server or is it going to be stored on different drives? Do you plan to burn CD-ROMs or DVDs for storage purposes? Set up a detailed schedule of what you’ve scanned and where it is housed, especially if everything is not in the same physical location (hard drive or server). Know what you’ve scanned or you won’t know if you’ve lost anything!

For the process to run smoothly, an internal project team should be assembled from the start. While some of the team may not be needed throughout the whole process, it is useful for them to know when and for what you’ll need their help. They can then plan to make time in their schedule for your project. And remember, it takes more time than you think!

Finally, by fall we will have met the goals: we now know what was in the collection; the materials are organized for storage and retrieval, and are being cataloged; items requiring preservation are being identified and repaired; and Web access is being created. As a product of all of these steps, access to the Stanford Geological Survey collection is being set up and put in place for geologists, faculty, students, and the public.
## Appendix A
### Stanford Geological Survey County Coverage

<table>
<thead>
<tr>
<th>State</th>
<th>County</th>
<th>Quad (1:63,360 unless noted)</th>
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### Appendix A (continued)

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Appendix B
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.050. 4|aG4051.C5 svar .S7 1902a
.052. |a4364|bP2|bP2:2S7
.072. 7|aC5|2|csg
.100. 1 |aRoseberry, F. T.|q(Fred Thomas)
.245. 10 |aTopography and geology Palo Alto quad., Frenchman's Lake. |
|cStanford University Geological Survey ; topography by F.T. Roseberry and
Frank L. Hess ; Frank L. Hess, draftsman.
.255. |aScale 1:4,800.|c(W 122p0s15§00—W 122p0s00§00—N 37p0s30§00—N 37p0s15§00—)
.260. |c1902.
.300. |a1 ms. map ;|bcol. ;|c34 x 34 cm.
.500. |aPen-and-ink and watercolor.
.500. |aRelief shown by contours and spot heights.
.500. |aAccompanied by field notebook.
.590. |aBrammer Library copy 2 is col. pen-and-ink on cloth; not colored
to show geology. Copy 3 is a blueprint.
.610. 20 |aStanford University|vMaps.
.650. 0 |aGeology;California;Palo Alto Region;Maps, Manuscript.
.651. 0 |aPalo Alto Region (Calif.);Maps, Topographic.
.651. 0 |aPalo Alto Region (Calif.);Maps, Manuscript.
.690. 4 |aNGMDB
.710. 2 |aStanford Geological Survey.
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.948. |aALTI 08/28/1999
.596. |a10
Appendix B
Example Cataloging Record Number 2

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.aSTF
.4G4051.C5 svar|b.S7 1929
.4|a4363|bS3|bV4
.7aC5|2lgc
.2aStanford Geological Survey.
.30aGeologic folio of a part of the Ventura quadrangle.
.30aVentura quadrangle, California
.3aGeologic folio of the Ventura quadrangle
.35aScale 1:4,800. 1" = 400 ft. W 119p0s30s00 — W 119p0s15s00 / N 34p0s30s00 — N 34p0s15s00.)
.3aStanford University, Calif. ; bStanford Geological Survey,
.31929.
.3atl atlas (18 v.) ; bmaps, some hand col., ms., ill. ; c61 cm. or smaller.
.3aRelief shown by contours and spot heights.
.3aNo. 1-2 and 9-10 accompanied by plane table maps.
.3aNo. 9 also accompanied by exceptional panoramic photograph along with structural geology on relief.
.3aAccompanied by 12 field notebooks.
.3aBarksdale, Johnson and McMasters text include fold-out topographical maps in front and back pockets.
.3aNo. 12, 17, Gandy, Killingsworth and Snedden text include fold-out topographical maps in front pocket.
.3aNo. 1-7, 9-11 accompanied by reports. Other reports: [4a] by David E. Green, [5a] by B.C. Hyde, [9a] by M.E. Newlove, [10a] by Lee S. Osborne (14 v. : typescript, maps, ill. ; 28 cm.)
.3aTitles of reports vary slightly.
.650 0aGeology|zCalifornia|zVentura County|xMaps.
.650 0aGeology|zCalifornia|zSanta Barbara County|xMaps.
.651 0aVentura County|xMaps.
.651 0aSanta Barbara County|xMaps.
.690 4aNGMDB
.700 1 aAdams, Elmo W.
Appendix B
Example Cataloging Record Number 2 (continued)

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.700. 1 |kCox, W. Philip.
.700. 1 |kCross, Charles M.
.700. 1 |kGandy, Archie.
.700. 1 |kGreen, David E.
.700. 1 |kHelmke, Rae F.
.700. 1 |kHyde, B. C.
.700. 1 |kJohnson, F. L.
.700. 1 |kKaplow, Edward J.
.700. 1 |kKillingsworth, Cecil C.
.700. 1 |kLoofbourouw, R.
.700. 1 |kMacGinitie, H. D.|q(Harry Dunlap),|d1896-
.700. 1 |kMcMasters, J. H.
.700. 1 |kNewlove, M. E.
.700. 1 |kOsborne, Lee S.
.700. 1 |kSmith, Colin Hubbard.
.700. 1 |kSnedden, Loring B.
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.740. 02|aGeology of a portion of the Ventura quadrangle, California.
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.596.  |a10
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.110  2 |aStanford Geological Survey.
.245  10|aField geology notebooks, 1925 field season, Nipomo quadrangle / |cStanford Geological Survey, C.F. Tolman Jr., director]
.260  |ce1925.
.500  |a10 field notebooks.
.500  |aIncludes topographic maps of the area and handwritten geologic notes.
.500  |aNo. 5 includes fold-out topographic map in front pocket.
.500  |aTitle supplied by cataloger.
.650  0|aGeology|zCalifornia|zSan Luis Obispo County|vMaps, Manuscripts.
.650  0|aGeology|zCalifornia|zSanta Barbara County|vMaps, Manuscripts.
.651  0|aSan Luis Obispo County (Calif.)|vMaps, Manuscripts.
.651  0|aSanta Barbara County (Calif.)|vMaps, Manuscripts.
.700  1 |aAtwill, E. R.
.700  1 |aCampbell, C. L.
.700  1 |aChubbuck, C. D.
.700  1 |aDrew, H.
.700  1 |aFarish, L. M.
.700  1 |aGarner, J. W.
.700  1 |aGoodloe, T. M.
.700  1 |aHobro, W. L.
.700  1 |aKildale, M. B.
.700  1 |aLynn, H. F.
.700  1 |aMitchell, H.
.700  1 |aTolman, Cyrus F.|q(Cyrus Fisher)
.700  1 |aVallat, E. H.
.700  1 |aWallace, H.
.700  1 |aWilt, James W.
.596  |a10

Oregon’s Willamette River Basin (WRB) is 180 miles long and 100 miles wide and includes approximately 2 million people (1990) or about 68% of the state’s total population. It also includes many of Oregon’s ecological treasures including wetlands, agricultural lands and substantial fauna. With the human population in the WRB projected to double by 2050, the Pacific Northwest Ecosystem Research Consortium (PNW-ERC) began a comprehensive study in which they collected current and historical data on ecological change in the WRB. Their research focused on four questions:

1. How have people altered the land, water, and biotic environment over the last 150 years?
2. How will human activity affect the WRB over the next 50 years?
3. What are the expected environmental consequences of these long-term landscape changes?
4. What types of management actions, in which geographic areas are likely to have the greatest effect?

The results of this research are presented in the *Willamette River Basin Planning Atlas: Trajectories of Environmental and Ecological Change*. This informative and beautifully illustrated atlas provides an excellent overview of the findings and recommendations of the PNW-ERC. With its attractive cartographic representations and solid research, this atlas will generate discussion among Oregonians for years to come. Moreover, this work should have a lasting influence on Oregon planners and policy makers as they look for ways to minimize the harmful effects of human development in the WRB, while maximizing efforts to improve the environment.

Released initially as a 66-page volume in 1998, the first edition of the *Willamette River Basin Planning Atlas* focused almost exclusively on answering the first research question: how has human settlement altered the land, water, and biotic environment of the WRB over the last 150 years? Using the digital database maintained by the PNW-ERC, the authors mapped many of the historical changes in the WRB. Changes in landforms, water networks, biotic systems, human settlement and land use were all chronicled. Despite only a very limited print run, the first edition of the *Willamette River Basin Planning Atlas* won accolades for its cartographic presentation and helped generate public debate in future planning in the WRB.

In the second edition, the authors expand their focus to encompass the three remaining research questions, including what the WRB will be like in 2050 when the population is expected to hit 3.9 million (double the 1990 population). At that time, the WRB ecosystem will be facing increasing pressures from human land use and demands for more agriculture production and water resources. In order to effectively manage such pressures, the authors stress the importance of outlining alternative futures in the planning process and that scenario development is crucial for recognizing and managing potential impacts. In this way they present three alternative “visions” for the future of the WRB.

The first vision, called the “Plan Trend” scenario, presents how the WRB will appear if all current policies stay in place and are acted upon. The second is the “Development” scenario. It allows for the loosening of existing
policies to allow for the freer rein of market forces in the WRB. The third scenario they present is "Conservation", which has a greater emphasis on ecosystem restoration and protection. The impact of each scenario in 2050 is mapped and presented in the new chapter "Trajectories of Change".

The authors also examine a number of scenarios with maps demonstrating the future impacts on vegetation, riparian areas, agricultural land use, forestry, and urban and rural patterns of land use. Projected changes in river flow, water availability, aquatic life and terrestrial wildlife are also featured in beautiful cartographic illustrations. The chapter concludes with several recommendations for improved analysis and planning as well as tighter management of resources.

One recommendation discussed involves "River Restoration", which is also a new chapter in the second edition. With the Willamette River being the source of a healthy ecosystem, the authors present a series of longitudinal maps and charts noting how the creation of dams, revetments, and the elimination of side channels have all served to harm the ecosystem over the past 150 years. As presented in several wonderful maps, the authors indicate that many areas could be successfully restored at low cost and with very little socioeconomic impact to existing human activities.

Along with the two new chapters, the authors have added new material to parts from the first edition. For example, the distribution of fish and terrestrial wildlife throughout the WRB is highlighted in several maps. Although the authors use many of the same maps from the first edition in the early chapters, these are supplemented with additional charts and photographs.

While the atlas is designed foremost as a resource for the planner and policy maker, the authors have gone to some lengths in avoiding overly technical or quantitative jargon. A clear and concise overview is provided at the beginning of each chapter, and the authors encourage readers to read each overview prior to delving into the individual chapters. A useful table of acronyms is also provided at the front of the book to help the layperson.

Apart from the substantial content, the authors have also added an excellent appendix that contains reference maps on such things as the mineralogy of the WRB and its relationship to the Earth's geologic history. A chart indicating the common and scientific names for local animals and a USGS topographic sheet index for the area are also part of the appendix.

Surprisingly, the authors do not include any material on climate change or the effects of global warming. The problem of toxic pollutants is also omitted. These issues may be included in a third edition.

Nevertheless, the second edition of the atlas is a worthy successor to the first edition and will serve as key resource in any discussion of planning in the WRB for many years to come. This atlas is a must for any academic or research library in the Pacific Northwest and would be of great interest to researchers in environmental studies, planning, public policy, and landscape architecture.

Andrew Nicholson
Map/GIS Librarian
University of Oregon Libraries
Eugene, OR.


Produced at the eve of the third millennium, this concise atlas begins with nothing less than the evolution of Homo sapiens. It presents 12,000 years of human history from the emergence of modern humans through the post-WW II era in 450 full-color maps and 160 charts and illustrations. Dr. Patrick O'Brien, of the Institute of Historical Research at the University of London, set out with his team of historians, cartographers, and editors to produce a popular reference work that could be used by university, college and school courses in world history.

The atlas is organized into five main chronological sections on ancient, medieval, early modern, enlightenment, and twentieth-century history. Within these five sections are 132 two-page articles that each highlights a key moment in world history with maps and an accompanying essay. Longer essays open each major historical period to provide the context of worldwide trends, political developments, and historical...
conflicts, as well as significant socio-economic, cultural, and religious themes. While plenty of attention is given to the rise and decline of empires and civilizations in Europe, Africa, Asia and the Americas, coverage also extends to postwar topics such as migration patterns, status of women, globalization, and environmental changes. A bibliography, consisting mainly of British publications, concludes the volume.

Despite its “concise” size (the volume measures 9 1/4 x 12 inches), the text is sharp and maps are legible and pleasingly tinted. Each topic is typically explained with three to four maps illustrating the points made in the concise, informative, well-written essay. For example, “The Vikings 800-100” describes Viking voyages of exploration, their trading and raiding routes, two periods of conquest and settlement, and the formation of states. Five maps portraying these events are keyed to the text. The main points could also quickly be taken away by simply reading the well-done captions for each map and illustration.

One of the challenges and joys of studying world history is tracing a theme or events in a particular region through time. Oxford’s Atlas of World History helps the reader to do this in two ways. For each topic, links are given to an earlier and/or later topic that is related. For example, “The Inca and Aztec Empires, 1400-1540” is connected to the earlier “Civilizations in Mesoamerica and South America, 800-1500” and to the later “Spain and The Americas, 1492-1550”. Finding connections or comparisons across time is also aided by the 24-page index, which includes names of people and events as well as place names.

George Philip Limited published the larger, original version of this atlas in Great Britain in 1999, and this concise version is largely a reprint of that edition. Although the “concise” edition carries a 2002 imprint, coverage for the modern period generally ends in the late 1990s. One exception to this, however, is the inclusion of the “war on terrorism” and the overthrow of the Taliban regime in Afghanistan in 2001 in “The Role of the United States in the World Since 1945”.

Oxford’s concise edition of the Atlas of World History would make a handy and affordable home reference to get a quick grasp and overview of major world events and themes. Libraries, however, may prefer the larger, 1999 original version since the extent of updating in this edition is minimal and that volume contains an additional 24-page “Timechart” and a 32-page section called “Events, People and Places” that features brief entries on major subjects within the maps. One other cautionary purchase note: the concise version of the atlas was also published by Philip’s in a slightly larger format, but the same 312 pages of content, under the name O’Brien’s Atlas of World History in 2001.

Sylvia Bender
California Energy Commission
Sacramento California

Allen, James P. and Eugene Turner. Changing Faces, Changing


In many ways, Changing Faces is a Census 2000 update of the authors’ 1996 work The Ethnic Quilt (reviewed in the March 1998 Information Bulletin 29:2, p. 87-89). If you are familiar with this title, Changing Faces will be a welcome addition. But while The Ethnic Quilt generally encompassed the time span 1960-1990, Changing Faces emphasizes demographic trends in the 1990s. Covering a five-county Southern California area (except for San Diego and Imperial counties), the atlas depicts the swirl of socioeconomic and demographic change among the region’s sixteen million people. The numerous maps in the atlas cover the populated portions of the five-county region surrounding Los Angeles. The less populated far reaches of Ventura, San Bernardino and Riverside counties are not discussed. Numerous color shaded choropleth and dot maps show ethnographic patterns of white, Black, Asian, Hispanic and American Indian population movement over the last ten years. The complex patterns of ethnic mixing and separation in the region are clearly explained and detailed. Being a native Southern Californian, I found the graphic patterns and charts fascinating. Particularly interesting is the authors’ historical analysis providing the reader with concise
descriptions of how L.A. area ethnic settlement patterns began with restrictive ownership covenants and labor market niches. The authors further discuss the patterns and trends that are evolving today. As the decades passed, some white communities became Black, then became Latino, then became Asian. One of the more interesting maps is on page 47 titled “Predominant Ethnic Groups”. It brings together the intensity patterns of the four major ethnic groups by census tract coloring. Also interesting are the dot maps showing loss or gain in ethnic population per census tract.

Professors Allen and Turner cite current geographical theories, terminology and models in their scholarly yet readable text that is supported with footnotes and an extensive bibliography at the end. Their conclusions are logical extensions of the conclusions drawn in the Ethnic Quilt: Metropolitan ethnic groups are deconcentrating, generally moving to less dense suburban zones. Whites in Southern California are less ethnically isolated than in other major metropolitan areas. Black and white separation, while still high in Los Angeles County, is diminishing; Latino and white separation is generally higher in the region than in other major metropolitan areas. Asian and white separation in Southern California is similar to the patterns in other metropolitan areas. The authors end with some positive conclusions: A general pattern emerges that many ethnic groups are moving out to better neighborhoods; there is increased home ownership among Blacks and Latinos and generally reduced residential separation among whites, Blacks and Central Americans.

My only minor criticism of the title is with the physical durability of the work. Unlike the hardbound Ethnic Quilt, Changing Faces comes in a spiral bound paperback format. For institutions interested in California’s urban geography, this atlas is worth acquiring and is an excellent update of the Ethnic Quilt.

Greg Armento
California State University, Long Beach


Do depictions of America appear on Pre-Columbian European maps? Are the northern regions shown thereon, commonly considered inaccurate representations of Scandinavia or northeast Asia, really outlines of North America? If so, how could information about then-unknown lands possibly have been transmitted to European mapmakers of that period?

James Enterline, who has made an intensive study of Norse exploration and settlement in Greenland and North America, poses the theory that these early settlers came into contact with the Inuit and that geographical knowledge learned from them made its way back to Europe. These Inuit peoples had only recently completed their trek across what is now the Canadian Arctic and down both coasts of Greenland. In their interactions with the Norse settlements they could have communicated clues about lands to the west, possibly even by primitive maps (called cartograms.) The author concedes that hard evidence for this view does not exist, but presents sources from archaeology, ethnology, linguistics, literature, and historical cartography to support his argument.

The book is divided into two parts. Part one closely examines a small number of documents relating to this period: the works of Claudius Clavus, a Dane who appeared in Rome around 1424 and who became known as an authority on the geography of the north. His maps were the first to show Greenland. Also discussed is the Iventio Fortunatae (circa. 1363), a now-lost travel book, which may have supported Clavus’ work and may also have been an influence on the world globe of Martin Behaim (1492). The globe appears to show the Arctic Archipelago, the Canadian Arctic coast, and Hudson Bay. The final document in this section is the Yale Vinland Map, which Enterline has studied and written about extensively. He suggests that the island called “Vinlandia” on the map could be Baffin Island. Part two is a chronological survey that includes examination of a number of early maps, focusing on the northern coastlines they depict.

Any work of this nature—speculative, encompassing various academic disciplines—is bound to be controversial. The author accepts this and invites the
engagement of other scholars. He sets a specific methodological framework for looking at these early maps, and he adheres to it. His extensive references are well cited and he notes areas still open to interpretation. The argument proceeds logically from one point to the next and seems, to this non-specialist, to be soundly based on credible evidence. The writing style is engaging and, despite the sometimes abstruse nature of the subject matter, keeps the reader’s interest. Map specialists will be especially intrigued by the discussion of specific early maps, their makers and histories, sixty-one of which are illustrated in black-and-white. Also included are extensive chapter notes and bibliography. I would recommend the book for general library collections.

Sue Haffner
Map Cataloger
Henry Madden Library
California State University, Fresno


Paige Andrew has written a manual for cataloging sheet maps that would enable even a cataloger who has never cataloged maps to comfortably catalog them. Even though there is a proliferation of maps in electronic formats, there are still many paper map collections waiting to be cataloged, and libraries still receive maps in paper format. Often the people who are asked to catalog them have no prior experience in cataloging maps and may know little about maps in general. Paige gives the new map cataloger all the necessary knowledge to catalog sheet maps starting out with what a map is, why it is worthwhile to catalog sheet maps, an idea of what the “main map” is, map cataloging tools, and what the chief and prescribed sources of information are for cataloging maps.

In the second section Paige discusses fixed fields unique to maps, other fixed fields in bibliographic records, and the variable fields that are unique to maps. Next Paige discusses deciding on the main entry for a map and writing the statement of responsibility, selecting the title to be used in the bibliographic record, edition statements, how to code the mathematical data fields for maps including how to figure out a map’s scale and its coordinates, publication information, how to measure a map and how to fill in the rest of the physical description area, and notes for map biographic records including examples.

In addition to discussing the descriptive cataloging of sheet maps, Paige discusses the make up of a Library of Congress G schedule call number both for maps and atlases. He describes subject analysis for maps briefly and explains geographic subject headings and geographical subdivisions for topical subject headings. Paige also discusses added entries that might be made on map bibliographic records.

In the last section of the book, Paige discusses special points to consider in cataloging historical maps such as scales using measurements other than feet, kilometers or miles, and unique notes needed for historical maps. In that section he also covers cataloging special map formats such as wall maps, map series, supplementary items such as texts and indexes, and facsimiles, photocopies, and other types of reproductions. There is an appendix with basic map tagging exercises with answer sheets, and the book includes an extensive bibliography of other books and articles on cataloging maps as well as an index.

Although there are other map cataloging manuals, they do not do what this book does, which is to give a cataloger step-by-step information on how to catalog sheet maps. *Cartographic Materials: a Manual of Interpretation for AACR2,* by the Anglo-American Cataloguing Committee for Cartographic Materials, published by ALA in 1982, is confusing because so many of the rules have changed since it was published. It also does not include information on MARC tags, nor does it include information on formulating G schedule call numbers or on subject analysis for maps. In any event, it is out of print, so it may be hard for a beginning map cataloger to obtain a copy. *Map Cataloging Manual,* prepared by the Geography and Map Division, Library of Congress, and published by the Library of Congress in 1991, discusses how LC deals with certain aspects of map cataloging, but it is not a systematic manual of how to catalog maps. *Maps and Related Cartographic Materials: Cataloging, Classification, and Bibliographic Control,* edited by Paige Andrew and Mary
Larsgaard and published by Haworth in 1999, includes many chapters that apply to cataloging sheet maps including a very useful chapter titled “Problem Areas in the Descriptive Cataloging of Sheet Maps” by Ken Rockwell, but it still is not a step-by-step guide to cataloging sheet maps.

I would definitely recommend this book to anyone who catalogs maps. Even though it is geared toward people who are new to map cataloging and I have cataloged maps as part of my job for several years, I found information in the book on many things I never understood or had learned incorrectly. It would be useful as a place to look up answers to cataloging questions for even experienced map catalogers.

Katherine Rankin
Special Formats Catalog Librarian
University of Nevada, Las Vegas

**Review Guidelines**

These guidelines have been created to aid the reviewer on questions of format and general policies for reviews.

**Review Format:** The review should be presented in three sections: 1) the bibliographic citation, 2) the review, 3) identification of the reviewer. Please submit reviews via e-mail. Microsoft Word format as an attachment is preferred. You may also send your review on 3.5” floppy disks. Please note, if you send your review through floppy or e-mail, also send via fax or mail, a backup paper copy for verification of content. Floppies will be returned upon request.

The bibliographic citation should include: Author’s name, title, edition (if applicable), place of publication, publisher, date, number of pages, price, LC number (if known), and ISBN number (if known). An example, including correct punctuation is given below:


Reviews should be double-spaced and follow the usual principles of paragraphing. If reviewed material is compared with other works, please include author’s name, title, publisher and date of publication within the review itself rather than using foot-notes. The review should be followed by your name as you wish to be cited, place of employment, including city and state.

**Editorial Policies:** The opinions and judgements appearing in WAML reviews are those of the author and do not reflect official sanction of WAML. The book review editor retains the right to make alterations in reviews submitted. If minor revisions do not alter the reviewer’s intent, they will be made without further communication. However, if the review editor feels that extensive revisions are needed, or if changes would result in altering the reviewer’s intent, such editing would only be made with the knowledge and agreement of the reviewer.

**Review Content:** To a certain extent the contents of a work must be described, however the reviewer should avoid making the review a list of the work’s contents. Rather the review should emphasize analysis, evaluation and comparative criticism. Questions, which should be considered in the review process, include: What is the purpose of the work? Has the content as described by the title been fulfilled? Has the author’s intent as described in the work’s preface and/or introductory remarks been realized in its content? How much of the work’s content is cartographic, or is it primarily written text illustrated by a few maps? How important is this work for research in geography and cartography? Should it be included in library collections, and what kind? The length of your review should be determined by the importance of the item being reviewed.

Reviews of books received by individual libraries that might be of interest to a wider audience are also invited, so long as they follow the review guidelines. Submit reviews to the Review Editor.

Thank you for your attention to these guidelines. Additional reviewers are always welcome. Please feel free to recommend other qualified reviewers who might be interested in submitting reviews to the *Information Bulletin*.

Katherine L. Rankin
Review Editor
WAML Information Bulletin
Catalog Department
University Libraries
University of Nevada, Las Vegas
4505 Maryland Parkway
Box 457034
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Tel: (702) 895-2224

Review of Atlases, Books and Digital Resources 163
New Mapping of Western North America

compiled by
Ken Rockwell
University of Utah Library Catalog Department

ALASKA


ALBERTA


ARIZONA


BRITISH COLUMBIA


Sonoma County Tourism Program. Visit the Sonoma County, wine country. 1 map, scale not given. Santa Rosa, CA: Sonoma County Tourism Program, pub. 2002. OCLC: 52152298


Irvin, Sue and Petersen, Sherrie. Santa Barbara County winery tasting rooms. 1 map, scale not given. Santa Ynez, CA: Santa Barbara County Vintners' Association, pub. 2001. OCLC: 51895834

COLORADO


Moore, David W. Generalized surficial geologic map of the Pueblo 10 x 20 quadrangle, Colorado. Scale 1:250,000. USGS Miscellaneous field studies map no. MF-2388, pub. 2003. URL: http://purl.access.gpo.gov/GPO/LPS20182 OCLC: 51881210


HAWAII


**IDAHO**


**MONTANA**


**NEVADA**


**Davies, David A. Active metal and industrial mineral mines in Nevada, 2001.** Scale ca. 1:1,000,000. Reno: Nevada Bureau of Mines and Geology open-file report no. 02-2, pub. 2002. OCLC: 52052963


NEW MEXICO


Bexfield, Laura M. and Anderholm, Scott K. *Estimated water-level declines in the Santa Fe group aquifer system in the Albuquerque area, central New Mexico, predevelopment to 2002.* Scale ca. 1:95,000. USGS Water-resources investigations report; 02-4233, pub. 2002. OCLC: 51785253

OREGON


UTAH

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**WASHINGTON**


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**NEW MAPPING OF WESTERN NORTH AMERICA**

169
Notice of newly-published maps and cartographic products are welcome, so they can be announced even before they appear in my default source, namely OCLC. However, I'd like to clarify the scope of the list. Given all the map products available, I have to place some limits on myself and the list, so I've routinely excluded the following: city street maps, simply because of their great quantity, regularly-updated, virtually annual editions of various maps, such as US National Park maps, AAA state and California region maps, state highway dept. road maps, Thomas Bros. Street atlases, NIMA/NOAA nautical charts, and USGS topos.

Thus, I concentrate on thematic maps (including cities, such as an earthquake map for San Francisco), and new maps of states and regions by commercial publishers. Examples are geologic maps covering a USGS quadrangle, a state road map from a foreign publisher, and recreation maps. So let me know when you become aware of a new map, being aware, though, that I may already have had it on a previous list and will try to screen those out.

— Ken Rockwell
New Mapping of Western North America Editor
News of Note
compiled by
Linda Zellmer
Indiana University Library

Benchmarks

Geospatial One-Stop Program Director Announced

Hank Garie has been named the new Geospatial One-Stop Program Director. The Geospatial One-Stop Initiative is one of 24 OMB electronic-government initiatives. The objective of Geospatial One-Stop is: to provide improved utility of and access to data collected by all levels of government; to expand partnerships among Federal, State, and local governments; and to reduce duplication and save money.

Mr. Garie has over 16 years experience in building and coordinating GIS in New Jersey State government and local communities. For the past 4 years, he has been serving as the New Jersey State GIS Coordinator, directing a program that promotes the use of GIS technology and development of statewide spatial data resources. Hank is a past president of the National State Geographic Information Council (NSGIC), an organization of States committed to efficient and effective government through the adoption of geographic information technology. In addition to practical management and GIS implementation experience at the State level, Hank has worked closely with the Federal Geographic Data Committee (FGDC) and individual Federal agencies to develop and promote strategies for implementing the National Spatial Data Infrastructure (NSDI).

Canadian News

The Association of Canadian Map Libraries & Archives (ACMLA) met at the University of Victoria from May 28 - June 1, 2003, as part of the On the Edge conference, also comprising the Canadian Association of Geographers and the Canadian Cartographic Association. Next year ACMLA will meet with CAPDU, the Canadian Association of Public Data Users, at the University of Manitoba in Winnipeg, during the last week of May.

The revised federal government Depository System Program for Maps, introduced a year ago, has been working well. The program, which is available to Canadian academic libraries, includes free licensed access to digital topographic maps held in the National Topographic Database, along with selected digital and paper thematic maps from Natural Resources Canada. Free geospatial data from all levels of government is becoming more widely available to libraries in Canada, thanks in part to lobbying by ACMLA and individual map librarians. The Government of Manitoba recently became the first provincial government to make geospatial data available freely on the internet.

The Government of Canada recently announced that the National Library and National Archives are to merge in a new organization, Library and Archives Canada. ACMLA was included in the consultation process, and its board stressed the importance of having legal deposit for maps and spatial data in Canada.

Contributed by Tim Ross,
timross@interchange.ubc.ca.

Cataloging News

Yugoslavia Officially Changes Name

On Feb. 4, 2003 the Yugoslav parliament adopted the Constitutional Charter of the State Union of Serbia and Montenegro, marking the beginning of a new state, replacing the Federal Republic of Yugoslavia. The Library of Congress has established new subject headings for the country; a new MARC country code has yet to be established. The Library of Congress Authority Record is below:
Conferences and Classes

Western Association of Map Libraries. Fall 2003 Meeting. Santa Cruz, California. Host: Cynthia Jahns. URL: http://library.ucsc.edu/maps/waml/.


Western Association of Map Libraries. Spring, 2005 Meeting. California State University – Chico.

Maps & Society Programme, 2002-3. University of London, Warburg Institute, Woburn Square, London at 5 PM on a Thursday. URL: http://www.ihrinfo.ac.uk/maps/warburgprog.html or contact Tony Campbell (t.campbell@ockendon.clara.co.uk).


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International Association for Social Science Information Service & Technology (IAASSIST). To Be Arranged. URL: http://www.iaassistdata.org/conferences/index.html.


ESRI Education User Conference. San Diego, California. Date to be Announced. URL: http://www.esri.com/industries/k-12/educ/index.html.

ESRI User Conference. San Diego, CA. Date to be Announced.


Digital Spatial Data

Monterey Bay Research Institute CD-ROMs Available

The following CD-ROMs that have been released by Monterey Bay Research Institute (MBARI):

- Hawaii Multibeam Survey (Digital Data Series No. 2)
- Monterey Bay Multibeam Survey (Digital Data Series No. 3)
- Santa Barbara Multibeam Survey (Digital Data Series No.4)
- Northern California and Oregon Margin Multibeam Survey (Digital Data Series No. 5)
- West Coast Seamounts and Ridges Multibeam Survey (Digital Data Series No. 7)

To request copies of these CD-ROMs, send a request to cdrom@mbari.org. All CD-ROMs are free. More information on MBARI mapping projects is available at: http://www.mbari.org/data/mapping/mapping.htm.

Contributed by Julie Sweetkind-Singer, Stanford University Libraries
Addressing Standard Under Review at FGDC

The Federal Geographic Data Committee (FGDC) recently released the Addressing Standard for public comment. The comment period will close July 31, 2003. The objective of the Standard is to provide a method for documenting the content of address information. As a data usability standard, the Standard describes a way to express the content, applicability, data quality and accuracy of a dataset or data element. The Standard additionally codifies some commonly used discrete units of address information, referred to as descriptive elements. It provides standardized terminology and definitions to alleviate inconsistencies in the use of descriptive elements and to simplify the documentation process.

The Standard establishes the requirements for documenting the content of addresses. It is applicable to addresses of entities having a spatial component. The Standard does not apply to addresses of entities lacking a spatial component and specifically excludes electronic addresses, such as e-mail addresses.

The FGDC Coordination Group approved releasing the draft Address Data Content Standard for public review at its April 1, 2003 meeting. The public review draft is available at http://www.census.gov/geo/www/standards/sddd/ADSproposal.html. Reviewers should refer to FGDC Directive #2d, Review Guidelines - Review Comment Template when preparing and submitting comments.

For information about the FGDC standards process (including public review), please visit FGDC Standards or contact Ms. Julie Binder Maitra, FGDC Standards Coordinator, by phone: (703) 648-4627 or E-mail: jmaitra@fgdc.gov.

FGDC Developing Profile of ISO 19115

The Federal Geographic Data Committee (FGDC) is developing metadata profiles that conform to the ISO 19115 Metadata standard. The metadata profiles presently being proposed are (1) a profile of ISO 19115 that is harmonized and consistent with FGDC-STD-001-1998 and (2) a profile that fully incorporates the richness and fullness of ISO 19115. Profile 1 will ensure existing FGDC metadata records can be migrated that conform to ISO 19115 while Profile 2 will enable metadata producers to fully exploit and metadata users to fully utilize the richness of ISO 19115. It is important to note that ISO 19115 has numerous metadata entities and attributes that are presently deficient in FGDC-STD-001-1998. During the course of development of these profiles, it may be determined that additional profiles are necessary to fully meet the National Spatial Data Infrastructure (NSDI) metadata requirements.

Cadastral Data Standard Approved

The Cadastral Data Content Standard was published in May. The standard was developed to support automation and integration of land records information. It is intended to be usable by all levels of government and the private sector. The standard contains the standardization of entities and objects related to cadastral information including survey measurements, transactions related to interests in land, general property descriptions, and boundary and corner evidence data. Any or all of these applications are intended to be supported by the standard. The standard is not intended to reflect an implementation design.

The intended geographic scope of the standard is all fifty states of the United States including all onshore cadastral as well as offshore Outer Continental Shelf Blocks. Applicability of this standard in other geographic areas and business processes, such as the Insular Areas of the United States and non-Outer Continental Shelf Block marine applications has not been determined. The standard can be viewed at: http://www.fairview-industries.com/webdocs/cad-stand-1-3.pdf.

OGC Releases Web Map Service Cookbook

From the Open GIS Consortium Web Site: The Open GIS Consortium, Inc. (OGC) recently announced the availability of the Web Map Service (WMS) Cookbook version 1.0, the first in a planned series of how to books detailing the implementation and use of OpenGIS Specifications. WMS defines interfaces for Web-based software to learn about, retrieve, merge and query maps. The Cookbook provides the basic understanding and steps needed for implementing and exploiting the WMS interface and related
Cookbook contributors include software vendors, universities, and local government users of the WMS interface from around the world. The variety of contributions highlights the different software being used and insures widespread applicability. The book is divided into three chapters. Chapter 1 establishes the background and context of the WMS interface implementation specification including a discussion of WMS client and server development technologies (XML, XSL/XSLT, ASP/JSP, etc.). This introductory chapter provides a general orientation for all readers but is targeted for managers and end-users. Chapter 2 addresses the design architecture of software systems that implement the WMS interface through use-case scenarios, WMS request examples, and illustrations. DTD/XML documents and XSL/XSLT style sheet examples highlight the role these technologies can play in WMS client and server implementations. Chapter 3 explores implementations of WMS in existing software on both the server and client side. Detailed "recipes" for implementing WMS in popular commercial, open source and freeware products are provided. Technical personnel deploying existing systems and developers implementing new systems will find this chapter particularly useful.

Stephan Winter, Associate Professor at the Institute for Geoinformation, Technical University Vienna, Austria shared his students’ experience with the Cookbook. "The students were able to implement a WMS service (with no prior knowledge of server installation) within 4 weeks of part-time effort. The result is currently running on an intranet. The students reported that it was possible to do such a project with only the cookbook in hand. I'm confident the Cookbook will be valuable to a wide range of users." OGC is an international industry consortium of more than 250 companies, government agencies and universities participating in a consensus process to develop publicly available interface specifications. OpenGIS Specifications support interoperable solutions that "geonable" the Web, wireless and location-based services, and mainstream IT. The specifications empower technology developers to make complex spatial information and services accessible and useful with all kinds of applications. Visit the OGC website at http://www.opengis.org.

GIS Data Corruption using WinZip

According to a recent ESRI technical announcement, WinZip can corrupt spatial data. ESRI has posted a document on how to fix the problem on their Knowledgebase (URL: http://support.esri.com/index.cfm?fa=knowledgebase.techarticles.articleShow&d=17135). According to the document, users should change the options in WinZip Classic so that the TAR file smart CR/LF conversion box is not checked. Data can then be unzipped without problems.

Employment

Curator of Maps. Boston Public Library. Resumes and cover letters, as well as inquiries, applications, and nominations, should be directed to: Dr. Nancy B. Sobel, Senior Associate, ISAACSON, MILLER, 334 Boylston St. Suite 500, Boston, MA 02116. Phone: (617) 262-6500. Facsimile: (617) 262-6509. EOE/AA. Our preferred format is via email to nsobel@imsearch.com, using MS Word.

Map Librarian. University of Washington Libraries. Map Collection and Cartographic Information Services. Applicants should submit a letter of application, a full resume including a work telephone number and e-mail address, salary requirements, and the names, addresses and telephone numbers of at least three references who are knowledgeable of the applicant’s qualifications for this position. Submit applications to: Charles E. Chamberlin, Deputy Director of Libraries, University of Washington Libraries, 482 Allen Library, Box 352900, Seattle, Washington 98195-2900. Applications due by April 23, 2003.

GIS/Map Librarian. East View Cartographic. Librarians interested in applying for this position should submit their letters of application, CV, and contact information for three references to: East View Cartographic, Geoffrey Forbes, Director of Operations, 3020 Harbor Lane N, Minneapolis MN 55447-5137, E-mail: gforbes@cartographic.com, Tel.: (763)253-0679, Fax: (800) 800-3839.
GIS Specialist, Massachusetts Institute of Technology. Resume review will begin Monday, June 9, 2003. Applications must include a cover letter, resume, and names and addresses of three current references and should be mailed to: Search Committee for GIS Specialist, The Libraries, Room 14S-324, Massachusetts Institute of Technology, 77 Massachusetts Ave., Cambridge, Massachusetts 02139-4307 or submit online at: http://web.mit.edu/hr/ or fax to 617-253-0583.

General News

Mapping America Exhibit at San Francisco International Airport

An exhibit titled "Mapping America" has opened at the San Francisco Airport Museum featuring the David Rumsey Map Collection. The exhibit also employs digital screens with images of the exhibition maps taken from the Rumsey online Map collection at www.davidrumsey.com. The show provides a unique look at America's historical evolution through a selection of eighteen, nineteenth and twentieth-century maps.

Rumsey says he can't image a better place to exhibit his private map collection than the airport, the only accredited museum in an airport in the country. The installation includes 74 maps, atlases, guidebooks, globes and charts from his private collection, which numbers more than 150,000 pieces.

The Mapping America exhibition is on view through January 15, 2004 and is open 24 hours a day, free of charge. It is located pre-security in Gallery D-5 Central South Connector, located between Terminals 1 and 2 near the Delta and American Airline gates. For a map locating the exhibit space see www.sfarts.org/maps/index.html.

Contributed by Phil Hoehn, Map Librarian, philhoehn@juno.com.

Rand McNally Emerges from Chapter 11

From the Rand McNally Web Site: On April 7, 2003, Rand McNally & Company announced that it had completed its financial restructuring and recapitalization, and has emerged from Chapter 11. With the consummation of the reorganization, Leonard Green & Partners, L.P. now owns a majority interest of the company.

Leonard Green & Partners, L.P. is a Los Angeles-based private equity firm specializing in management buyouts of middle market companies. Since its founding in 1989, Leonard Green & Partners, L.P. has invested in 27 transactions. The recent closing of Green Equity Investments IV, L.P. brings the total amount of private capital managed by the firm to approximately $3.7 billion.


Newberry Library Receives Gousha Road Maps Donation

Rand McNally and Newberry Library announced a major donation of historical road maps. Rand McNally donated the complete archival collection of more than 100,000 printed road maps produced between 1927 and 1996 by the H. M. Gousha Company, a company it had acquired in 1996. With this collection, the Chicago library is now the leading center for the conservation and study of the American road map. A set of duplicate maps has been provided to the Geography and Map Division of the Library of Congress.

Historians use road maps to study patterns of leisure travel and the growth of roadside service industries, and to research vanished communities and roads. The illustrated covers can serve as a resource for learning about social issues and mores of the time. For laymen, the routes on an old highway map can invoke images of youth, family trips and memories; perhaps conjure up a vision of John Steinbeck's Okies or Jack Kerouac's Route 66.

In a 50-year period, between the 1920s and the mid-1970s, millions of road maps were printed by the nation's oil companies as promotional items for gas stations to distribute free to motorists. Rand McNally, General Drafting, and
Gousha were three map companies primarily responsible for much of this enormous cartographic output. The Newberry Library is an independent library that is free and open to the public for research and reference in the humanities. The Library offers lectures, seminars, concerts, and exhibits related to its collections. For more information, visit http://www.newberry.org.

**AGS Fellowships for 2003-2004**

The American Geographical Society Library, University of Wisconsin-Milwaukee Libraries, welcomes applications for Helen and John S. Best Research Fellowships. Stipends of $375 per week, for periods up to 4 weeks, will be awarded to support residencies for the purpose of conducting research which makes direct use of the Library. The Fellowships will be tenable between December 1, 2003 and November 30, 2004.

The AGS Library, the former research library and map collection of the American Geographical Society of New York, has strengths in geography, cartography and related historical topics. Applications must be postmarked by September 15, 2003. For further information, write, call or e-mail the AGS Library, P.O. Box 399, Milwaukee, WI 53201-0399, Tel: (414) 229-6282, E-mail: agslib@uwmx.edu, Web site: http://www.uwm.edu/Libraries/AGSL.

**Contributed by Christopher Baruth, Ph.D., cmb@leardo.lib.uwm.edu**

**Northeastern U.S. Map Exhibits**

Three cartographic exhibits will be mounted in the Northeastern

U.S. this summer, all within easy driving distance of each other. Opening first will be the **Cartographic Treasures at Harvard** exhibit which will coincide with the 20th International Conference on the History of Cartography (ICH) and will run from June 16th through September 2003. Also coinciding with this conference will be an exhibit at the Osher Map Library in Portland, Maine entitled: **Mapping the Republic: Conflicting Concepts of the Territory and Character of the USA, 1790-1900** with smaller exhibits at the Maine Historical Society and the Portland Museum of Art. And, if that is not enough, you can then travel to the Concord Museum in Concord, Mass. to view **Degrees of Latitude: Maps of America from the Colonial Williamsburg Collection** from July 10 - October 19, 2003.

**Contributed by David Cobb, cobb@fas.harvard.edu.**

**Internet Resources & News**

**WebGLIS Replaced**

The US Geological Survey recently announced that the Global Land Information System (GLIS), a tool for querying and ordering satellite images, aerial photographs, and cartographic products, has been replaced by EarthExplorer <http://earthexplorer.usgs.gov>. Several resources are not available through EarthExplorer, although they can be ordered through EROS Data Center’s customer services (Customer Services, U.S. Geological Survey, EROS Data Center, 47914 252nd Street, Sioux Falls, SD 57198-0001, Tel: 800-252-4547, Tel: 605-594-6151, TDD: 605-594-6933, Fax: 605-594-6589, Email: custserv@usgs.gov).

**Who Global Atlas of Infectious Diseases**

The World Health Organization’s (WHO) Communicable Disease Cluster has developed an interactive mapping site to map infectious diseases. The site, called the Global Atlas of Infectious Diseases, provides ready made

**Items not available through EarthExplorer include:** MRLC Landsat TM Derivative, Side-Looking Airborne Radar (SLAR), Alaska AVHRR Twice-Monthly Composites, Conterminous U.S. AVHRR, Sahel & NW Africa 14-Day NDVI Composites, SCAR Geodesy & Geographic Information, Geophysical Data, National Geochronological Data Base, National Uranium Resource Evaluation, Northern Great Plains 1988 AVHRR, Land Cover Characteristics Data Set, National Atlas, and the National Hydrography Dataset. Some of this data is available through other sites.

**SARS Mapping in Hong Kong**

From an ESRI Press Release: In response to the global outbreak of Severe Acute Respiratory Syndrome (SARS), ESRI China (Hong Kong) has developed a SARS Mapping web site to disseminate the latest information on the geographic distribution of the illness.

The site is based on the data from the Government of Hong Kong’s Department of Health (DOH). The Hong Kong SARS map shows the distribution of buildings with infected residents. The site can be viewed at: http://www.esrichina-hk.com/SARS/Eng/sars_eng_main.htm.
maps showing the distribution of several infectious diseases. The site also has a link to an interactive mapping portal.

The Atlas contains maps, tables and charts showing different diseases at a global, country, district and community level. Disease data can be related to a range of indicators on poverty, economics, education and health services to provide a more comprehensive picture of the situation at different levels. The Global Atlas database currently contains over 300 indicators on over 20 infectious diseases.

Maps on Indian Land Cessions

The maps from Indian Land Cessions in the United States by Charles C. Royce are available on the Internet through the USGenWeb project. The original report appeared in the 18th Annual Report of the Bureau of American Ethnology, to the Secretary of the Smithsonian Institution, 1896-97, by J. W. Powell, Director - In Two Parts - Part 2 which was printed by the Government Printing Office in 1899. The site contains links to 67 scanned maps showing Native American distribution at various times during US history. The site is available at: http://www.rootsweb.com/~usgenweb/maps/cessions/.

Fish & Wildlife Service Interactive Mapping

The US Fish and Wildlife Service web site Interactive Map and Data Server (IMADS) site <http://www.fws.gov/data/IMADS/index.htm> has links to several interactive mapping applications. Presently, the number of applications available are limited, but the site will grow as time goes on.

This server has two objectives: to provide web-based access to geographic data for non-GIS users as well as staff trained in GIS and to create a simple process for querying and displaying geographic and tabular data pertaining to the administrative and natural resource responsibilities of the U.S. Fish and Wildlife Service (FWS). At present, the site has information on the site links to interactive mapping services on FWS office locations, refuge boundaries and internet sites. The Office Locations site contains base data for the entire United States, such as Census and Legislative boundaries, hydrologic units, and federal land ownership. The Boundary site contains data on the legislated boundaries of Wildlife Refuges. The Internet service contains links to local internet sites throughout the United States.

Bureau of Transportation Statistics Data

The Bureau of Transportation Statistics (BTS) geospatial data site <http://www.bts.gov/gis/ntatlas/index.html> can be used to download BTS data on transportation facilities, networks, and services of national significance. The data is designed to be used with geographic information system (GIS) software to locate transportation features and provide a framework for transportation network analysis. The site includes links to National Transportation Atlas (2002), Dynamap 100 and the 1998 North American Transportation Atlas.
Mexico and United States. Also, included are highway and rail Border Crossing facilities located at the border of the United States and Canada or the United States and Mexico. The data is available online and on a compact disc, which was also distributed through the Federal Depository Library Program.

The site also contains links to software, including a data conversion program developed by BTS to convert NTAD and NORTAD files into several GIS file formats and translation programs developed by BTS, customers and vendors.

**Louisiana Purchase on American Memory**

A web site related to the Louisiana Purchase is available on American Memory. The site [http://memory.loc.gov/amem/amlaw/louisianapurchase.html](http://memory.loc.gov/amem/amlaw/louisianapurchase.html) contains links to a historical timeline on the Louisiana Purchase, which was finalized 200 years ago in a treaty signed on April 30, 1803. The Purchase doubled the size of the United States and enabled its western expansion. The timeline provides links to documents pertinent to the history of the Louisiana Purchase from 1802 to 1807, including treaty ratification, establishment of a government for the new territory, boundary issues, and its role in the Lewis and Clark Expedition. All of the congressional documents contained within the timeline come from the American Memory collection “A Century of Lawmaking for a New Nation.” The site also contains links to maps related to the Louisiana Purchase.

**National Atlas Printable Maps**

Do you need a simple prepared map that you can print at home, at school, or in the office? Take a look at the USGS’ expanding list of maps formatted to be viewed, printed, or downloaded from the web. The National Atlas of the United States of America® Web site [http://www.nationalatlas.gov/printable.html](http://www.nationalatlas.gov/printable.html) has printable maps on several topics, including the Congressional Districts for the 108th Congress, individual maps on Presidential elections from 1789-2000, and maps on the distribution of West Nile Virus.

**New Address for Terraserver**

The Microsoft Terraserver archive of USGS topographic maps and aerial photographs has moved to Terraserver-USA [http://terraserver-usa.com](http://terraserver-usa.com). Joseph Kerski, USGS, has outlined several educational and GIS uses for the site:

Use the maps and images to analyze human and physical processes across the Earth’s surface, from across the country to right in your own neighborhood. Examples include the following:

1) Land Use: What is the land use like in your neighborhood? In your region? How does it compare to land use elsewhere in the United States? Why? What influence does population, climate, proximity to coastlines, and other phenomena have on land use? Why?

2) Landforms: What type of landforms exist in your neighborhood? In your region? How do they compare to landforms elsewhere in the United States? Why? What influence does climate, geology, rivers, ancient and current processes, proximity to coastlines, and other phenomena have on landforms? Why and how? Examine the following landforms in your region and in other regions: plains, floodplains, alluvial fans, oxbow lakes, deltas, braided streams, intermittent streams, glaciers, glacial valleys, eskers, kames, moraines, coastlines, ancient lakes, cirques, buttes, mesas, lava flows, sand dunes, karst topography, rolling hills, mountains, valleys, swamps, marshes, lakes, and other landforms. How are these features evident on the topographic maps and aerial photographs? What will the landscape look like 10 years from now? In 100 years? In 1000 years?

3) Population: Can you estimate the population in the map or photograph of your neighborhood? In your region? How does it compare to population elsewhere in the United States? Why is it similar or different? What influence does land use, climate, perception, and other phenomena have on population? Why? What does the settlement pattern look like in your region? Is it clustered around a certain physical feature, or spread out evenly across the landscape? What are the reasons?

4) Urbanization: What type of dwellings do people live in around your area? How do these dwellings compare in size and density to those in other parts of...
your city? How do these dwellings compare to those in other urban areas? Why? What influences the size and density and type of dwellings?

5) Scale. How much terrain is visible (in square miles or square kilometers) at a scale, or resolution, of 1 meter? Versus 2, 8, or 16 meters? How does the amount of detail change as the scale, or resolution, changes? What is the best scale to view a glacier? A school building? A river delta? A city? Why? How does the resolution of the aerial photographs compare to the topographic maps? What is the maximum that you can zoom in on an aerial photograph versus a topographic map?

6) Seasons. Examine some aerial photographs taken in summer versus winter, spring, and fall. What are the differences, in vegetation and sun angle, for example? Why do they exist? What would your area look like during the other seasons?

Geographic Information System (GIS) Uses: With a GIS, you can:

1) Use these maps and images as base maps behind your field-collected coordinates. The maps, as your field-collected coordinates using a GPS (Global Positioning System) receiver, are both in Earth-referenced coordinates. Therefore, the points you collect using your GPS will plot onto these maps. Use the procedures below to ensure that the photographs and maps you download from terraserver contain the Earth-referenced information.

2) Drape the maps and aerial photographs on a 3D digital elevation model (DEM) to visualize the Earth as it truly exists, in three dimensions.

3) Enhance all spatial analysis with maps and aerial photographs.

Contributed by Joseph Kerski, jjkerski@usgs.gov

New Publication from OGC

From the Open GIS Consortium Web Site: The Open GIS Consortium (OGC) announces OGC User Magazine, a free quarterly e-mail publication that highlights the use of OpenGIS® Specifications in building world class, interoperable solutions for spatial and related technologies. The first issue is currently online at http://www.opengis.org/pressrm/ogcuser/20030430ogc_user.htm.

OGC User will provide detailed studies of how and why organizations are choosing to build their small to enterprise solutions around these specifications and the benefits and challenges they see. Adena Schutzberg, a 12-year veteran of the industry, will edit the publication. In the first issue, Mark Reichardt, OGC’s Executive Director, Outreach and Community Adoption, explained the reasoning behind the publication: “OGC has reached a point of critical mass where the work of our members is achieving broad application in the user community. User organizations are extending their existing systems via OpenGIS specifications, and are embracing products in the marketplace that implement our specifications. It’s time to share these stories so that others can explore the benefits and possibilities that come with interoperability.”

Subscription information is available at http://www.opengis.org/ogcSubscribe.php. If you have a story suggestion for a future issue, please contact the editor at adena@opengis.org.

OGC is an international industry consortium of more than 250 companies, government agencies and universities participating in a consensus process to develop publicly available interface specifications. OpenGIS Specifications support interoperable solutions that “geo-enable” the Web, wireless and location-based services, and mainstream IT. The specifications empower technology developers to make complex spatial information and services accessible and useful with all kinds of applications. Visit the OGC website at http://www.opengis.org.

OGC Geospatial One Stop Portal

From the Open GIS Consortium Web Site: The Open GIS Consortium (OGC) recently announced that work on the Geospatial One Stop Portal architecture and prototype is well underway by OGC member companies. As of this date, the following companies are actively participating or have agreed to provide technology: Compusult, CubeWerx, Galdos Systems, SAIC, Autodesk, Intergraph, PCI Geomatics, Sapient Technology, Questerra, Oracle and Northrop Grumman Information Technology, TASC. Twenty companies offered
proposals in response to a December, 2002 Request for Quotations (RFQ)/Call for Participation (CFP) in the OGC Geospatial One-Stop Portal Initiative (GOS-PI).

The goal of the GOS-PI is to build a standards-based architecture and prototype for a portal that will provide geospatial information discovery, access, and mapping in the US. The portal implementation will be a "prototype" in the literal sense of a first working example on which future instances will be based. OGC is partnering with the Geospatial One-Stop (GOS) project on this work. Led by the Department of the Interior, GOS is one of 24 US Office of Management and Budget E-Government initiatives to improve effectiveness, efficiency, and customer service throughout all layers of government. Geospatial One-Stop builds upon National Spatial Data Infrastructure objectives to enhance interoperability among geographic components of government activities. More information about Geospatial One-Stop is available at http://www.geo-one-stop.gov/.

David Schell, President of OGC, said, "The GOS Portal will be a key feature of E-Government in this country and it will be imitated around the world, so it is extremely important that it is, from the outset, an exemplar of multi-vendor interoperability. If GOS stays on course with an open, non-proprietary approach, it will be completely in alignment with the spirit and letter of Section 210 of the E-Government Act of 2002, which mandates the Department of Interior ‘to promote the development of interoperable GIS technologies for low-cost use and sharing of geographic data by government entities and the public.’"

This initiative, under the auspices of Geospatial One-Stop, is being sponsored by the National Aeronautics and Space Administration, the Federal Geographic Data Committee, the US Department of Agriculture, and the US Geological Survey. As detailed in the OGC RFQ, the initiative sponsors and participants are working to refine and document the technical architecture of the Geospatial One-Stop Portal. In the initiative, participants and supporting organizations will develop, demonstrate and install a working prototype implementation based on that architecture.

James R. O’Neill, President of Northrop Grumman Information Technology TASC said, “The Geospatial One-Stop Portal is a key enabler for the program to allow government to government sharing of geospatial information. As a leader in critical, protected, custom-synthesized information engineering products and services for the national and homeland security communities, we support the federal government’s integration of products from vendors using OGC specifications to build a truly interoperable access and dissemination mechanism for geospatial data.”

GOS-PI is part of OGC’s Interoperability Program, a global, collaborative, hands-on engineering and testing program that rapidly delivers proven candidate specifications into OGC’s Specification Program, where they are formalized for public release. In OGC’s Interoperability Initiatives, international teams of technology providers work together to solve specific geoprocessing interoperability problems posed by the Initiative’s sponsoring organizations. Questions about the OGC Interoperability Program and GOS-PI should be addressed to Mr. Ron Fresne, Interoperability Initiatives Manager, rfresne@opengis.org, +1 (703) 707-0261.

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* Contributed by Phil Hoehn.

Federal, State & Local
Government News

USDA Announces Partnership
with NASA

On May 30, 2003, Agriculture
Secretary, Ann M. Veneman, and
National Aeronautics and Space
Administration (NASA)
Administrator, Sean O’Keefe,
announced a partnership that will
use a variety of technologies, such as
remote sensing, to protect the
environment and enhance the
agricultural competitiveness of
American farmers and ranchers.
Veneman and O’Keefe signed a
Memorandum of Understanding
(MOU) that permits USDA to draw
on the best scientific and technical
information available from NASA
in monitoring, mapping, modeling
and systems engineering. The
primary purpose of this new
cooperative effort is to help
increase the production efficiency
of farmers while continuing to
reduce the cost of production by
bringing more practical benefits of
science and technology into
agricultural applications.

An immediate outcome of the new
partnership is a $1 million, 3-year
program to establish Geospatial
Extension Programs at land grant
universities. Geospatial extension
specialists work closely with
NASA and USDA to address
geographic information systems/
remote sensing needs of the
agricultural community. Among the
technological advances available to
farmers from precision agriculture
techniques are:

- Monitors and maps that can
detect and record changes
in yields, soil attributes or
crop conditions, including
pest infestations and water
nutrient stress.
- Technologies that use
information from sensors to
vary the application rate
and timing for seeds,
fertilizers, pesticides and
irrigation water.
- Vehicle guidance systems
that provide on-the-go
sensing for weed and pest
populations and detect crop
traits, such as protein or oil
content, during harvest.

This joint endeavor could also
spawn information that will
contribute to project plans for
NASA’s Earth Science Enterprise,
an initiative to develop a scientific
understanding of the Earth’s
response to natural or human-
induced changes. The technology
will be highlighted at the
Ministerial and Expo on
Agricultural Science and
Technology June 23-25 in
Sacramento, Calif, where ministers
from over 180 countries will
discuss and share science and
technological innovation in
agriculture. Additional conference
information available at: http://

184 News of Note
NIMA Kicks off Bicentennial Commemoration of the Lewis and Clark Expedition

From a NIMA Press Release: On February 28, the National Imagery and Mapping Agency kicked off its 4-year bicentennial commemoration of the historic Lewis and Clark Expedition, which was commissioned by President Thomas Jefferson in 1803 to explore what is now known as the Louisiana Purchase. This was the first large effort by the fledgling United States government to "Know The Earth ... Show The Way," and is considered by many to be the nation’s first true geospatial intelligence support mission.

“Captains Meriwether Lewis and William Clark set the standards NIMA follows today,” said guest speaker Congressman Doug Bereuter (R-Neb), a member of the House Permanent Select Committee on Intelligence (HPSCI) and co-chair of the bicameral and bipartisan Lewis and Clark Bicentennial Congressional Caucus. “The efforts begun by Lewis and Clark to study trade flow, boundaries between nations and the geography of the region continue today. In Bosnia, Afghanistan and elsewhere, the Intelligence Community continues to collect information on potential adversaries — doing with amazing tools — essentially the same kind of work conducted by Lewis and Clark 200 years ago,” said Bereuter. “And NIMA remains in the forefront of such efforts.”

NIMA Director, retired Air Force Lt. Gen. James R. Clapper Jr., presented Rep. Bereuter with a reproduction of the map drawn by Captain Clark circa 1803 illustrating North America from the Mississippi to the Pacific Ocean. NIMA's has also established a Web site on the Lewis and Clark Expedition: http://www.nima.mil/ocrn/nima/history/lc/. The MrSID Viewer is licensed from International Land Systems (ILS), Inc. and is a cooperative product with LizardTech. ILS can be reached over the Internet at www.landsystems.com or www.lizardtech.com. LizardTech, MrSid and the LizardTech logo are trademarks. It is recommended that you use Internet Explorer when downloading any of these graphics. Information on the maps in the series appears below:

NIMA Historical Map Series Available from USGS

From a NIMA Press Release: NIMA is the proud inheritor of our nation’s mapping, charting and geodesy capabilities. To celebrate and illustrate their history, and show in both an educational and interesting way, the analytic disciplines that form the basis of NIMA’s core competency of Geospatial Intelligence (cartography, photo interpretation, imagery analysis, regional, aeronautical, hydrographic, and geodetic analysis), NIMA has developed a Historical Poster Series. These attractive and informative visuals demonstrate how NIMA’s legacy tradecrafts enable them to provide timely, relevant and accurate Geospatial Intelligence support to the nation’s warriors and decision makers.

Posters are approx. 24"x36. To order the posters, contact the US Geological Survey (USGS) Earth Science Information Center at 1-888-ask-usgs or send an e-mail to ask@usgs.gov. Posters available in the series include: the Lewis and Clark Expedition (Early American), Antietam (Civil War), and Armistice Day (WWI). Posters on World War II include: D-Day, the Normandy Air Campaign, Philippines and Iwo Jima. The historical maps are also available for download in Mr.SID® format. MrSID® files require the download of the free MrSID Viewer. The MrSID® Viewer displays images that have been compressed into the MrSID® format. The MrSID Viewer is licensed from International Land Systems (ILS), Inc. and is a cooperative product with LizardTech. ILS can be reached over the Internet at www.landsystems.com or www.lizardtech.com. LizardTech, MrSid and the LizardTech logo are trademarks. It is recommended that you use Internet Explorer when downloading any of these graphics. Information on the maps in the series appears below:

Lewis and Clark Expedition - Map - Original at the Library of Congress. The Lewis and Clark Expedition (officially, the Corps of Discovery) was the young republic’s most ambitious federal effort to gain an understanding and to record the vast territory the United States had purchased from France, in the Louisiana Purchase. Two Army officers and their team charted mountains and rivers, described wild life, wrote intelligence reports about the land, and reported on the indigenous tribal population and competing world powers in the new territory. This map is based on William Clark’s original drawing and was first printed in 1814. It displays the location and relationships between mountains and rivers - vital knowledge needed for transcontinental trade and the Westward migration of settlers.

Antietam - Map - One of a series of 14 maps based on surveys of the Antietam Battlefield showing military positions during the course of the battle. The originals are located at the Antietam National Battlefield. These maps were
created in response to a congressional mandate to document significant Civil War battlefields. The purpose was to gain a greater understanding of the movement of troop, artillery and cavalry units as they maneuvered to win an advantage. In the end, the opposing forces became bogged down ending in a stalemate. Information is depicted on this map just as modern day Geospatial Intelligence products are used today. The NIMA Professional Military Education CD - available from USGS - contains the entire series of maps, the current map and imagery plus data viewers allowing them to be displayed on a personal computer. For more information visit http://www.nima.mil/ocrn/nima/antietam/index.html.

Armistice Day - Map - Original at the St. Louis Soldiers Memorial, St. Louis Missouri. American military mapping truly came of age in the First World War. For the first time, American cartographers worked closely with their Allied European counterparts to produce maps that could be shared. This map shows the placement of all forces on Armistice Day, 11AM, November 11, 1918. American positions are shown in relation to the entire Western Front, as well as the Order of Battle. This portrayal of different combinations of information is typical of Geospatial Intelligence products.

D-Day - Map - Online at the Library of Congress map site

http://memory.loc.gov/ammem/gmdhtml/gmdhome.html
This site has the entire series of HQ Twelfth Army Group situation maps depicting the position of the 12th Army Group and adjacent Allied Forces and of the German units for each day from D-Day (6 June 1944) thru 26 July 1945. Image - US Army Center for Military history http://www.army.mil/cmh-pg/reference/normandy/Pictures.htm.

Normandy Air Campaign - Map - Original at the National Archives, Washington D.C. P-47 fighter-bombers, along with other planes such as the Hawker Typhoon, formed an intimate partnership with allied ground forces during the Normandy Campaign. Through close communication with mobile airground control posts known as “contact cars” that accompanied leading armored forces, aircraft pilots were kept informed of enemy and friendly ground locations. This information exchange helped pilots execute precision air strikes on waiting German forces and significantly reduced the chance of allied troops falling victim to friendly air fire. Image - P47’s flying in patrol formation from US Air Force photo collection, background image from http://www.web-birds.com. (Taken from an A-20 during the invasion). This site was established by veterans and contains information about WW2 units, missions and equipment.

Philippines - Map - Captured Japanese Map - Original at the National Archives, Washington D.C. This map shows the totality of air and sea battles during the second Philippine campaign, when the US regained control of the islands from the Japanese. The map displays the Japanese routes the Americans had to cut to achieve victory. Image - U.S.S. Hornet from US Navy Site http://www.navy.mil. The site contains histories and photos of Navy ships. Aircraft from the Hornet were used for photo reconnaissance prior to the invasion of Okinawa.

Iwo Jima - Map - Original at the USMC Museum Washington Navy Yard, Washington D.C. This map of Iwo Jima shows the original invasion plan, and includes handwritten updates. Aerial reconnaissance was used to locate and identify many of the Japanese defensive positions.

NIMA Releases CD on Battle of Antietam

In honor of the 140th anniversary of the Battle of Antietam, NIMA is releasing a special demonstration disk - the Antietam Battlefield Professional Military Education CD. The primary purpose of the CD is to give our military customers the opportunity to experiment and become familiar with Geospatial Intelligence tools so they can later apply their skills in an operational setting. NIMA participated in a special event honoring the anniversary of the Battle of Antietam on Sept. 17, 2002 in Sharpsburg, Md.
Established by an Act of Congress on August 30, 1890, the Civil War site marks the end of General Robert E. Lee's first invasion of the North in September 1862. The battle claimed more than 23,000 men killed, wounded and missing in one single day — September 17, 1862 — and led to Lincoln's issuance of the Emancipation Proclamation.

NIMA created the CD with the assistance of the Antietam Battlefield historian, Geographic Information Systems Lab, U.S. Geological Survey, Park Geospatial Information Science Manager and the US Marine Corps Intelligence Activity. To obtain a copy of the PC-compatible CD, contact the U.S. Geological Survey (USGS). DOD Customers can order this product through the Defense Logistics Agency (DLA). Ordering Information:

Series: V031M
Item: ANTIETAM
Edition: 001
NSN: 7644014889813
NIMA Reference #: V031MANTIETAM

Commercial Remote Sensing Policy Announced

On June 28, 2002, President Bush directed the NSC, with support of the Office of Science and Technology Policy (OSTP), to review national space policies. The effort was coordinated under the auspices of the Space Policy Coordinating Committee, chaired by the NSC Senior Director for Defense Policy and Arms Control. Other Federal agencies, including NIMA, participated with recommendations regarding revision, consolidation and/or elimination of existing national space policy statement related to space activities. The new policy provides guidance for: the licensing and operation of U.S. commercial remote sensing space systems; U.S. Government use of commercial remote sensing space capabilities; foreign access to and exports of these capabilities; and government-to-government intelligence, defense, and foreign policy relationships involving commercial remote sensing space capabilities. Its goal is to advance and protect our national security and foreign policy interests by maintaining the nation's leadership in remote sensing space activities, and by sustaining and enhancing U.S. remote sensing industry. Doing so will also foster economic growth, contributing to environmental stewardship, and enabling science and technology excellence.

Under the new policy, NIMA continues to exercise key responsibilities for commercial remote sensing from space as it is applied to national security and foreign policy. The Departments of Interior and Commerce, and the National Aeronautical and Space Administration (NASA) are jointly responsible for identifying civil remote sensing needs. All Federal agencies will allocate the resources required to implement these objectives. NIMA will assist the civil agencies in any way it can to implement this policy and develop contract mechanisms. NIMA has long been on record as supporting a strong, robust and viable commercial imagery industry. The policy assigns specific implementation actions for the Secretaries of Defense, State, Commerce and the Director of Central Intelligence. NIMA will have a leadership position in preparation and community coordination of at least three of the implementation plans and will be a supporter of the remaining five. It is within these implementation plans where the details of the policy will be developed and defined. NIMA will remain dedicated to this effort to develop and execute the implementation plans. Further information about the U.S. commercial remote sensing policy is available on the USGS Satellite Images of Earth Debut as Art Prints.

Astonishing patterns, vivid abstractions, and fantastic shapes characterize "Earth as Art," a joint USGS and NASA collection of satellite imagery that displays 41 images of Earth taken by the Landsat 7 satellite from over 400 miles high. These graceful portraits of Earth show the most intriguing and illuminating aspects of nature. To do justice to such beauty, fine art prints of these and other selected U.S. Geological Survey (USGS) satellite and aerial images are now available as part of a recently signed cooperative agreement.
research and development agreement (CRADA) between the USGS and LookClickPrint, Inc., (LCP) of Los Lunas, New Mexico.

Under the CRADA, the USGS and LCP will together make premium-quality reproductions of the "Earth as Art" collection available to public. LCP will be responsible for producing, ordering, processing, and distributing prints from the collection. The USGS contribution will include providing digital files of the collection to LCP along with descriptive information of each individual image. Combining the skills of a master printer with state-of-the-art digital print technology, LookClickPrint, Inc. (LCP) uses archival inks, paper, and canvas to reproduce many types of images as premium-quality, fine art prints, each displaying rich color and precise detail. LCP offers prints of images from a network of museums - prints related to geography, astronomy, history, nature, sports, as well as traditional art.

USGS will continue to develop and bring to the attention of LCP other digital data and products that could be of interest to LCP customers. Customer response to this initial collection will be a key factor for USGS and LCP to determine what additional USGS images and maps may be suitable for incorporating into LCP's collection. LCP provides customers with direct access to USGS images and the capability to search and select an image, choose a size, and specify printing on either paper or canvas. Orders are then transmitted across a virtual private network to an LCP printing facility where each print is individually created according to the customer's order and shipped directly to that customer. Prints can be accessed and purchased through: 

The "Earth as Art" collection highlights images that were created by the USGS to introduce the general public to the Landsat Program administered jointly by USGS and the National Aeronautics and Space Administration. The USGS operates Landsat 5 and 7, manages the national archive of data collected by all of the Landsat satellites, and distributes these data to researchers around the world as part of The National Map. More information on the Landsat Program can be found at http://landsat7.usgs.gov/index.php. A Delaware corporation, LookClickPrint produces archival quality, custom-made, state-of-the-art digital reproductions of selected images from museums and other collections worldwide. To learn more about LookClickPrint, Inc., visit http://www.lookclickprint.com/

USGS Library Changes

In fall 2002, the USGS National Mapping Division (NMD) Reference Collection Library in Reston, Virginia was closed. Preparations were made for the USGS Library to accept its book and serials collection as well as the historic topographic map archive. The book collection has been moved to staging space within the USGS Library. Its contents are being cataloged and integrated into the main library collection. Selected journal subscriptions are being added to the USGS Library collection.

Responsibility for the historic topographic map archive was formally transferred to the USGS Library in March 2003. However, the archive will be maintained as a special collection in its present space (Room 2B-125, USGS National Center, Reston, Virginia). Service hours are 1-3 p.m. Monday through Friday. For access to this collection at other times, contact the USGS Library's reference desk at 703-648-4302. The USGS Library also has a large collection of these maps, accessible during the normal library hours of 8 a.m. to 4 p.m. Monday through Friday.

The topographic map archive is probably the most complete collection of USGS topographic maps. It includes each U.S. state and territory as well as all scales, editions, and various printings of these maps. Coverage dates from the 1880's, when the USGS began publishing standard topographic quadrangles.

Contributed by Erin P. Donnelly, edonnell@usgs.gov

New USGS Fact Sheets

- FS 0130-02. Satellite image atlas of glaciers of the world, by R. S. Williams, Jr. and J. G.


USGS releases New Atlas on Glaciers

In 1978, the USGS began the preparation of the USGS Professional Paper 1386, “Satellite Image Atlas of Glaciers of the World.” Between 1979 and 1981, satellite images were distributed to a team of 70 scientists from 25 nations who agreed to author sections of the Atlas on a geographic area (chapters B-K) or a glaciological topic (included in chapter A). The scientists used Landsat 1, 2, and 3 multispectral scanner (MSS) images and Landsat 2 and 3 return beam vidicon (RBV) images to inventory the areal occurrence of glacier ice on our planet within the boundaries of the spacecraft’s coverage (between about 82° north and south latitudes). Later contributors also used Landsat 4 and 5 MSS and Thematic Mapper, Landsat 7 Enhanced Thematic Mapper-Plus (ETM+), and other satellite images.

In addition to analyzing images for a specific geographic area, authors were asked to provide current information about the glaciers in each area and compare their present area with historical information about their past extent from published maps, reports, and photographs. Because of the limitations of Landsat images for monitoring small glaciers in some areas (the result of inadequate spatial resolution, lack of suitable seasonal coverage, or absence of coverage), some information on the extent of small glaciers was necessarily derived from other sources. The most recent chapter released deals with North America. P 1386-J. Satellite image atlas of glaciers of the world; North America, edited by R. S. Williams, Jr., and J. G. Ferrigno, U.S. Geological Survey. 2002. p. J1-J405. The atlas is available for $76 from USGS Information Services, Box 25286, Federal Center, Denver, CO 80225, Telephone 1-888-USA-MAPS. It is also available on the Web at: http://pubs.usgs.gov/prof/p1386j/.

New CD-ROM on Petroleum in Utah & Colorado

The USGS recently released DDS-0069-B, Petroleum Systems and Geologic Assessment of Oil and Gas in the Uinta-Piceance Province, Utah and Colorado. The assessment identifies petroleum source and reservoir rocks and hydrocarbon traps in the area of the Uinta and Piceance Basins in Utah.
and Colorado. Using this information, the USGS estimated the undiscovered oil and gas resources within each assessment unit in the Basin.

The purpose of the U.S. Geological Survey’s (USGS) National Oil and Gas Assessment is to identify possible new oil and gas reserves in the United States. The publication and associated data is also available on the Web at: http://geology.cr.usgs.gov/energy/noga/dds-69b/.

Tikrit, Basrah, Al Mawsil (Mosul) and Karkuk Added to Special Reference Series

The National Imagery and Mapping Agency (NIMA) recently published maps of Tikrit, Basrah, Al Mawsil (Mosul) and Karkuk, which join other special Iraq reference maps. NIMA produced these maps as tools to help its public affairs office and other government public affairs offices in their efforts to discuss issues with the media and public that might be related to the area depicted. The unclassified maps, also referred to by some users as reference graphics, are suitable for reference only and should not be used for any other purpose.

The maps will be available for public distribution in the near future from the U.S. Geological Survey (USGS) by calling 1-888-ASK-USGS. The USGS is the sales agent for the public distribution of unclassified NIMA topographic map products and digital cartographic data.

Information needed to order the maps is listed below in the following order:

1. Sheet Title
2. NIMA Stock Number
3. USGS Stock Number

TIKritch
K942STIKRIT
NSN 7643-01-506-3416

BASRAH
K942SALBASRAH
NSN 7643-01-506-3417

ALMAWSIL (MOSUL)
K942SALMAWSIL
NSN 7643-01-506-3418

KARKUK
K942SKARKUK
NSN 7643-01-506-3419

Electronic versions of the maps are available in JPEG, EPS (zipped), and MrSID® formats at http://www.nima.mil/cda/article/0,2311,3104_11762_114465,00.html. Users are cautioned to use a file format and size appropriate to their hardware/software capabilities.

(Note: MrSID® is a trademark of LizardTech, Inc.)

Historical Imagery

Declassification (HID). America’s Eyes: What We Were Seeing

The National Imagery and Mapping Agency (NIMA) is leading the U.S. Government effort to declassify and release to the public a variety of historical information about our nation’s Intelligence Systems through the Historical Imagery Declassification (HID) Program. The HID Program has three goals: promote the spirit of open governance; demonstrate results of taxpayer investment in national security and ensure that researchers from environmentalists to historians have access to useful and unique sources of information. NIMA has developed a Web site showing examples of the historical imagery: http://www.nima.mil/cda/article/0,2311,3104_11762_114934,00.html.

For more information on declassified imagery visit http://earthexplorer.usgs.gov or http://www.nara.gov.

Mojave Desert Subsidence Revealed by Satellites

From a USGS Press Release: The earth has subsided as much as four inches in parts of the Mojave Desert in southern California, according to U.S. Geological Survey (USGS) scientists. Using the satellite mapping process known as interferometric synthetic aperture radar (InSAR), scientists have detected large earth surface depressions near the agricultural areas of Lucerne Valley, El Mirage, Lockhart, and Newberry Springs in the southwestern portion of the Mojave Desert. The subsidence occurred between 1992 and 1999 and is linked to declining water levels.

The USGS study, in cooperation with the Mojave Water Agency, found that land subsidence was linked to water-level declines of more than 100 feet between the 1950s and the 1990s. Land subsidence can disrupt surface drainage; reduce aquifer storage; cause earth fissures; and damage wells, building, roads, and utility infrastructure. According to Michelle Sneed, USGS scientist and lead author of the study, “Earth fissures several feet wide and deep have been observed in Lucerne Valley.” The USGS reports that continued monitoring of some areas of the Mojave Desert is warranted because ground-water levels continue to decline, and pumping-induced land subsidence,
documented by this study, likely will increase.


FWS Celebrates Centennial of Wildlife Refuge System

On March 14, 2003, the National Wildlife Refuge System, the only system of federal lands in America dedicated specifically to wildlife conservation, celebrated its 100th birthday. The Centennial was marked by activities in many National Wildlife Refuges around the country. The U.S. Fish and Wildlife Service has developed a Web site to provide information on activities related to the Centennial, as well as the history of the National Wildlife Refuge system. For more information, see http://refuges.fws.gov/centennial/index.html.

PUMS Files Released

The U.S. Census Bureau has recently completed release of the Public Use Microdata Sample (PUMS) files for the entire United States and Puerto Rico. The PUMS files have state-level Census 2000 data containing individual records of the characteristics for a 1 percent sample of people and housing units (long census form). The PUMS files contain geographic units called super-Public Use Microdata Areas (super-PUMAs), a new geographic entity for Census 2000. The state files, which may contain one or more super-PUMAs, include geographic equivalency files that show the relationship between the super-PUMA and standard Census 2000 geographic concepts (e.g., counties, etc.). The super-PUMAs are made up of a Public Use Microdata Area (PUMA) or group of contiguous PUMAs (each PUMA must have a minimum of 100,000 population). PUMAs are only identified on the 5-percent files and not on the 1-percent files.

The data can be downloaded from the Census Bureau’s PUMS Web site: http://www.census.gov/Press-Release/www/2003/PUMS.html. At the same time, the Census Bureau is also beginning to plan for Census 2010; 250,000 residents received sample Census questionnaires in late January.

New Arizona Digital Geologic Maps


New Maps from Nevada Bureau of Mines & Geology

The Nevada Bureau of Mines and Geology has recently published several new maps. They include:

- Geologic map of the Willow Creek Reservoir Quadrangle, Elko County, Nevada: Wallace (2003) $17.00
- Geologic map of the Willow Creek Reservoir SE Quadrangle, Elko County, Nevada: Wallace (2003), rolled $17.00
- Geologic map of the Hiller Mountains Quadrangle, Clark County, Nevada and Mohave County, Arizona: Howard and others (2003) $17.00
- Geologic map of the Bobs Flat Quadrangle, Elko County, Nevada: Peters (2003) $17.00
- Geologic map of the Calvito Flat Quadrangle, Clark County, Nevada and Mohave County, Arizona: Anderson (2003) $17.00
- Nevada geothermal resources: Shevenell and Garside (2003) $17.50

The maps can be ordered online through the Bureau’s Web site (http://www.nbmg.unr.edu/sales/ps.htm) or through their sales office: Publication Sales- Mail Stop 178, Nevada Bureau of Mines and Geology, University of Nevada, Reno, NV 89557-0088, telephone 775-784-6691 ext. 2, fax 775-784-1709.
California Earthquake Hazard Maps Released

The California Geological Survey recently released official maps of Alquist-Priolo earthquake fault zones to Riverside, San Bernardino, and San Diego counties and the cities of Chino Hills, Corona, Coronado, and San Diego. In addition, maps on several quadrangles have been released. The quadrangles completed include: Agua Dulce, Condor Peak, Del Sur, Hi Vista, Lake Hughes, Juniper Hills, Lovejoy Buttes, Matilija Little Buttes, Rosamond, Palmdale Sleepy Valley, and Valyermo quadrangles in Los Angeles County.

Earthquake Fault Zones are regulatory zones that encompass surface traces of active faults that have a potential for future surface fault rupture. The illustration shows the general location of maps delineating the proposed Earthquake Fault Zones within the affected areas of Riverside, San Bernardino, and San Diego counties. Click within the appropriate map to see a larger-scale image showing the approximate location of the proposed Earthquake Fault Zones.

The Survey also released a map of Earthquake Shaking Potential in conjunction with other agencies at the Disaster Resistant California conference in San Jose, CA. The map shows the relative intensity of ground shaking and damage in California from anticipated future earthquakes. Expected damages in California are projected to exceed $30 billion in the next 10 years.

The map is available from the California Seismic Safety Commission at 916-263-5506 or via the Web as a jpg or pdf. Links to the online maps are available on the California Geological Survey’s Web site: http://www.consrv.ca.gov/cgs/.

News from Washington Geological Survey


New Fault Map from Idaho Geological Survey

The Idaho Geological Survey recently released a fault map titled Miocene and Younger Faults in Idaho by Roy M. Breckenridge, Reed S. Lewis, Guy W. Adema and Daniel W. Weisz. It is available for $13.00 from Publication Sales, Idaho Geological Survey, University of Idaho, PO Box 443014, Moscow, ID 83844-3014, Telephone: (208) 885-7991, Fax (208) 885-5826, University of Idaho Toll Free 1-888-884-3246. This and other geologic maps can also be downloaded as a pdf from their Web site at: http://www.idahogeolog.org. The Idaho Geological Survey has recently adopted new technology for printing maps created in digital formats. Maps will be plotted on demand using a large ink-jet printer at 600 dots-per-inch resolution with color, run-resistant inks. They do note that the colors could fade over time. The data for many recent IGS maps can be downloaded from INSIDE Idaho (http://www.insideidaho.org).

Hazard Maps from Montana Bureau of Mines & Geology

The Montana Bureau of Mines & Geology has released three hazard maps. They are: Areas of potential landslide hazard in the Billings area, Yellowstone County, Montana by D.A. Lopez and M. Sims (GM-61-B), Areas of potential rock-fall hazard in the Billings area, Yellowstone County, Montana by D.A. Lopez and M. Sims (GM-61-C) and Areas of potential swelling-clay hazard in the Billings area, Yellowstone County, Montana by D.A. Lopez and M. Sims (GM-61-D). The maps are available from the Montana Bureau of Mines and Geology, Publications Office, Montana Tech of The University of Montana, 1300 West Park Street, Butte, MT 59701-8997.

New Wyoming Coalbed Methane Maps

The Wyoming State Geological Survey (WSGS) has revised their coalbed methane (CBM) maps of the Powder River Basin, Wyoming. Three maps that show coalbed methane development in the basin are now available as WSGS Map Series (MS)-56, MS-57, and MS-58, replacing previous versions of the maps, which were known as Coalbed Methane Maps (CMMs). Now part of the WSGS numbered map series, each new map contains updated CBM permit information, drilling, production, and other development activities through February 5, 2003. The maps are available in either hard copy or digital form. The maps also show major natural gas pipelines, compressor stations, gas plants, coal outcrop and overburden information, coal leases, railroads and spur lines, and land ownership.
- MS-56, titled Coalbed methane activity in the eastern Powder River Basin, Campbell and Converse Counties, Wyoming, by R.H. De Bruin, R.M. Lyman, L.L. Hallberg, and N.R. Jones, replaces CMM 02-4 published in September, 2002. A full color, plotted map measuring 36" x 60" at a scale of 1:126,720 (1"≈2 miles) is available (rolled only) for $30.00 (add $6.00 for shipping and handling; Wyoming addresses must include 6% sales tax). The digital data for this map is available on the CD-ROM for MS-58.

- MS-57, titled Coalbed methane activity in the western Powder River Basin, Campbell, Converse, Johnson, Natrona, and Sheridan Counties, Wyoming, by R.H. De Bruin, R.M. Lyman, L.L. Hallberg, M.M. Harrison, and N.R. Jones, replaces CMM 02-5 published in September, 2002. This is also available as a full color, plotted map measuring 36" x 60" for the same price as MS-56; the digital data is also on the CD-ROM for MS-58.

- MS-58, titled Coalbed methane activity in the Powder River Basin, Wyoming, by R.H. De Bruin, R.M. Lyman, L.L. Hallberg, M.M. Harrison, and N.R. Jones, replaces CMM 02-6 published in September, 2002. This full color, plotted map is a reduced and combined version of MS-56 and MS-57 that measures 36" x 45" at a scale of 1:250,000 (1"≈4 miles) and is available (rolled only) for $40.00 (add $7.50 for shipping and handling; Wyoming addresses must include 6% sales tax), or laminated for $50.00 (add $8.50 for shipping and handling; Wyoming addresses must include 6% sales tax).

Digital data for the eastern and western Powder River Basin maps and the combined map are available on the CD-ROM of MS-58. ESRI Shapefiles (in a number of layers that can be toggled off or on) are supplied, as well as ESRI ArcReader® and LizardTech® MrSID Geo Viewer software included for viewing the maps. The CD sells for $50.00 (add $8.50 for shipping and handling; Wyoming addresses must include 6% sales tax). The three maps are available over-the-counter at the WSGS office in Laramie or can be ordered by phone, fax, or Email.

New Colorado Groundwater Atlas

The Colorado Geological Survey has just produced a large format, 210 page publication that makes it easy to get both basic and detailed information about Colorado’s ground water resources. The Ground Water Atlas of Colorado is a comprehensive, map-based look at ground water in our state. It summarizes the location, geography, geology, water quality, and hydrologic characteristics of the prominent aquifers in each part of Colorado. While an invaluable resource for ground water professionals, the multitude of maps, diagrams, pictures, tables, and graphs included in each section help make the technical aspects of ground water more understandable for the layperson. It can be ordered for $40.00 from the Colorado Geological Survey, Publications.
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