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$500. 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 at the address shown below.

Subscriptions to the Information Bulletin are US$25 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$5 is charged for mailing to countries outside of the US and Canada.

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<table>
<thead>
<tr>
<th>Features and Photoessays</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preliminary Agenda, WAML Spring Meeting, Stanford University, California.................................................. 7</td>
</tr>
<tr>
<td>Minutes of the WAML Fall Meeting, University of Hawai'i-Manoa by Andrew Nicholson.................................. 9</td>
</tr>
<tr>
<td>Views of the WAML Fall Meeting, University of Hawai'i-Manoa................................................................. 12</td>
</tr>
<tr>
<td>Telecommunication Map Classification and Cartobibliography by Gerald L. Greenberg.................................... 16</td>
</tr>
<tr>
<td>Digital Programs at the Geography and Map Division, Library of Congress: A Status Report by Gary Fitzpatrick................................................................. 23</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reviews of Atlases, Books and Digital Resources edited by Kathy Rankin ......................................................... 27</th>
</tr>
</thead>
</table>

| New Mapping of Western North America compiled by Ken Rockwell ................................................................. 35 |

<table>
<thead>
<tr>
<th>WAML Business</th>
</tr>
</thead>
<tbody>
<tr>
<td>Editor's Message ................................................................. 6</td>
</tr>
<tr>
<td>President's Message ............................................................... 6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>News of Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benchmarks ................................................................. 43</td>
</tr>
<tr>
<td>Cataloging News ............................................................ 45</td>
</tr>
<tr>
<td>Conferences &amp; Classes ..................................................... 46</td>
</tr>
<tr>
<td>Digital Spatial Data ......................................................... 47</td>
</tr>
<tr>
<td>Employment ................................................................. 60</td>
</tr>
<tr>
<td>General News ................................................................. 50</td>
</tr>
<tr>
<td>Internet Resources .......................................................... 52</td>
</tr>
<tr>
<td>Periodical Articles ......................................................... 53</td>
</tr>
<tr>
<td>US Federal, State and Local Government News ......................... 55</td>
</tr>
</tbody>
</table>

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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 on disk in a PC-compatible word processing program, such as Microsoft Word or WordPerfect, as well as 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.

Manuscripts should be submitted to:

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Editor, WAML Information Bulletin
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P.O. Box 1892
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sweeney@rice.edu

Please contact the editor before submitting articles via electronic mail.

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.

Contribution Guidelines for Electronic News and Notes

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.

Information Bulletin and Electronic News & Notes

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Wyoming Editor - Vacant


Lists for 2002/03 Membership Year
Committees and Representatives

<table>
<thead>
<tr>
<th>Executive Board</th>
<th>Membership/Hospitality Committee</th>
<th>PAC Microforms Subcommittee</th>
</tr>
</thead>
<tbody>
<tr>
<td>President: Richard Spohn</td>
<td>Carol Doyle (2002-)</td>
<td>Larry Cruse (1993-)</td>
</tr>
<tr>
<td>Vice President/President Elect:</td>
<td>Yvonne Wilson (2002-)</td>
<td>Representatives/Liaisons</td>
</tr>
<tr>
<td>Sue Haffner</td>
<td>Nominating Committee</td>
<td>To AACCOCM - Mary Larsgaard</td>
</tr>
<tr>
<td>Secretary: Andrew Nicholson</td>
<td>Christopher J.J. Thiry (2002-)</td>
<td>(1992-)</td>
</tr>
<tr>
<td>Treasurer: Cynthia Jahns</td>
<td>Need additional members</td>
<td>To ACMLA - Tim Ross (1991-)</td>
</tr>
<tr>
<td>Past President: Christopher J.J. Thiry</td>
<td>Publications Advisory Committee</td>
<td>To ALA/MGERT - Needs representative</td>
</tr>
<tr>
<td>Appointees</td>
<td>(PAC)</td>
<td>To CCCSA - Linda Zellmer (1999-)</td>
</tr>
<tr>
<td>Archivist - Julie Sweetkind, (2000-)</td>
<td>Phil Hoehn (1999-)</td>
<td>To CUAC -</td>
</tr>
<tr>
<td>Business Manager - Julie Hoff</td>
<td>David Deckelbaum (1999-)</td>
<td>David Deckelbaum (2003 - )</td>
</tr>
<tr>
<td>Subscription Manager - Jim</td>
<td>Linda Zellmer, IB Managing Editor</td>
<td>To GIS - Needs Representative</td>
</tr>
<tr>
<td>Web Manager – Linda Zellmer</td>
<td>Julie Hoff (2002 - )</td>
<td>To SLA/G&amp;M - Linda Zellmer</td>
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<tr>
<td>(1999 - )</td>
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<td>(2002 - )</td>
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WESTERN ASSOCIATION OF MAP LIBRARIES
Financial Statement 2001 - 2002

**INCOME**

- Balance forward July 1, 2001: $5,629.67
- Checking account interest: $20.59
- Dues: $4,050.00
- Meetings: $6,381.89
- Transfer from Subscriptions: $5,500.00
- Transfer from Publications: $2,000.00

**TOTAL INCOME**: $23,582.15

**EXPENSES**

- Information Bulletin: $3,680.81
- Honoraria: $1,300.00
- Meetings: $4,649.28
- Travel: $430.25
- Web Site: $150.00
- Ballot expenses: $51.38
- Treasurer expenses (1998 - 2002): $300.00

**TOTAL EXPENSES**: $10,561.72

**CHECKING ACCOUNT BALANCE**: $13,020.43

**SAVINGS ACCOUNT BALANCE**: $10,370.22

**TOTAL BALANCE JUNE 30, 2002**: $23,390.65

**MEMBERSHIP**

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<tr>
<th>Type</th>
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<tr>
<td>Personal members</td>
<td>129</td>
<td>138</td>
</tr>
<tr>
<td>Life members</td>
<td>9</td>
<td>8</td>
</tr>
</tbody>
</table>
**President’s Message**

Howdy fellow WAMLites!

Here in usually sunny southwestern Orange County, Florida we are having an endless, heavy rainy season with almost 6 feet of rain in the past 6 months. Wish I could send some moisture to those of you in the drought areas of the west - in exchange for a bit of dry air!

I recently attended the 35th anniversary meeting of WAML held in Honolulu. Our hosts, Mabel Suzuki and Ross Togashi of the University of Hawai’i-Manoa and Riley Moffat of Brigham Young University-Hawai’i, organized an excellent meeting and field trip for the occasion. Papers presented a great balance between technical and practical information, plus contributions with a local influence. The two hour walking tour of Waikiki with a paper presentation concerning the history of Hawai’i’s land systems was a big hit with all of the attendees. And thanks to Mary Larsgaard for her cataloging preconference workshop. On the social side, both dinners and the Big Island field trip, including a visit to the observatory at Mauna Kea, were enjoyed by those members who were able to attend.

At the Executive Board meeting we welcomed a major change over of officers with Cynthia Jahns taking over as Treasurer, Andrew Nicholson taking over as Secretary and Sue Haffner assuming the Vice Presidency. Cynthia announced the society is in solid financial shape. The Board agreed to fund Stan Stevens’ project to index the remaining California Private Land Claims (so-called Rancho Maps) microform collection. This should result in a very useful publication, especially for California libraries of all types. The Board also decided to raise the honoraria for the IB editor to reflect the amount of work it takes to produce each issue. A major thank is owed to John Stevens for helping WAML retain its IRS tax exempt status.

There will be a change in the IB editorship. Lisa Sweeney from Rice University has agreed to take over as IB editor effective with issue 34(2). On behalf of the society, I would like to thank Linda Zellmer for her outstanding work as editor during the past few years. Linda has consistently produced a quality journal in a timely manner, which has been a credit to maintaining the image of our society. Kudos to her for a job very well done!

Thanks to all members who continue to volunteer for committees, liaisons, officers, etc. Your devotion to the society has kept us a healthy and active one over the years. I look forward to working with you in the coming year and to seeing many of you at the Stanford meeting March 26-29, 2003.

— Rich
WAML President

**Editor’s Message**

Greetings,

I apologize for the delay in getting this issue out. I decided to wait until after the Hawai’i meeting. This will be my last issue of the *Information Bulletin*. Lisa Sweeney, from Rice University, will be taking over as IB Editor. I would like to thank everyone who has contributed articles and content during the last 2+ years, especially Kathy Rankin, who has always been on time submitting book reviews. Ken Rockwell has also been a loyal contributor. While I will be stepping down as editor, I will continue to make a contribution to WAML, as I will continue to edit the web site, and will be taking over as *News & Notes* editor. I will also be providing assistance to Lisa during the transition. You may also see some other contributions from me in the coming months and years, in the form of articles and book reviews.

WAML has always been a special organization, and I hope to continue to attend some meetings and contribute, even if it is by long distance. Many thanks to all of you for your continued support. Best wishes.

Linda Zellmer
Preliminary Agenda

WAML Spring Meeting
Stanford University
March 26-29, 2003

WAML Spring 2003 Conference Speakers List

• The Stanford Geological Survey Maps and Field Notebook Project. Julie Sweetkind-Singer, GIS & Map Librarian, Branner Earth Sciences Library & Map Collections and Charlotte Derksen, Head Librarian, Branner Earth Sciences Library & Map Collections

• The History of the Stanford Geological Survey. Elizabeth Miller, Professor, School of Earth Sciences, Stanford University

• The Norwich Africa Map Collection. Roberto Trujillo, Head of Special Collections, Stanford University. (This will also include a visit to Special Collections to see a display of the Africa maps from the Norwich Collection.)

• Maps on Stamps. Chaim Braun, CISAC, Stanford University.

• GIS and the Sliding Rocks on the Racetrack Playa. Paula Messina, Assistant Professor, Geology Department, San Jose State University and Phil Stoffer, Geologist, US Geological Survey.

• More to be announced!

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Airport Transportation

Taking a cab from the airport can be up to $90 from SFO so we recommend SuperShuttle, South & East Bay Shuttle from SFO or SJC, and Bayporter from SJC or OAK. CalTrain is about $2.50 from either airport. Once you have arrived in the Stanford area you may wish to use the Marguerite Shuttle and Palo Alto Free Shuttle to get around.

The Super Shuttle runs 24 hours per day 7 days per week. Cash, credit cards and US Travelers Checks are accepted. On arriving at the SFO airport, claim your luggage on the lower level. Proceed to the upper level and outside to the outer curb. Follow the blue SuperShuttle signs to the uniformed Airport Guest Coordinators in blue jackets. They will arrange SuperShuttle transportation to your destination. The Super Shuttle reservation number is 415-558-8500 or online at www.supershuttle.com.

The South and East Bay Shuttle runs between the San Francisco International Airport and the San Jose Airport. The fare is $29.00 for the first person and $5.00 for each additional person in your group. Rates are subject to change without notice. Credit cards are NOT accepted—only cash or checks. Call from the baggage area Departure Level at either airport (408) 225-4444 and the shuttle will pick you up within 15 minutes.

BayPorter Express provides service to and from San Francisco and Oakland International airports. For Reservations and Information call: (877) 467-1800 toll free throughout the Bay area or (415) 467-1800 outside the Bay area fax: (415) 467-8783. Reservations can also be made online at www.bayporter.com.

Hotel Information

Hotel California
2341 Ash Street, Palo Alto, CA
650-322-7666
$80/night with breakfast
One bed in each room.
On second floor of building with no elevator
Full-service kitchen
Marguerite shuttle service to campus
Near CalTrain

Cardinal Hotel
235 Hamilton Avenue, Palo Alto, CA
650-323-5101 — ask for WAML Conference rate
$65/room (European style with shared hallway bath)
$125/room (single or double with private bath)
No breakfast, just coffee or tea.
6 blocks from the Marguerite shuttle and CalTrain station

Mermaid Inn
727 El Camino Real, Menlo Park, CA 94025
650-323-9481
$76/single; $80/2 people/1 bed;
$84/2 people/2 beds + 10% tax
Continental breakfast (coffee/tea, bagel/danish)
Marguerite Shuttle runs there 3 times a day.

Super 8 Motel
3200 El Camino Real, Palo Alto, CA 94306
650-493-9085
$78.88/single; $98.88 double
Continental breakfast
4 blocks from the Marguerite shuttle

Keep watching the meeting web site for more information: http://garamond.stanford.edu/depts/gis/waml/
Minutes of
WAML Fall 2002 Meeting
University of Hawai‘i
Manoa

Executive Board Meeting Minutes
WAML 2002 Fall Meeting
University of Hawai‘i-Manoa
Honolulu, Hawaii
November 6th, 2002

Present: Richard Spohn, Sue Haffner, Christopher Thiry, Cynthia Jahns, Dorothy McGarry, Muriel Strickland, Andrew Nicholson, Katherine Rankin, Stanley Stevens. Present for part of the meeting: Jane Ingalls, John Stevens, Linda Zellmer

WAML President Richard Spohn opened the meeting at 8:50am

Treasurer’s Report - Outgoing Treasurer Muriel Strickland presented the financial report for WAML as of June 30th, 2002. New Treasurer Cynthia Jahns presented financial report from July 1st to the present. Income and expenses were discussed and it was agreed that the budget is in good shape.

Business Manager’s Report - Julie Hoff was not in attendance, but submitted a report to President Richard Spohn. This report was read to the board. Richard Soares, the outgoing business manager, has passed on the new PC, 1800 Occasional Papers (OP), an archive set of IB, and other supplies to Julie. There was some discussion on the status and future of microfiche sets and also archive copies of the IB. The business manager should explore options for fiche copying, particularly fiche copying.

Subscription Manager’s Report - Jim O’Donnell, the subscription manager was not in attendance, but submitted his report by email to the Executive Board. Jim has worked hard to untangle disputes with vendors and reports 159 paid subscriptions. The board wishes to thank Jim for his efforts.

IB Report - Linda Zellmer asked to be relieved of some or all of the IB editing duties. Linda also reported that “Instructions for Authors” will be appearing in the next issue; included will be a request to authors to include digital or high quality color copies of maps/images with their articles. Black and white copies will no longer be accepted. The Board agrees that finding new people to fill the IB and News Notes positions is a high priority.

Web Manager - Linda Zellmer reports that corrections to the website are only being done when someone contacts her about the error. Members should continue doing this.

Past President - Chris Thirty reports that he will not be at the next meeting to be held at Stanford, but that it should not be hard to find new candidates for the board as the California meetings often have high attendance.

Membership/Hospitality Committee - Carol Doyle and Yvonne Wilson will serve as co-chairs, replacing Cynthia Jahns.

Book Review Editor - Katherine Rankin reports that all is well.

Future Meetings - Sue Haffner reports that the California State Library in Sacramento will host the Spring 2004 meeting. Jane Ingalls from Stanford University talked briefly about plans for the next meeting. The WAML conference will take place March 26-29, 2003 at Stanford. More information is available from the WAML website.

Publications Committee - Neither David Deckelbaum nor Philip Hoehn were in attendance. Chris Thirty reports that WAML is looking for volunteers to write the second part of a History of WAML. Founding President Stanley Stevens has agreed to write the first part.
The Executive Board was also informed that Adonna Fleming also wishes to step down as the News and Notes Editor.

Old Business - The Executive Board is informed that a “Duties for WAML Officers” is being finalized and will appear on the web site in the near future.

John Stevens reported that the IRS responded to his letter asking that WAML be reinstated as a tax-exempt organization. The IRS has sent a power of attorney form, which should be signed by the President and Treasurer of WAML.

New Business - The Executive Board discussed a proposal to eliminate one of the three WAML Bank accounts. Discussion took place and it is decided that the Business Managers account could be eliminated.

The Board listened to a request by Stanley Stevens for a grant not exceeding $1,000 for the completion of an index to a microfilm set of California Rancho Maps. The WAML Executive approved the request and hoped that the final product may also be made available as an Occasional Paper.

The Executive Board next discussed a request from Haworth Press, the publishers of the upcoming Journal of Map and Geography Librarianship for a copy of our mailing list, permission to advertise in the IB, and a link from the WAML website to the new journal. The Board agrees to send them the list for an increased fee of $150. Advertising and the website link were not approved.

The Executive Board next discussed the honorarium for the IB editor. As a token of appreciation for the responsibility and commitment for editing the IB, the Executive Board approves the raising of the honorarium from $250 to $500 for the Editor and Production Editor of the IB. If one person fulfills both responsibilities, the honorarium will be combined for a total of $1000. The honorarium will also be prorated if case duties are split.

The meeting adjourned at 11:40am.

Minutes respectfully submitted by, Andrew Nicholson

Business Meeting Minutes
WAML 2002 Fall Meeting
University of Hawaii, Manoa
Honolulu, Hawaii
November 7, 2002

The Business Meeting was called to order by President Richard Spohn at 3:20pm. The minutes of the previous meeting are approved with one correction.

Secretary Andrew Nicholson summarized the Executive Board Meeting minutes.

Treasurer Cynthia Jahns presented the financial report. Income has greatly exceeded expenses, with WAML receiving a profit of $7390. She also reported that form will be soon made available for members to provide a brief explanation for money transactions. Membership renewals are going well.

Sue Haffner informed members of future WAML meetings. She introduced Jane Ingalls of Stanford University, who outlined plans for the next WAML meeting to take place between March 26-29th. Cynthia Jahns reported that plans are already underway for the Fall 2003 meeting that will take place at UC-Santa Cruz. Sue Haffner reported that Kathryn Womble at California State Library at Sacramento will host the Spring 2004 meeting. Volunteers are need to host future meetings beyond 2005. Suggestions are always welcome!

President Richard Spohn read the Business Managers Report, submitted by Julie Hoff. President Richard Spohn read the Subscription Managers Report, submitted by Jim O’Donnell. He thanked Jim for his efforts in sorting out the various disputes with vendors.

IB Editors Report - Linda Zellmer reports that she would like to be relieved of some or even all of the editor duties. Volunteers are also needed to transcribe taped WAML presentations so they be printed in the IB. Andrew Nicholson has agreed to transcribe the Fall 2001 presentation on the Atlas of Oregon. A new volunteer is also need to compile the News & Notes feature on the WAML site; Adonna Fleming will continue to do it on bi-monthly basis until replaced.

Archivist - There is no report.

Membership/Hospitality Committee - Yvonne Wilson and Carol Doyle are the new co-chairs.

Publications - There is no report

Liaison Reports

AACCCM - Mary Larsgaard reported that a new 2nd edition of Cartographic Materials is going to press in early December and will released early in the new year

ACMLA - There is no report. Janet Collins mentioned that the next meeting at Victoria, B.C. in May 2003.

ALA/MAGERT - Mary Larsgaard reported that ALA will be meeting Toronto in June 2003. Mary McInroy
is the new president of MAGERT. The tentative MAGERT agenda includes a Saturday morning program on cataloging.

CCISA - There is no report.

CUAC - Janet Collins reports that they meet in the first week in May usually in the Washington DC area and may expand into a 2 day meeting. In 2003, the meeting will be at GPO. Chris Thiry and David Deckelbaum will attend as WAML representatives; please direct questions to them.

GIS - Linda Newman reported that the group met in Denver two weeks ago and will meet next year in Seattle. One interesting note from the Denver meeting is a change in name from GIS to GSIS.

IFLA - Dorothy McGarry reported that the next meeting will take place in Berlin next summer.

SLA - Will be meeting in New York next year. Linda Zellmer reported that David Rumsey won an award at the last meeting in Los Angeles.

Old Business

It is announced that a “Duties for WAML Officers” will be appearing on the WAML Web site in the near future.

New Business

Larry Cruse will be putting an OCLC criteria on Marc records on the WAML site.

President Richard Spohn made a presentation to Mabel Suzuki for her hard work in getting ready for this conference. Mabel acknowledged the help of Riley Moffat and Ross Togashi for their help to make it possible.

Sounding Board

Chris Thiry announced that that ALA is not interested in publishing a new edition of the Guide to Map Resources, but has allowed MAGERT to take the publication elsewhere. The survey form that Chris has developed is complete.

Chris was asked about mounting the Guide as a website. Difficult as people often assume the web is always current. The site would require constant maintenance. A CD-ROM is a possibility.

Chris was also asked if ESRI might be interested in publishing the book. Chris Thiry will ask Steve Rogers at Ohio State about this.

Riley Moffat asked if it was worthwhile placing a portal on the web for western Americana maps. There was widespread agreement at this suggestion.

The business meeting was adjourned at 4:15pm.

Respectfully submitted by,
Andrew Nicholson

Attendees

Christopher J.J. Thiry (Colorado School of Mines)
Sue Haffner (CSU-Fresno)
Stan Stevens (UC-Santa Cruz)
Sylvia Bender (California Energy Commission)
Cynthia Jahns (UC-Santa Cruz)
Andrew Nicholson (University of Oregon)
Janet Collins (Western Washington)
Linda Zellmer (Indiana)
Kathy Rankin (UNLV-Las Vegas)
Muriel Strickland (San Diego Historical Society)
Linda Newman (UNLV-Reno)
Richard Spohn (Retired)

Riley Moffat (BYU-Hawaii)
Lisa Sweeney (Rice University)
Mary Larssen (UC-Santa Barbara)
Yvonne Wilson (UC-Irvine)
Fatemah Van Buren (UC-Berkeley)
Jane Ingalls (Stanford)
John Creaser (UC-Berkeley)
Greg Armento (CSU-Long Beach)
Jerry Greenberg (USGS-Retired)
Dorothy McGarry (UCLA)
Miriam Glanz (University of Arizona Library School)
Views of the
WAML Fall Meeting
University of Hawai‘i at Manoa
November 5-8, 2002

Part of the first day’s activities included a walking tour of Waikiki to study land use change.
Members talk with vendors, ProQuest and Eastview Cartographic, during the break.

Members spent time socializing at the banquet at the Willows restaurant.
Hosts Riley Moffat, Mabel Suzuki and Ross Togashi were thanked Hawaiian style, with leis.

Mabel Suzuki thanks Gary Fitzpatrick for his talk by presenting him with a lei.
The field trip included spectacular views of the observatories on Mauna Kea and several opportunities to view the sunset (below).
Telecommunication Map Classification and Cartobibliography

by

Gerald L. Greenberg, Ph.D.

Telecommunication maps have been produced since the first telegraph lines were installed in 1845. A large number of wire and wireless telecommunication systems currently support thousands of activities in modern societies. These systems provide services such as message and data transfer, sound and image program broadcasting, radio location/navigation signals, and remote-control applications. A variety of telecommunication maps are essential graphic tools for planning, installation, operation, maintenance, regulation, evaluation, advertising, historical illustration, and other related activities.

Special thematic map collections occur in private holdings, commercial-industrial collections and public agency archives. Some prominent libraries of telecommunication maps are located at administrative offices of the International Telecommunication Union, European Broadcasting Union, International Civil Aviation Organization, International Hydrographic Bureau, British Broadcasting Corporation, International Telephone and Telegraph Corporation, American Telephone and Telegraph Corporation, Radio Corporation of America, Western Union, U.S. Federal Communications Commission, and other similar types of public and commercial telecommunication agencies. Other primary sources are the radio and electronics technical publications containing thousands of map illustrations.

Map librarians may ask if there are any systematic ways of researching, acquiring, classifying and listing maps that depict telecommunication systems and services. The most obvious approach is according to the map subject, types of systems and services (radio, telegraph, telephone, facsimile, television, radar, telemetry, navigational-aids, etc.). A more specific manner of working with telecommunication maps is by their use. In the early 1960's, a functional approach was devised by the author, after researching and analyzing the sources, types, data contents and design characteristics of more than 700 different kinds of telecommunication maps. Four general functional categories proposed are allocation maps, network maps, radionavigation charts, and engineering charts. A recent review of modern telecommunication maps, both printed and computerized versions, appears to reverify using these categories. Detailed elaboration of each category and subtypes including example illustrations will follow.

Useful cartobibliographies and map catalogs exist for many types of transportation and communications including publications on postal maps, road maps, railroad maps, and aeronautical and marine charts. However it is difficult to find any cartographic or map library literature addressing telecommunication map collections, contents and designs. Studies of telecommunication map library card files reveal critical search information (metadata) sought by map librarians and users. The cartobibliographic procedure used in this study employs some standard data contents of map cataloging and a few additional items, arranged upon a catalog card format, illustrated in Figure 1. Conventional items include title, map number or code, edition, series, date, source-author, publisher, sheet size, number of sheets, language, price, scale, grids, projection, colors and symbols. Special information items include category, system, service, technical remarks and unique codes and signs. Comprehensive standard lists of telecommunication systems and services (numbering into the hundreds), needed to identify map subject contents and uses, were obtained from publications of regulatory agencies such as the International...
Telecommunication maps are a functional category of telecommunication maps used as aids to plan and implement legal identification, regulation, and utilization of telecommunication systems and services. These map functions are accomplished through cartographic representation of current, officially sanctioned national and international telecommunication designations or rules of operations which are denoted as follows: wire and radio system signs of identification (prefix-suffix codes, call letters and numbers); services locations, routes, areas and boundaries; operator/user tariff rates, toll districts and time zones; technical notations on emission, frequency, power, capacity, etc.; and emergency or restrictive notes and spatial limitations. Most maps in this category are small scale, drawn upon rectangular or radial grids, and depict local, regional, continental or worldwide operating information. Allocations map sources are international and national telecommunication regulatory agencies and local wire and radio utility service publications.

A variety of allocations maps are essential aids to wire and radio operators and engineers, and to people who manage and use government or private telecommunication facilities. Monitoring charts, often supplemented by tabular technical information, are used with radio receivers and directional antennas to check legally prescribed identity, location, direction, range, intensity, coverage and special technical qualities of system and service operations. With an azimuthal-equidistant grid such maps can be centered on any point and facilitate accurate great-circle compass bearings and distance measures from the selected central location to local or distant places. Frequency-emission-power allocation maps and time zone charts, normally having rectangular grids and broad geographic coverage, are also used in monitoring and planning radio operations. Since there are so many simultaneous radio transmissions and broadcasts, both locally and worldwide, it is necessary to control and prevent radio interference and illegal transmissions in a fashion similar to airplane traffic control, using maps to help identify and eliminate conflicting signals in a particular service area. Multiple-use of the same radio spectrum parts is possible in adjacent and separated areas through regulated spatial and temporal transmission allocations. The most commonly recognized allocation maps are telephone exchange and toll maps which are used as graphic operating aids in making local and long-distance calls.

Figure 1. Example of a Telecommunication Map Evaluation Card used in research.
Usually printed inside telephone books, these maps appear highly diagrammatic, and contain many notations which explain symbolized communication areas (also termed zones, districts, sectors or regions) that have dialing prefix identities such as local and long-distance numeric codes. If an exchange map also contains information on service charges or tariff rates, it is called a toll map. An example is shown in Figure 2.

Network maps are a functional category of telecommunication maps used for general illustration and advertising of locations, routes and aerial coverage of systems and services. Some maps illustrating continental or international facilities coverage employ equal-area map grids (equivalent projections) to reduce overall graphic distortions of broad geographic distributions of symbolized information. Most network maps are small size and scale, local or regional diagrammatic generalizations of station and route locations and service boundaries of single or multiple telecommunication providers. Enlarged inset maps for congested areas, and supplemental lists of information are sometimes contained within network map format. An exceptionally comprehensive, large size network map is the Communication Chart of the World, issued in three sheets measuring 35 by 46 inches at a scale of 1:23,000,000 (U.S. Navy Hydrographic Office No. 2180a,b,c; 1923, 1948, 1957). Pictorial and animated maps such as motion pictures and video displays have been produced to impart graphic realism of direction and motion to the user. Such maps employ picture-like symbols of transmitter towers, flashing radio waves, and dynamic-appearing symbols including dotted, dashed, wavy, serrated and arrow-tipped lines. Network maps can be found in industrial surveys, promotional advertisements, illustrations in technical journals, special library collections, historical atlases and archives of private and public agencies. Network maps may show recent or historical information, but are not as detailed as other telecommunication map categories containing official and technical operating notes and symbols. A telecommunication network consists of two or more wire or radio stations, usually under similar proprietorship, which are connected for the purpose of extending area coverage of the service(s) provided by telecommunication system(s) used in the network. Network linkages depicted on maps include wire-lines, coaxial and fiber-optical cables, and ground or satellite radio relay routes for message or data transfer and broadcasting.

Types of network maps provide generalized graphic reviews of

![Chart of Regions as Defined in Table of Frequency Allocations](image)

*Chart of Regions as Defined in Table of Frequency Allocations (See Nos. 125 to 132 and 135)*

Figure 2. Example of an Allocations Map showing Tropical Zone (highlighted).
installations and uses of wire and radio systems. Station distribution maps and route-line maps or cable maps illustrate the evolution of telecommunication facilities, such as historic telegraph routes and radio station sites in the 1800's, transcontinental and transoceanic coaxial cable paths, microwave radio-relay station linkages, fiber-optic data transmission lines, urban cellular radio-telephone channels and world-wide orbiting space-satellite radio-relay connections. Facilities and services coverage maps for all types of telecommunication illustrate the identity and distribution patterns of connected stations, the extent of operations areas and interconnections among different services. An example is shown in Figure 3.

Radionavigation charts are a functional category of telecommunication maps used by navigators and pilots as graphic navigation and communication reference aids with electronic navigation systems. These charts contain internationally standardized symbols and notations pertaining to marine and aeronautical radio navigation and communications. Symbols and notations are printed in magenta or purple or fluorescent colors visible under red or ultraviolet cabin illumination for preservation of dark visual adaptation at night. The information content on these charts is periodically changed to reflect current operating changes and conditions regulated by agencies such as the International Hydrographic Bureau and the International Civil Aviation Organization, in coordination with national civil and military navigation authorities. Charts are usually compiled upon small, medium and large scale rectangular -- conformal base coordinates to permit accurate determinations of navigational vectors and compass bearings (radio-goniometry) for both local straight-line paths and long-distance great-circle routes. Some charts also employ polar grids to facilitate measurements of directional angles and distances (radio direction-finding and ranging) from local radio navigation control points such as ship harbor entrances and airports. Other charts contain special grid lines of position (LOP's) representing system locations as important to the radio navigator as are parallels of latitude and meridians of longitude to the celestial navigator. Sources for radionavigation charts are by subscription from official national navigation agencies, marine and aeronautical supplies stores and large libraries which maintain national map depositories.

Nomenclature of different kinds of radionavigation charts is conventionally assigned according to their system representations. In the 1930's the first "radio beacon charts," were made to show identities and locations of coastal and airport radio direction-finding beacons in a similar fashion.

Figure 3. Example of a Network map showing overseas telephone service from the United States.
to the cartographic illustration of light houses and light beacons. During World War II more accurate, long-range systems of radio location were invented. Based upon multi-location transmissions of coded and time-phased signal pulses, these systems required cartographic-nomographic aids to navigation known as Decca, Consol, Loran and Shoran tracking charts. Other unique graphic radio navigation aids developed during the war period are known as radar superposition charts and photomaps, on which topographic radar scope images were projected for the navigator to identify and match with charted landmarks while proceeding at night and under foggy and low-visibility conditions. High-resolution radar tracking map displays have been developed to monitor missile paths, satellite orbits and sea and air vehicle traffic locations and movements.

During the 1950's and 1960's, radio facilities charts were developed for long-distance flights, and instrument approach-landing-departure diagrams were created for airports. Modern inventions such as microfilm projectors, motion picture cameras, cathode ray tube television screens and liquid-crystal displays (LCD), combined with cartographic film records and digitized map data bases, have made it possible to produce animated maps and automated charts containing historical, simulated or real-time seamless displays of radio navigation data used for both stationary and mobile applications. Global position system (GPS) map displays, using networks of ground-based and synchronous orbiting space-satellite radio-relay stations are widely used to check accuracy and supplement other radio navigation systems. Combined radio and visual navigation information is included on most modern nautical and aeronautical navigation charts used throughout the world. A selected chart example is on Figure 4.

Engineering charts are a functional category of telecommunication maps used by engineers, technicians and researchers for the technical planning, installation, operation, maintenance and evaluation of every electronic communication system and service. Most are large in size and scale, much like local building construction plans and blueprint diagrams, except they depict schematic arrangements of utility symbols and related technical reference notes. Large diagrams have rectangular coordinates with site location reference marks. Medium- and smaller-scale chart information is usually compiled upon topographic map bases containing both geographic and local survey coordinates, as well as terrain and culture features.

Figure 4. Chart showing radionavigation lines.
The siting of cable routes requires unobstructed paths which are costly to trench, tunnel or circumvent. Microwave-radio relay station towers, radar stations and radio telescopes are best situated where landforms and artificial features do not block or deflect radio signals. Map bases with conformal, polar and nomographic grids are employed for field studies needed to analyze vectors and radiation patterns of radio signals. Information contained on engineering charts includes: system component location coordinates, local and regional site characteristics, transmission zone boundaries, radio signal intensity and spatial patterns (field-strength contours), radio wave propagation information (troposphere and ionosphere refraction index contours), potential and actual user service consumption, and notations on electrical specifications and measurements of circuits and radiation fields. Historical and recent sources of these charts include archives of most telecommunication utility companies, public planning department offices and official regulatory or licensing agencies. Technical journals contain numerous reduced-size engineering chart illustrations. Because of their large size, many original manuscripts have been lost because of deterioration of materials and a lack of storage space. In recent years, facsimiles of manuscripts have been preserved on microfilm and in digital computer data files on magnetic tape or laser disks.

Many kinds of engineering charts are used at telecommunication offices, laboratories and field sites. Utility charts, also called construction diagrams, network schematics, circuit or conduit plans, line maps and profiles are required for most situations where local, regional and national planning agency approvals and regulatory agency licensing permits are obtained for land accessions, rights-of-way and operations. Besides being primary engineering layout reference guides, these maps are usually contained in environmental impact reports and legal documents for installations of wire routes and transmitter sites. Ground conductivity charts are used to depict and analyze the resistance of soil to electrical currents that could affect efficiency of telegraph line. Radio signals operating at low-medium-high frequencies (long-medium-short waves) are also limited in range by surface conduction characteristics. Field strength charts, sometimes called station contour maps, field intensity charts or radiation diagrams, are employed by radio stations to plot and evaluate radio signal strength and area radiation pattern of signals at predetermined distances from the transmitter site. Propagation and prediction charts and nomograms are used in both commercial and experimental high-frequency (short-wave) radio communications and broadcasting for delineating areas of signal

Figure 5. Engineering chart showing reach of a radio station in the San Diego, California area.
transmission and reception affected by tropospheric and ionospheric refraction and reflections which may impede or vastly extend the transmission range and coverage at different times of the day and year and sunspot cycle. Audience survey maps, with potential and actual numbers and characteristics of radio listeners or television viewers, superimposed on postal zip code or county boundaries, are periodically compiled by radio and television broadcasting stations and commercial survey agencies for program planning and rating. A selected chart example is on Figure 5.

Illustrations and Their Sources

Figure 1 - Greenberg, Gerald L., 1963. *A Cartographic Analysis of Telecommunication Maps*. M.A. Thesis, Geography Department, University of California, Los Angeles, p. 419.


Figure 3. American Telephone and Telegraph Corporation, 1947. Overseas Radio Telephone Service from the United States. *Bell Telephone Magazine*, vol. 26, no. 1, p. 35.


Figure 5. Columbia Broadcasting System, Inc., Radio Station KFMB, Engineering Dept., 1954. *Field

\textit{About the Author}

Dr. Greenberg is retired from the National Mapping Division of the U.S. Geological Survey after over 20 years of Federal service. Other past employment was as an associate professor and chairman of the Geography Department at California State University Sacramento, as a cartographer in automated map production at the System Development Corporation in Santa Monica, California, and as a radio operator and technician in civilian and military occupations. Presently he is doing volunteer work in current and historical map and aerial photo archiving at the USGS Library in Menlo Park, California.

Please address technical questions to the author, Gerald L. Greenberg, Email: w6ern4826@sbcglobal.net.

\textit{Intensity Contours of Operation}. San Diego, CA.

Information is extracted and revised from *A Cartographic Analysis of Telecommunication Maps*, M.A. thesis by the author, University of California Geography Department, Los Angeles, 1963, 523 pp., 42 illustrations plus map symbol legends, tables of technical information, lists of systems and services, bibliography, glossary, and cartobibliography of 300 map citations. The author's comments reflect extensive research activities and employment in cartographic design, map library metadata base production and telecommunication operations.
Digital Programs at the Geography and Map Division, Library of Congress
A Status Report

by

Gary Fitzpatrick

My title at the Geography and Map Division is Cartographic Specialist for Digital Programs. For the past few years, my role has been to find technology and resources to put digital programs in place and then turn them over to other people. In some respects, it has been a very frustrating process; in others it has been very rewarding. I intend to review the successes that we've had, describe our programs and progress on those programs and our plans for the future.

The digital programs at the Library of Congress' Geography and Map Division started in about 1992 when Ralph Ehrenberg, our Chief at the time, became aware of the fact that there were some exciting things that were going on in digital geography which none of us at the Library of Congress knew anything about. Because, technologically speaking, I was the least far behind in the Division, I was asked to get my nose out of our historical atlases and maps and try to figure out what was going on and how it all relates to the Library of Congress. As part of that, we formed the Center for Geographic Information with the help of a corporate support group. The Center had a very specific mission: to help the Geography and Map Division in its transition to the digital era. Because of that group, we have developed and have had some programs in place that have made some real contributions. The Center's supporters consisted of some leading firms in the field, including such companies as Microsoft, Hewlett-Packard, ESRI, Rand McNally, MapInfo and H.M. Gousha, who provided us with a lot of advice. These companies also donated about $700,000 - $800,000 of equipment, which helped us get going in the digital arena. The Center had a specific purpose: to help us in the transition to our digital programs, not support us forever. The Center is presently in limbo because there is nothing that we need help on at the moment.

It has taken a long time, but we have been successful in getting the Library of Congress' administration to really understand digital geography and its implications, and to support it in a way that Industry felt that the Library should be. Only in the last year have we finally received the budgetary support so that we can do many of the things that we have wanted. Prior to now, we have had to rely on donations of outside expertise for assistance. Now we are making inroads in the budget process. The most significant of these inroads is that 2 years ago, we put a request before Congress to develop a program to provide GIS services to Congress. As part of this program, we asked for four staff positions. These people would use GIS and digital spatial data to directly support Congress and the Congressional Research Service. After 2 years our request was approved, so we now have budgetary support that we are starting to tap. With this money, we have created cartographer/geographer classifications, so we are no longer limited to trying to bring in people and try and fit them into librarian classifications. Our experience is that Congress wants us to provide real cartographic and geographic support; they don't just want access to the data. In fact, both CRS and Congress are saying that they don't want to become GIS experts. They want us to be the experts and present them with the results. As a result, we have been forced to accept the fact that, at least in service to Congress, we are going to have to become cartographers and geographers, not just librarians.

This has been a monumental decision for us, and was not an easy
one to make. However, given the history of the Division, we did not have people on staff who were trained cartographers or geographers who could perform data analyses. We are very clear in our focus that we will be supplying such services to Congress. We do not have any pretense that we will be doing geographic analyses for people outside of Congress or producing maps for any other purpose. However, it may be that if we do produce maps for Congress, some of them will be placed on a web site or published. The decisions to place materials on a web site or publish them will be made by Congress, not the Geography and Map Division, because anything that we do for Congress is done confidentially and can only be released to the public by members of Congress.

In support of this GIS initiative for Congress, the Library has finally purchased the software that we need, so we no longer have to rely on donations. We are now putting a really good software infrastructure in place that will help the entire Library of Congress, not just the Geography and Map Division. ESRI, MapInfo and a number of other companies have been very generous in donating virtually anything we needed, but we have reached the point where we cannot rely on donations; we have to purchase the software so that we have better control and the technical support that comes with it. The Library has funded an entire suite of ESRI software with a number of floating licenses that can be used throughout the Library. Infrastructure support in the Library has wired the Geography and Map Division for high-speed Ethernet and given us a number of high-end workstations which, thanks to the Federal procurement process, aren't actually as good as some of the older ones that were donated. We have just received a couple of very large format plotters which will primarily be used to make maps for Congress. Until now, we have been doing this on an ad-hoc basis when a member requested a map. We now have a 60” plotter, which is what we need to produce a map that can be used on the House or Senate floor. Because those rooms are so large, a standard 36” or 42” wide map is not clearly visible from the back seats.

Among the services we will be providing Congress is production of a Congressional District Atlas that will be useful as a reference tool. The present Congressional District Atlas shows all of the nuances of Congressional District boundaries. The new Congressional District Atlas will depict the nature of a Congressional District in context, instead of having numerous small insets. The plan is also to use the Web to provide access to the very detailed Congressional boundary information that might be needed. The Government Division of the Congressional Research Service was very adamant that the format of the Congressional District Atlas in the 1990s simply did not meet their needs.

We plan to make maps on demand for Congress and hope to identify some products that we know they will want on a recurring basis so that we can develop some standard products. For that purpose, we have recently contracted with Joel Morrison of the Ohio State University Center for Mapping, who was formerly Chief of the Geography Division of the U.S. Bureau of the Census and Head of Research at the U.S. Geological Survey. He will be coming in to assess all of the cartographic work that has been done by the Library of Congress and recommend what we should and should not be doing. This will give the Library a better idea of the types of skills we need to acquire, and the staff, and help us better define what we should be doing for Congress. None of us who are presently on staff have the expertise to do this type of analysis and make recommendations. Other contracts will develop based on the things that Joel has said. I do expect that there may be a contract to design a Congressional District map that meets some of the requirements of the Congressional Research Service.

Regarding our other digital programs, we are working with Larry Cruse to make it easier to find the bibliographic records for maps that we have scanned and put up on the Web. Colleen Cahill will be supplying a list of the Library of Congress numbers. This list will be made available so that libraries can load records for the maps that the Library has scanned into their online catalogs. This is similar to the program in place between the UC Libraries and the David Rumsey Collection.

The Division has been cataloging web pages related to maps and geography as part of a broader initiative in the Library to catalog web sites. We are not presently cataloging online maps. We are not far enough along in the program to develop a statement on how we differentiate the two. It is a fairly new program; at future sessions, perhaps Barbara Story, the head of our Cataloging Team, will be prepared to describe this effort in more depth. Feel free to contact Barbara for more information.

One of the big successes in our digital program during the past few years has been the scanning of historic maps. In terms of technology, we are finally getting good support from ITS in the Library. They have provided us with a number of high-end workstations that can be
used for doing the post-processing after maps have been scanned. Each of the people in that operation now have two high-end workstations so that they can work on two items at once, because there is a lot of wait-time involved in the post-processing of scanned images. The high-speed Ethernet enables us to easily move data around and work off of a central server. We will be getting a new server that will handle just the scanning operation and hold our geographic information system software, so we will no longer depend on little bits of storage scattered throughout ITS.

We have a new scanner on order from a company that formed recently. The company, Coherent Imaging, has several people who were involved with the former Tangent Corporation, the company that produced the flatbed scanners that we are now using. The new scanner will have a flat bed that is either 24" or 30" wide and 60" or 72" long. The ability to scan a map that is 30" wide and 5 or 6 feet long will greatly speed up the processing involved in scanning our historic maps. The most time consuming part of the process is piecing maps that have been scanned in sections back together. The more that we can scan in a single pass, the easier it will be. The price on the scanner has not yet been set; we hope to see it in place early next year. The new scanner will incorporate new ideas in scanner technology, as it will be very modular; repairs will be done by pulling out large modules and shipping them off for repair. Replacements will be shipped as well, thus eliminating the down time caused waiting for a technician to come and repair the unit.

The scanning projects which have been completed include the Panoramic Maps (~1000 maps) and the Railroad Maps (~700 maps). The scanning program was started with a grant from David Packard, not the Hewlett-Packard Company. It has set the framework for all scanning the Library in the late 1990s. The grant was specifically set up to historic Americana. We began by focusing on the major bibliographies that had been compiled on historic Americana and tried to get those maps online. The Panoramic and Railroad maps were the first two bibliographies completed. We then started branching out into other collections that we felt fit the criteria of historic Americana, but were not necessarily published as bibliographies. One of the groups of maps we scanned were those of the American Colonization Society; this collection includes 30 - 40 maps related to the founding of Liberia, which had received extensive use.

Several projects are nearly complete, including collections of maps related to Southeast Asia and Macao. These were done in response to initiatives from the diplomatic community in Washington, D.C. A number of countries are very interested in our scanning program and have asked us to scan material for their country. Nicaragua and Peru are among the countries that we have close contacts with. Eventually we will work on scanning materials for each of them.

Another project, which is nearly complete, has been based on work that a staff member is doing to compile a bibliography of maps related to the Louisiana Purchase. We have scanned many of the maps from that bibliography; they will be going online very soon.

A number of fairly large scanning projects are ongoing. A project to scan the Civil War maps will be continuing for quite some time. We have over 1000 Civil War maps scanned, but not all are accessible yet. There will eventually be more than 3000 Civil War maps scanned. We are also acquiring new materials related to the Civil War which will eventually be included.

We have a special project with the Virginia Historical Society and Virginia State Library. A major Geography and Map Division donor, Allan M. Voorhies, brought us together and helped those institutions get started in their scanning programs. The Library of Congress will be taking their files and mounting them on our web site rather than spreading the information among three sites.

The American Revolution project is also continuing, base on a bibliography by John R. Sellers and Patricia Mofen van Ee. There are about 3000 maps in that bibliography. We are not sure if we will do every plate for every state in the Atlantic Neptune. We will eventually do them all, but may not do all of them early in the project.

The National Parks project is ongoing. We have done Yellowstone, Grand Canyon and Great Smoky Mountains and hope to do more.

We scan public domain maps for the Places in the News section of the general Library of Congress web site. The other ongoing scanning project is based on the bibliography of Luso-Hispanic maps by our Chief, John Hebert. This is a list of Portuguese and Spanish maps, primarily nautical charts. All of that material will eventually be scanned and made available.

We are trying to get some standard contract language developed so that we can pursue partnerships with map resellers. Several companies are interested in reprinting our maps and making a profit on them; some are even willing to share the proceeds. We need standard contract language regarding reprinting of these materi-
als. The only problem is that the money generated from this will go to the Library of Congress’ publishing office, not the Geography and Map Division. We do want to try and tap into that money, and have several publishing projects in mind.

Once we have finished raising the money for the purchase of the Waldseemuller map, it will go up online. We are planning to scan the County Land Ownership maps and atlases. However, given the amount of time needed to complete the Civil and Revolutionary war maps, we may not be able to do these for a while.

NASA and the U.S. Geological Survey have approached us about some online exhibits based on the U.S. Geological Survey’s recent Earth as Art exhibit. It has been posted as a semi-permanent exhibit outside of the Geography and Map Division. In discussions, however, we are looking into going forward with an Earth as... series of exhibits. To expand on this concept we would combine historic maps with various types of modern imagery and focus on specific places or themes. We are talking about selecting 20 historic maps on their artistic value to complement the Earth as Art exhibit. We are pursuing other ideas along this theme, including Earth as History, showing four U.S. and World cities, including historic maps and imagery. The cities that we are considering are New York, St. Louis, Las Vegas (because of its rapid growth), Honolulu, Paris, Cairo, Lima and a city in Japan. NASA may contribute some funding so that we can pursue this idea. We look for the NASA-USGS program to move forward and are open to suggestions for additional Earth as... displays.

This summarizes what has been happening with our digital programs. Despite all of the frustrations, I can look back and realize that once the GIS program is in place, we will have added ten people to our staff since 1992; all of them are working on digital projects. It has been a very rewarding project in the long run, now that I can look back and see all of those beautiful historic maps that are available online. It has been a lot harder than I thought it would be; there were a lot more issues to deal with than I thought it would be, because there were a lot more issues to deal with trying to get the Division’s digital programs incorporated into the Library’s total view of the digital program. I think that we are fairly well established now, and will get the support that we need.

One side benefit of the digital program has been that I have been able to use the technology to analyze our storage space. By putting the layout of the Collection into AutoCAD, we realized that we may be able to increase our Capitol Hill storage space by 20 – 25%. This may help us keep our materials in house rather than sending them to an off-site storage facility.

About the Author

Gary L. Fitzpatrick is the Cartographic Specialist for Digital Programs in the Geography and Map Division at the Library of Congress, where has worked for 32 years. He was the principal contributor to the Division’s bibliography, Fire Insurance Maps in the Library of Congress, has been the curator of numerous exhibits for the Library, and is the author of the Early Mapping of Hawaii and coauthor of Surveying the Mahele: Mapping Hawaii’s Land Revolution.
Reviews of Atlases, Books and Digital Resources
edited by
Kathy Rankin
University of Nevada, Las Vegas


*Mapping Census 2000: The Geography of U.S. Diversity* is a digital cartographic production of the 2000 U.S. Census population data. Originally published by the U.S. Census Bureau as part of the Census 2000 Special Reports series, this book has been republished by ESRI Press. As with most data sets, Census data is usually produced in a numeric tabular form. This book provides a different type of presentation and analysis by creating 75 GIS maps of the most recent Census data. Although population statistics from the Census Bureau are a "rich data set" in and of themselves, this work enhances the data and allows the reader to both see the geographic organization of the population and better understand population trends.

The book opens with an informative introduction to the 2000 Census. I highly recommend reading the introduction before viewing the maps. The changes made in connection with race representation on the Census survey can be confusing and the introduction provides a clear explanation of these changes. The introduction also provides detailed information on the maps and the technology used to produce them.

The publication is well-organized and contains four sections. The first section provides ten maps illustrating several perspectives of the total population of the United States, regardless of race or ethnicity. The next section consists of four maps illustrating racial prevalence and diversity. The third section includes forty-eight maps covering each racial category. Maps include total population of each race and their combination with other races. These maps highlight specific aspects of each race including percent of population, percent under the age of eighteen and percentage of change (from 1990 Census). The final section presents thirteen maps covering the presence or absence of Hispanic or Latino origin of the population.

The maps were created using ArcMap, the desktop cartographic GIS software from ESRI. ArcMap is part of the ArcGIS software suite. Each map was created using a customized version of the Albers equal area conic map projection. Most maps are choropleth, meaning numerical data values are divided into classes. The classes are used to shade areas on the map. In addition, the maps are designed to aid map comparison and provide critical summary breaks or class breaks within the maps. The summary break or class break is where the decision is made to end one data range or color and where to begin the next. Class breaks were chosen using a combination of arbitrary rounded breaks shared between maps and national rates for each topic. Comparison among maps is facilitated by using the same categories and colors within each series. Colors were selected to accommodate readers who are colorblind. A total of eight different color schemes are used in the book.

This highly detailed work holds true to its purpose of showing a realistic picture of the diversification of the United States population with a high level of detail. Individual maps are attractively presented, easily read and are accentuated by concise legends. The maps are creatively colored to reflect population data changes. The 75 maps are broken down by county level and are accompanied by a smaller map showing data by state level. Compared to similar books, *Mapping Census 2000* is superior in technology and presentation. This is due to advanced software and GIS capability. One criticism of the work...
is that the quality would be much higher if each entry included an explanation or summary. For example, *We the People: An Atlas of America's Ethnic Diversity* by Allen and Turner contains text with historical, in-depth analysis that enables the user to better understand the maps. The addition of text would have significantly enhanced this publication.

As a geographic and cartographic work, this book is important because it enriches vital data sets. Most data sets are not spatial or geographic in nature. In addition, this collection of maps shows how GIS products can be used to illustrate important information in an easy to understand, well-organized manner. This book would be a great resource for public libraries and academic libraries. It can be used by the novice, professional researcher or undergraduate student.

References


Cory Tucker Librarian University of Nevada, Las Vegas Las Vegas, Nevada


**The Utah Road & Recreation Atlas** is the latest of six state atlases produced by Benchmark Maps. These atlases are geared toward the outdoor enthusiast, and Utah certainly has tremendous opportunities in this regard. The Utah atlas is split into five sections. The first section, “Regional Maps,” provides two regional maps, the first a US highway map (with interstate and US highways), and then a larger scale regional map entitled “The Mountain West,” detailing a good part of the continental United States west of the Rocky Mountains (and showing interstate, US, and state highways).

Finally, a two page map of Utah is provided, giving a good overview of Utah cities, roads, and geographical features.

The bulk of the atlas maps are contained in sections two (Recreation Guides) and three (Landscape Maps). Eight, one page, sectional maps are found in section two. Generally, the map appears on the left side and the recreation guide is found on the right facing page. These maps are drawn to 1:730,000 scale, with details provided in 9 shaded colors. Some of the color gradations are close enough as to be difficult to distinguish; for example, the three separate designations for wilderness, forest service, and wildlife area lands are all close shades of green. The recreation maps show “every road” from interstate highways down to unpaved and 4WD roads, as well as natural features, cities/towns (with 7 circles of varying size denoting population size), and symbols denoting items such as museums, ruins, and campgrounds. In addition, other symbols denote areas of recreational activities such as hiking, rafting, etc.

The accompanying text of the recreation guides provide information on attractions such as state and national parks, natural wonders, historic sites, and notable towns. This information includes contact phone numbers, grid locations corresponding to the recreation maps, and highway information to get to the particular site. Each guide has a section entitled “Information Resources” containing a list of a dozen or more agencies which can provide more information for the general area in particular. In addition, climate information is provided for three cities/towns per map (including colorful graphs detailing average/record highs/lows, precipitation levels, and other information, such as average number of nights below freezing). Overall, these recreation guides are quite comprehensive for the state, especially considering there is a full page guide for each of the eight maps. Following the recreation guides is an index to campgrounds and RV parks, detailing hundreds of such sites across the state (including number of tent sites, recreational activities near the site, and phone contact information).

The true heart of the atlas is section three, the Landscape Maps. This section is comprised of 27 two-page maps, drawn to 1:250,000 scale (four miles to an inch). The background shadings of these maps are based on elevation, such as light green for the lower elevations beginning around 2,000 feet, yellows/browns for the mid-elevations, and grays and whites for the upper elevations to the state’s highpoint of 13,528 feet. Overall, the maps are beautifully rendered and exquisitely detailed, appearing nearly three-dimensional. Mountain ranges appear textured and elevated and trenches appear depressed. The maps are extremely clear. Roads are divided into eight designations (five paved designations, one unpaved, one 4WD, and one “unclassified designation”). Road mileages between cities/junctions are provided on the recreation maps, but not the landscape maps. Cities/towns are designated by one of seven circles corresponding to population. Natural features are all clearly labeled, and symbols designate additional items such as airports, gates, campgrounds, and trailheads. Many named mountain peaks with elevations are provided on the maps. County boundaries are clearly defined, as are boundaries.
for national parks, Indian reservations, and military reservations. For areas where there is no public access, this is clearly labeled.

The fourth section, “Metro Area Maps,” contains a two-page map of Salt Lake City (with an inset map of Central Salt Lake City), and one-page maps of Ogden and Provo, all drawn to 1:170,000 scale. Suburbs are clearly evident, as each is shaded in its own color. These maps provide useful overviews of the cities; obviously, one would want a larger scale city map for detailed city navigation.

The fifth section is the index. The index is split into seven subsections: counties/county seats; cities, towns, and locales; selected rivers, lakes, and bays; selected physical features; state parks; national parks, monuments, and forests; and wilderness and wildlife areas. Index entries provide name, landscape map number, and grid location. Hundreds of entries are provided for the cities and physical features indexes. In addition, there are two overview maps of Utah on the back cover of the atlas. These include an identifying page guide overlay for both the landscape maps and the recreation maps. The back cover of the atlas is incredibly useful and allows one to easily identify and turn to the correct map within the atlas. In addition, for GPS aficionados, latitude and longitude coordinates are provided for every ten minutes on the landscape maps, with a corresponding overlay grid denoting these coordinates across the entire map spread. One minute tick marks are provided on the border of each landscape map.

Given the recent publication date, I have not extensively field tested the Utah atlas. However, I have extensively tested the California and Arizona Benchmark atlases, including driving several of the more “major” 4WD roads. No inaccuracies were found with the information. To help test for accuracy with the Utah Atlas, I looked for two somewhat recent features, the Olympic Stadium in Salt Lake City, and Grand Staircase - Escalante National Monument. Both are clearly present. I did notice that, according to the back cover map, Kings Peak, the highest point in Utah, should appear on map pages 46-47, when in fact it appears on map pages 44-45. This is likely just a typo, and the physical features index within the atlas does provide the correct map page and grid location (though the index incorrectly calls it “King Peak” as opposed to “Kings Peak”).

The chief competitor to the Benchmark atlas is the Utah Atlas & Gazetteer (Delorme, 2nd edition). The copy I looked at was the 1998 edition (there is a 2000 edition). The main Delorme maps are drawn at the same scale of 1:250,000. Latitude/longitude coordinates are provided only at the four corners of each map. The maps are not as dimensional as the Benchmark maps. Along with a small degree of texture, they rely on contour lines to help illustrate, for example, mountain ranges. The maps are drawn in several drab colors based on land ownership (BLM, State lands) and physical characteristics (woodland, sand), as opposed to elevation. Recreational information is provided, including useful sections detailing hiking opportunities, scenic drives, fishing, etc. In addition, more complete information on national parks and monuments is provided. Overall, however, the Benchmark atlas provides more recreational information, and includes more complete maps devoted specifically to recreation. Delorme’s only index per se is a one page index of place names, containing several hundred entries with page number and grid location. The author has several Delorme atlases, primarily because they were published before the Benchmark series existed, and because Delorme currently covers more states than the Benchmark series. In field testing, the Benchmark maps are much easier to use. It is often impossible to get a sense of how good a road may or may not be with the Delorme atlas. Overall, the Delorme maps simply can’t compete with the Benchmark maps, in terms of level of detail, ease of use, and sheer overall beauty.

Benchmark notes that it has received several awards for the way their Landscape Maps present information. These awards are clearly deserved. Atlases are meant to convey geographical information. At another level, some consider atlases to be potential works of art, myself included. The Benchmark Utah Road & Recreation Atlas succeeds admirably on both counts. A tremendous amount of detailed information is provided, and the maps, especially the landscape set, are true works of art. No other atlas to my knowledge comes close to the quality and beauty of the Benchmark series of state atlases. Anyone wanting a treasure trove of information about the varied recreational activities within Utah, or anyone simply wanting to know more about the state and the lay of the land, should choose this atlas above any other. This atlas is recommended for academic and public libraries within Utah and the regional western United States.

Jason Vaughan
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University of Nevada, Las Vegas
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*The Map That Changed the World; William Smith and the Birth of Modern Geology* is a delight that should be read by professional and amateur cartographers, geographers and geologists.

The author, noted writer Simon Winchester (who graduated with a Geology degree from Oxford University), makes no secret of the fact that this text is an unabashed tribute to his hero, William Smith, a nineteenth-century surveyor and canal digger whose passionate hobby was geology. In the course of Smith’s vocation and avocation he went on to create what became the first geologic map of the British Isles in 1815 and to become the individual who many believe to be the father of modern geology.

Winchester clearly achieves his goal of paying homage to his hero while at the same time giving the reader a detailed overview of the study of fossils found in England during the heyday of canal digging in the early part of the nineteenth century and how these finds led to the creation of Smith’s historic map. Winchester also shows in this book, as in his past texts, the ugly class distinctions of the haves and have-nots in academic, scientific and social circles during this time period in England.

Unblushingly Winchester compares the development of this map to other historic developments of the 19th and 20th century, such as the *Oxford English Dictionary* (the topic of Winchester’s previous book, *The Professor and the Madman*), the Manhattan Project and the Human Genome Project. At the same time Winchester discusses the fact that Smith’s work was built upon the foundation of the work of other notable geologists, such as John Woodward’s *Natural History of the Earth* and John Whithurst’s *An Inquiry into the Original State and Foundation of the Earth*. Interestingly, Winchester devotes an entire chapter of this text to how Smith’s work influenced his own study of geology. He also discusses the evolution of the William Smith medal given by the Geographical Society of London. Although the book’s format is primarily textual, the reader will find that the few maps that are included as attachments are in color and heavily detailed. The descriptions and sketches of the fossils that lead to the development of Smith’s groundbreaking map are also key to this book.

Although this text is by no means a scholarly work, I believe that most will find this an enjoyable read and it should be included in any academic and public library that collects in the field of geography or cartography. True map buffs will delight in the book’s dust cover.

Peter L. Kraus
University of Utah


It is simply a delight to hear of another exhibition catalog published by the Bienes Center for the Literary Arts. The Center holds a fine record of exhibitions and publications and the librarian/bibliophile in us can take pride in the fact that this center of creativity is attached to a public library, the Broward County Library of Fort Lauderdale, Florida. The Bienes Center was created in 1996 through the philanthropy of Dianne and Michael Bienes and holds important collections of Floridian, illustrated books, Florida artists’ books and the Florida records of the WPA and other New Deal Agencies. It has held exhibitions on *The Rivers of America* series, the Federal Writers’ Project for Florida, modern rare books to name only a few. This catalog on the mapping of Florida is its latest offering.

The catalog is attractively paper bound in heavy dark brown paper with an outline of the state of Florida on the cover cut out and a lighter tone of brown showing through. The use of die-cut paper covers is a highly effective design feature and has become characteristic of publications issued by the Bienes Center for the Literary Arts. The catalog on the *Rivers of America* book series has a sweeping “S” curve cut from the cover revealing a meandering river on the sheet underneath.

The introduction to the catalog at hand provides a sense of the purpose of the exhibition. “The exhibit,” it says, “employs rare and antique maps and facsimiles to graphically chronicle from 1507 to 1931 the discovery and colonization of Florida by the Spanish, the British, the French and the United States. It attempts to answer such questions as who actually discovered Florida? How was it discovered and how did it eventually become a state in 1845?” There follows a succinct 19 page overview written by Ralph E. Ehrenberg, Chief Emeritus, Geography and Map
Division of the Library of Congress, of the cartographic history of the Florida peninsula entitled, “Marvelous Countries and Lands” Notable Map of Florida, 1507-1846”, followed by a three-page essay by William Straight shedding light on the question of the identity of the true discoverer of Florida. The catalog offers 15 full-size color map reproductions, some more readable than others, along with three half and four small or reference illustrations of a total of 46 that appeared in the exhibition. These are appropriately scattered throughout the catalog. The editor decided to reproduce the entire text block from the 1931 Florida State Department of Agriculture’s Historical Map of Florida, entitled, Historical Data Concerning Florida within the pages of the catalog. The text block is largely a timeline of important events in Florida’s history followed by a list of governors of the state. Finally, the catalog includes an “Exhibition Checklist” of very high quality map citations and annotations. The catalog has two indexes, a glossary and a very useful bibliography.

Between the timeline and the indexes, however, the catalog moves a bit beyond its stated purpose by presenting essays on the Gulf Stream by James C. Hobbs, how the name “America” was applied to the New World, and “Map Printing Methods”, both by Joseph H. Fitzgerald, and finally, two pages on the “Latitude and Longitude” by Ted Andros. These are all from 1 to 3 pages long and are useful in the sense that they can answer many questions that might come to mind in the course of viewing the exhibit; it might have been better to put these essays into appendices of their own to indicate their subsidiary nature instead of in the main body of the catalog.

Ehrenberg’s essay is easily the heart of the publication. It matches men and maps to events and times and identifies the significance of the maps in the exhibition for the reader. Chronological divisions of the essay are, First Images, Spanish Florida, French Florida, English Carolina-Spanish Florida Borderland Disputes, and East and West Florida. The name of the essay “marvellous [sic] countries and lands” comes from the note written by the Italian Peter Martyr an important chronicler of early New World voyages on the back of a map that might have been the first to show Florida. Peter Martyr’s “cartographer, Andres Morales,” writes Ehrenberg, “drew a short wavy line to represent a coastline that he labeled isla de beimeni (Bimini) parte. Some scholars believe that this line represents the southern coast of Florida...” The concluding map is J. Goldsborough Bruff’s 1845 map, entitled The State of Florida, Compiled in the Bureau of Topographic Engineers From the Best Authorities. Ehrenberg states that the Bruff map, one of the first maps of the new state of Florida and measuring nearly 12 square feet, is an “exquisite work of art and science” and gave to the nineteenth century map reader detailed information on the Florida only hinted at by Peter Martyr and Andres Morales. In between these two maps, many nations and traditions have contributed to make the map of Florida, always “improving upon the work of their predecessors.”

This catalog is not the definitive statement on the cartographic history of Florida as the introduction to the bibliography so clearly suggests. However, this exhibition catalog should be acquired by larger academic libraries and by those libraries with a regional interest in works on Florida and the southeast. Others should acquire the web-version of the catalog by logging onto the Bienes Center for the Literary Arts at http://www.broward.org/bienes and then selecting the “Exhibitions” button. The entire catalog complete with its illustrations can be found there. Nominate this site to your technical services departments for cataloging into your online web-interfaced system. Because the Bienes Center will be launching more exhibitions and catalogs of interest to bibliophiles of all stripes, I suggest you personally bookmark their site and check in occasionally for the latest news.

Florida, The Making of a State : A Cartographic Adventure continues the Center's record of excellence.

Peter Stark
Special Collections Acquisitions Librarian
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The two publications under review here are by the same author and deal with the same topic, the Hereford Mappamundi. The closing paragraph of the acknowledgements in the book, note that “Material in the book also
appears on the CD-ROM *A Wheel of Memory: The Hereford Mappa mundi* ..." (sic). A summary provided with the CD describes it as “An interactive exploration of the *Hereford Mappa Mundi*, a late thirteenth-century world map that presents, in over one thousand texts and images, a panoramic view of the intellectual and conceptual framework of the Middle Ages.”

The first and most notable difference between the two publications, aside from the different media, is the presence of color in the CD-ROM, and the absence of same from the book. The next most noticeable difference is the more extensive text in the book and the more academic tone of that text. This last may be simply this reviewer’s perception based on the more extensiveness of the analysis and his own more frequent consultation of the footnotes due to their being instantly accessible at the foot of each page.

We are introduced to both publications by a statement from Aristotle to the effect “that memory belongs to that part of the soul to which imagination belongs” and that “The stimulus produced [by viewing a picture] impresses a sort of likeness of the percept, just as when men seal with signet rings”. The quote goes on to note that although our mental image is not the image itself, it serves as an aid to memory. That “a picture is worth a thousand words” is brought home to us whenever we open our high school or college yearbooks or family albums. Suddenly stories of the past, the sound of voices, and remembrances of events flood our minds. Hence the title of the CD-ROM version.

In medieval times and both before and for a long time after, all teaching of the illiterate populace (mostly restricted to religious topics and folklore), and much of that of the literate minority, consisted or oral teaching and the enactment of dramas; stories from the bible, the romances of Alexander, great events of the Crusades, and even current events.

The author has identified the *Hereford Mappamundi* as consisting of three major strands, the story of the Christian Bible, consisting of the Christian themes of Creation, Sin, Judgment and Redemption, along with the preceding and overlapping story of the Hebrew peoples; the Romance of Alexander, with places associated with his conquests being displayed on the map and a number of names and text blocks related to him (69 in all); and the Crusades, again with places associated with the Christian attempts to wrest control of The Holy Land from the Muslims. Of these three great themes, the least likely to the modern mind might be that of Alexander the Great, yet his story seems to have been second in popularity only to that of the Bible in Western Europe at this time.

Alexander’s Empire stretched from India to the Atlantic and his accomplishments became the basis of stories that took on mythic proportions. Over 300 years before Christ, he wrote to his teacher Aristotle about the lands in which he traveled and of the people with whom he had contact. His letter to Aristotle seems to have been widely available in England as early as the eleventh century, attached to the writing of a historian whose work contained descriptions of strangely made human beings, descriptions and pictures of which most readers will have encountered at other times prior to opening either of the publications under review here. That Alexander should be a large part of the Christian document Kline deconstructs in her work is attributable to Christian Monks, who, ignoring the less attractive aspects of Alexander’s personality and actions, made of him a saint-like precursor of the evangelical mission assigned to the followers of Jesus, the Christ. Confirmation of the author’s stance regarding the popularity of the Romance of Alexander is found in *The Canterbury Tales* (written during the century following the creation of the Hereford map) where Chaucer has the Monk remark:

“that his story is so common
That every wight that hath discretion
Hath herd somewhat or all of his fortune”

(*Encyclopaedia Britannica*, 1959, v.1, pg 572)

As an art historian, the author has approached the Hereford map from a different angle than that taken by other authors whose work I have read. She has not ignored the other approaches but rather she presents, for me, an expanded view of what this icon represented to the people of its time.

She does this in a series of chapters (the book) or sections (the CD) bearing on the topics of “Wheels of Memory” (in the book titled “The circle as conceptual device”), medieval mappaemundi in general and the Hereford mappamundi in particular, “The World of animals”, “The World of strange races”, “The World of Alexander the Great”, “The World of the Bible”, “The World of the Crusades”, and “The World of geography”. There is some difference in the sequence of the two presentations at which readers encounter the material regarding medieval mappaemundi but both approaches worked for this reviewer.

One of the advantages of the CD-ROM is the inclusion of audio clips to accompany animated displays that
illustrate particular facets of the map. The "Wheels of Memory" section may be viewed entirely with audio narration while beyond this section only certain frames, identified by the presence of the audio icon, can be viewed in this way. An example of this is the description of zonal maps in which clicking on a zone highlights that zone and triggers an audio description of same. All of the screens accompanied by the audio icon can also simply be read and advanced one by one, either for review, or in case the reader is hearing-impaired.

One of the disadvantages of the CD-ROM for this reviewer is the size of type used in the text. I found not only was it too small for easy reading, but viewed against the pseudo-crinkly surface of the virtual parchment on which it was printed, that some parts of words disappeared into the crinkles. This led to lost time and eyestrain in my attempts to decipher those words.

The author has fallen into the old trap regarding scale when she refers to the Hereford map as a "large scale map" when she means a large format map. Similarly she refers to the Psalter map as a "small scale map" because it occupies only one page of a small book. The issue of scale seems to arise again in her description of the Peutinger map though in a different context. Further she is inconsistent in her use of units of measurement, sometimes giving distances in Imperial units, sometimes in metric, and sometimes in both systems.

That the two products may have been intended for two different audiences is indicated by the inclusion on the CD-ROM of a very extensive glossary of terms that might be unfamiliar to a graduate of our present secularized school systems or to those of faith systems other than Christianity. It is handled very cleverly by highlighting the words with which the author feels a reader might not be familiar, and providing a link from those to the glossary explanation that appears in a box on the screen while the original text remains. The entire glossary may be accessed from a button within this box or from the home screen. A glossary is not present in the book.

The text pertaining to any one image is normally advanced by use of the scroll bar but in a number of cases the reader is required to click on a red ball next to the text, and to drag it down. This is consistent with the use of the scroll bar. I think it would be helpful if the reader could also use either page down, or the navigation arrows on the keyboard in order to avoid a sore wrist.

As an art historian the author has given us an extensive look at the sources the original artist must have used as his (or her) model for the images placed within the Hereford map. Her expressed task was to "begin to uncover how this map and by extension, others like it, function as objects of art in their own time. In examining in detail, within the book, the possibilities of how the map was viewed and understood, questions of literacy and oral tradition, of artistry, and textuality, become the recurrent themes." She deals therefore with topics such as how we see, how images and languages communicate ideas, how our understanding is based on previous experience, and how removing images from their original context and placing them in a new context without altering the accompanying text may change our understanding of the content of the image. Though touched upon in the CD-ROM, these topics are not explored to nearly the same extent.

The subject heading assigned to both these publications by the Library of Congress are Geography, Medieval—Maps and Cartography, History—Maps, but I would think there should be several others as well. Considering both the content and the very extensive bibliography which accompanies this work, I would suggest, Art, medieval; Christian art and symbolism—Europe—Medieval, 500-1500, at the least.

Though the target audience for the CD-ROM is probably that of senior high school and first through third-year university students, I believe that readers of the more advanced presentation would benefit greatly from having the CD-ROM to hand while reading the book. Both the colour and the animated presentations assist in understanding. Due to the very wide range of topics and the two target audiences, I would recommend that most university libraries would benefit from adding these publications to their holdings.

Ronald Whistance-Smith
Curator Emeritus, William C. Wonders Map Collection
Edmonton, Alberta

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 footnotes. 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 judgments 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.

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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.

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ALBERTA


ARIZONA


U.S. Bureau of Land Management, Yuma Field Office, 2001. Kofa and New Water Mountains Wilderness, Yuma, Arizona. 1 Map, Scale...
1:125,000. Yuma, AZ: The Office. OCLC: 50310605.

Ordering information for Arizona Geological Survey maps is available on their website: http://www.azgs.state.az.us/order_info.htm.

BRITISH COLUMBIA


CALIFORNIA


The Dibblee Geological Foundation has begun to release CD's of the extensive geological maps resulting from the work of Thomas W. Dibblee. The first 3 discs, OCLC #50903821 cover the Santa Monica Mountains (disc 1), the Santa Barbara-Santa Ynez Mts (disc 2), and the Ventura-Santa Ynez Mountains (disc 3).


Eureka Cartography, 2002. Santa Cruz County Bikeways. 5 Maps on 1 sheet, Scale ca. 1:22,000. Pub. for the Santa Cruz County Regional Transportation Committee by Eureka Cartography. OCLC: 50474586.


Holzer, Thomas L., 2002. Liquefaction Hazard and Shaking...


COLORADO


North South Publications. 2001. The Boulder Bouldering Map. 10 Maps on 1 sheet. Scale not given. [S.I.]: North South. OCLC: 50860423


HAWAII


IDAHO


Notice: The University of Idaho has recently released several compact discs of Landsat 7 imagery covering parts of Idaho and adjacent states, as reflected on several recent OCLC records input in September 2002.

MONTANA


NEVADA

iGage (Firm), 2000. All Topo Maps: Nevada. 6 computer optical discs, input scales differ. 8th ed. Salt Lake City, Utah: iGage. OCLC: 50642542.


OREGON


PACIFIC COAST


PACIFIC NORTHWEST


UTAH


393. URL: http://www.maps.state.ut.us/order. OCLC: 50390608.


WASHINGTON


WESTERN UNITED STATES


Spin Maps Inc., 2001. Denver to Los Angeles: In-Flight Route Map, Educational Facts & Figures, Fun for the Whole Family, Reusable...


Rocky Mountain Map Company has released updates of numerous structure contour maps from various western states, with well data revised to 2001. Examples include Northeastern Arizona; Piceance and Paradox Basins, Colorado; Overthrust Belt, ID-WY-UT; Powder River, Crazy Mountain and Big Horn Basins, Montana; San Juan Basin, NM-CO; Uinta and Green River Basins, Utah; Jackson Hole, Hanna, Laramie and Wind River Basins, Wyoming.


Many western national parks and monuments are covered in Maptech’s National park digital guide (Ed. 1.0: ver. 5.03), a set of 13 computer optical discs published in Amesbury, MA by Maptech. Includes guidebooks, USGS topographic maps (mostly 1:24,000/25,000 or 1:100,000 scale), and is GPS compatible. OCLC: 50552338


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, Editor, New Mapping of Western North America.


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.

News of Note
compiled by
Linda Zellmer and Adonna Fleming

Benchmarks

Rumsey Collection adds New Maps

Over 700 new maps were added to the David Rumsey Collection (http://www.davidrumsey.com) in August. They may be found by searching the database for the author names. Among the items added are:

- **Railroad and Land Development Maps of Texas**, various dates, 1877 to 1892. (Galveston, Texas), Houston & Texas Central Railway, International & Great Northern Railroad, Southern Pacific Company, St. Louis, Iron Mountain, Southern Railway Company, Texas and Pacific Railway, and Texas Land and Immigration Company.


- Andreas, A.T., 1874. *Illustrated Historical Atlas of the State of Minnesota*. 191 Maps and views. One of the earliest atlases of Minnesota with maps and views of cities, counties, farms, commercial buildings, and 3 birds-eye views of Minneapolis, St. Paul, and Winona not found in the standard editions of this work.

- Andreas, A.T., 1875. *Illustrated Historical Atlas of the State of Iowa*. 222 Maps and views. Similar to the Minnesota Historical Atlas, with extensive coverage of Iowa farm plats and views.


- Marzolla, Benedetto, 1856. (Atlante Geografico). 51 Maps. This is a very attractive and scarce atlas by an Italian cartographer from Naples. Marzolla prints extensive notes with his maps, listing his cartographic sources and giving political and statistical information on the areas covered. The map of “Nuova California” is based on the Hypolite Ferry map of 1850 and is discussed by Wheat. The maps are dated from 1840 to 1856.


The David Rumsey Historical Map Collection now contains over 7,180 maps online. The Collection focuses
on rare 18th and 19th century North and South America cartographic history materials. Historic maps of the World, Europe, Asia and Africa are also available on the site. Contributed by Phil Hoehn, philhoehn@juno.com.

Arthur M. Miyazaki (1925-2002)

University of California, Berkeley cataloger Arthur M. Miyazaki (1925-2002) passed away in June. He was the Japanese Cataloger at Berkeley’s East Asian Library for 32 years until his retirement in 1992. From 1984-86 Mr. Miyazaki did original cataloging for 12,000 Japanese language map sheets (mostly U.S. Army Map Service “captured maps”) now housed in Berkeley’s Earth Sciences and Map Library. He also served as the treasurer of the Friends of the East Asian Library.

J. David Love

J. David Love, legendary Wyoming geologist, died on Friday, August 23. He was 89 years old.

Love spent most of his career mapping the geology of his home state of Wyoming and received many awards recognizing his spirit and scientific contributions. David Love was a scientist emeritus with the U.S. Geological Survey (USGS), an honorary member of the American Association of Petroleum Geologists, and a lifetime member of the Geological Society of America. He also held an honorary doctor of laws from the University of Wyoming. Love worked for the USGS 45 years and continued to publish and to produce maps after his retirement. He also taught and led field trips as an adjunct professor at the University of Wyoming and several other universities. During his life, he earned several awards, including the U.S. Department of the Interior’s Meritorious Service Award and the first Legendary Geoscientist Award from the American Geological Institute, which recognizes geoscientists whose achievements have lasting and historic value for the earth sciences. In June 2000, the Museum of History and Wildlife Art in Jackson Hole gave him its Carl Rungius Award, named for wildlife and landscape painter Carl Rungius. David and Jane Love, also received the 2002 Teton Medal, for their service to the Jackson Hole community.

Born April 17, 1913 in Wyoming, Love spent his childhood on the Wind River Basin south of Riverton. Aside from many travels, he left Wyoming for only a few years: first to earn a Ph.D. in geology from Yale University, and then to spend 4 years mapping the Midcontinent and southeastern United States for Shell Oil Co. In 1942 he returned to Wyoming to work as party chief of the USGS Mineral Deposits Branch. The next year, he opened the USGS Laramie field office, where he spent the next 45 years working, mapping the state and finding its resources. He directed the compilation of the 1955 and 1985 Wyoming geologic maps. Much of his time he spent outside, mapping Wyoming’s geology. Author John McPhee chronicled much of his life and personality in the book Rising from the Plains.

Libraries Awarded for GIS Achievements

The University of Connecticut’s Maps & Geographic Information Center (MAGIC) and the University of Idaho’s Library received Special Achievement in GIS Awards at the ESRI User Conference in San Diego, CA.

The University of Connecticut’s Homer Babbage Library and University of Idaho Library were honored on July 11 for their innovative use of geographic information system (GIS) technology. ESRI, the world leader in GIS software, recognizes organizations that provide substantial benefits to society through their use of GIS technology. The Special Achievement in GIS award ceremony takes place at the Twenty-second Annual ESRI International User Conference in San Diego, California, among thousands of GIS professionals.

The University of Connecticut’s Homer Babbage Library was honored for its Map and Geographic Information Center (MAGIC). Since 1989, MAGIC has collected and provided access to digital geospatial data. The Center has over 20,000 files of geospatial data for Connecticut ranging from transportation to soil layers, as well as census geographies and data for the past three decennial censuses. This information along with the library’s 180,000 maps, some 50,000 aerial photographs, and vector data is available to the university and the community.

University of Idaho’s Library was honored for its Interactive Numeric Spatial Information Data Engine (INSIDE) web site. The site is a cooperative data sharing effort between the University of Idaho Library and federal and state agencies, as well as local communities in Idaho. INSIDE Idaho makes government collected and distributed data, previously available only through requests to agencies or visits to a library, more readily accessible to the public.

Users can access an array of geospatial and numeric information from the INSIDE Idaho homepage. In addition to providing necessary information for research and learning, a tutorial for efficient use of the site is available, along with a calendar of
events that lists GIS-related conferences, workshops, and meetings. Aerial photographs of many Idaho areas are also located on the homepage of the site.

In April 2002, the Idaho Geospatial Committee unanimously voted to formally recognize INSIDE Idaho as the official statewide geospatial clearinghouse for Idaho. INSIDE Idaho uses GIS technology efficiently, allowing many agencies and the public to share data, resources, and expertise to meet the increasing demands for spatial information.

MAGIC is user-driven and configures its site to ensure efficient distribution of spatial data. A partnership with the University of Connecticut Center for Geographic Information and Analysis has given MAGIC additional support and ideas of what the library should be. MAGIC pushed for an ESRI university site license to give faculty and students the tools needed to use the data on MAGIC.

Interim FGDC Director Named

Ivan DeLoatch will be serving as the Staff Director of the Federal Geographic Data Committee for the period October – December 2002. As Staff Director, Ivan will be providing for the coordination of operations in the Federal Geographic Data Committee. Ivan has over 22 years of environmental program, technical, and policy experience in the Federal, State, and private sectors transcending the data management spectrum. For the past 3 years, he has been serving as Chief of the Data Acquisition Branch in the Environmental Protection Agency’s (EPA) Office of Environmental Information, where he has lead the effort to establish EPA’s Geospatial Program and implement innovative approaches to acquire key datasets for Agency-wide use. EPA is developing an enterprise approach for the use of geospatial data, tools and technology; that includes key internal and external planning activities. He also serves as a representative for several intra- and interagency committees addressing geospatial information, including the Federal Geographic Data Committee’s Coordination Group.

John Moeller Retires

John Moeller, staff director of the Federal Geographic Data Committee, retired after 34 years in Federal service last summer. Moeller is credited with helping provide communities with tools and incentives to develop geographic data and make data widely available for use by citizens, government officials, businesses, and academic institutions. He made numerous presentations to domestic and international organizations to advocate spatial data sharing and development of compatible infrastructures to apply spatial data to economic, environmental, and other social issues. During his tenure, FGDC succeeded in advancing the National Spatial Data Infrastructure and interoperability standards and forming partnerships between Federal, State, tribal, and local governments and business, academic and nonprofit groups.

After serving with the Army Corps of Engineers, Moeller earned a master’s degree in natural resource administration at Syracuse University. He was an early advocate for use of computers to analyze geographic information in his various positions at the Bureau of Land Management. As GIS grew, Moeller realized that the lack of adequate standards and institutional barriers would be the obstacles to creating large integrated networks of GIS databases.

Cataloging News

East Timor Call Numbers

The call numbers for East Timor have been approved. The class number for maps is G8198.2-24; the class number for atlases is G2433.2-24.

Maps

G8198.2-24 East Timor. Timor Timur. Portuguese Timor
G8198.2 General
G8198.2 By subject Table G1
G8198.24 Cities and towns, etc., A-Z Table G8198.24

Atlases

G2433.2-24 East Timor. Timor Timur. Portuguese Timor
G2433.2 General
G2433.21 By subject Table G1
G2433.24 Cities and towns, etc., A-Z Table G8198.24

Contributed by Barbara Story and Dan Seldin.

G-Schedule for Regions

After much delay, the G-schedule of US and Canadian regions (those cutters ending in “2” or “7”) is up on our web site. The lists are from LC from July 2001. They are official but out of date. They are an improvement over the 1990? fiche. Check out: http://www.mines.edu/library/maproom/G_schedule/g_schedule_list.html. Contributed by Christopher JJ Thiry, cthiry@mines.edu.
Conferences and Classes


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


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


North American Cartographic Information Society (NACIS), To Be Arranged. For more information see: http://www.nacis.org/.


Digital Spatial Data

Global GIS Database CRADA

The American Geological Institute (AGI) and the US Geological Survey (USGS) recently signed a cooperative agreement for distribution of the USGS Global Geographic Information System (GIS) database, which was partially distributed by the USGS as Digital Data Series as DDS-62. The Global GIS Series is a digital world atlas consisting of one DVD-ROM with the entire data set or seven regional CD-ROMs.

The USGS Global GIS database contains a wide range of information from the USGS archives and from other public domain sources, including geology, hydrology, volcanoes, seismicity, ore deposits, energy resource data, climate data, and ecological regions. Other useful geographical and cultural data, such as country boundaries, locations of cities, elevations, population density, roads, airfields, and utility lines, are also included in the atlas.

Produced at a scale of 1:1 million or approximately 1 km resolution, the data are ideal for government officials, researchers, educators, the private sector, and the general public for conducting regional-scale customized analyses using the GIS software provided with the atlas or using commercially available ArcView software. The agreement also provides significant opportunities for expanding the use of global geospatial data, particularly for incorporation into new educational materials.

CD-ROMs for Central and South America, Africa, South Asia, and the South Pacific, which were produced by the USGS and distributed through the Federal Depository Library Program, are currently available in libraries. The remaining regions, North Eurasia, North America, and Europe, will be available by the end of 2002. No information is available on whether the remaining CD-ROMs in the series will be distributed through the Federal Depository Library Program.

A World atlas on DVD-ROM will be available in early 2003. The Global GIS Series is available from AGI at a list price of $29.95 for each of the regional CD-ROMs and $149.95 for the DVD-ROM. Members of AGI member societies receive a 20% discount. Orders may be placed through the AGI Publications Center at http://www.agiweb.org/pubs, or by mail, telephone, fax, or e-mail (American Geological Institute, Attention: Publications Center, 4220 King Street, Alexandria, VA 22302, Tel: (703) 379-2480, Fax: (703) 379-7563, E-mail: pubs@agiweb.org). For deliveries in the contiguous U.S., add $7.00 for postage and handling costs for the first CD-ROM or DVD-ROM and $1.25 for each additional CD-ROM or DVD-ROM.

National Elevation Dataset

The National Elevation Dataset (NED) is a new raster product assembled by the US Geological Survey. NED is designed to provide seamless national elevation data with a consistent datum, elevation unit, and projection. Data corrections were made in the NED assembly process to minimize artifacts, match edges, and fill sliver areas of missing data. NED has a resolution of 1 arc-second (approximately 30 meters) for the conterminous United States, Hawaii, and Puerto Rico and a resolution of 2 arc-seconds for Alaska.

NED data sources have a variety of elevation units, horizontal datums, and map projections. In the NED assembly process the elevation values were converted to decimal meters as a consistent unit of measure; NAD83 is consistently used as horizontal datum, and all the data are recast in a geographic projection. Older DEM's produced by methods that are now obsolete were filtered during the NED assembly process to minimize artifacts commonly found in data. Artifact removal greatly improves the quality of the slope, shaded-relief, and synthetic drainage information that can be derived from the elevation data. These processing steps ensure that the NED has no voids and artificial discontinuities have been minimized.

As higher-resolution or higher-quality data become available, the NED is periodically updated to incorporate best-available coverage. As USGS's 7.5-minute and 15-minute digital elevation products near completion for the conterminous United States and Alaska respectively, NED data will soon be derived from these sources at a minimum. For the small areas that are not yet covered, the lower-resolution 30-minute and 1-degree USGS DEM products were interpolated to obtain values used in NED. These original elevation files are currently available from the USGS at http://edcwww.cr.usgs.gov/doc/edchome/nlcdb/nlcdb.html. In cases where 7.5-minute DEM's have a ten meter resolution, the original source data will be at a higher resolution than the NED. As more data become available at a finer resolution than NED, the feasibility of developing a finer resolution NED will be investigated. The National Elevation Dataset (NED) provides seamless elevation data for the U.S. in a raster format with a consistent datum, elevation unit, and projection. The USGS merges the highest-resolution
elevation available into a seamless raster to create NED. Data from NED are available to users through FTP or CD in three formats (Arc Grid, Grid-Float, BIL). Data are available for download or on CD for seamless, user-defined areas through the NED Store (http://gisdata.usgs.gov/ned/data.htm); data sets up to 10 MB can be downloaded at no charge.

### Price Change for Seamless NED Data

The price of seamless data from the National Elevation Dataset (NED) delivered on CD-R has changed from $1 per 7.5' quad range to $32 per CD, plus a $45 CD processing charge and a $5 handling charge per order. Approximately 600 MB of data fits on a CD. The number of CDs and cost per order will vary, depending on the size of the data ordered. For example, if 400 MB of data is ordered, then the cost would be $82.00. If 700 MB of data is ordered, then the cost would be for two CDs at $114.00. Seamless NED data can still be downloaded for free in quantities of 10 MB or less.

NED data for the conterminous United States, Alaska, Hawaii, Puerto Rico, and the Virgin Islands can be searched and ordered using the Seamless Data Distribution System at http://gisdata.usgs.gov/seamless. Questions about seamless data distribution can be referred to EDC Customer Services at 800-252-4547. FAX: 605-596-6589. E-mail: custserv@usgs.gov. Contributed by Rea Mueller, GS-N-HQ_ESIC_Bulletins@usgs.gov.

### Seamless NLCD on CD-R

Seamless data from the National Land Cover Dataset (NLCD) is now available on CD-R media. These custom generated digital products are based on user specified geographic areas (square or rectangular), either drawn on a map interface or entered as coordinates. The price for seamless NLCD data on CD-R is $32 per CD, plus both a $45 CD processing charge and a $5 handling charge per order. Approximately 600 MB of data will fit on a CD. The number of CDs and the cost per order will vary, depending on the size of the data ordered. For example, if 400 MB of data is ordered, then the cost would be $32 + $45 + $5 = $82.00. If 700 MB of data is ordered, then the cost would be for two CDs at $32 + $32 + $45 + $5 = $114.00. Seamless NLCD data is also available for free FTP download in quantities of 100 MB or less.

NED in 10-meter resolution is only available for free download from the seamless web site at http://seamless.usgs.gov. The data can be instantaneously downloaded for areas up to 30 square degrees of latitude and longitude in 100 mb pieces. The projection is geographic, horizontal datum is NAD83, and vertical data of NAV88. For information about seamless 10 meter NED data, please contact EDC Customer Service at 800-252-4547. FAX: 605-594-6589. Email: custserv@usgs.gov. Contributed by Rea Mueller, GS-N-HQ_ESIC_Bulletins@usgs.gov.

### National Elevation Dataset at 10 m Resolution

The USGS is now offering seamless pricing for data purchases of the National Elevation Data (NED) dataset on media. New automated production methods have allowed for more efficient product distribution, and those cost savings are being passed on to the customer. Prices for the NED dataset on CD-R have been established. Prices for other media are yet to be determined. The cost for the entire NED dataset ordered on CD-R is $3565 ($3520 for data + $45 for CD processing). A $5 handling charge will apply to all orders.

The entire data set, which includes the conterminous United States, Alaska, Hawaii, Puerto Rico, the Pacific Islands, and the Samoan Islands, is available on 110 CDs. The data is available in binary floating point raster with header or ArcGrid formats. The majority of the conterminous US files are one raster of 2 by 6 degrees latitude and longitude each; Alaska files are rasters of 1 by 1 degree latitude and longitude; the island files are rasters of variable sizes. Each order will include an index map and each CD will be numbered. Partial bulk orders of NED data are also available for delivery on CD-R. For more information about bulk NED packaging and pricing or to place an order for the entire NED dataset, please contact EDC Customer Services at 800-252-4547. FAX: 605-594-6589. E-mail: custserv@usgs.gov. Contributed by Rea Mueller, GS-N-HQ_ESIC_Bulletins@usgs.gov.
and ordered using the Seamless Data Distribution System at http://gdisdata.usgs.gov/seamless. NLCD data in predetermined State areas are also available on CD-ROM at the NLCD Web site http://landcover.usgs.gov/natlcover.html. These CDs are $32 each plus a $5 handling charge per order. Questions about seamless data distribution can be referred to EDC Customer Services at 800-252-4547. FAX: 605-596-6589. E-mail: custserv@usgs.gov. Contributed by Rea Mueller, GS-N-HQ_ESIC_Bulletins@usgs.gov.

Shuttle Radar Topography Data

Under an agreement with NASA and NIMA, the US Geological Survey is now distributing elevation data from the Shuttle Radar Topography Mission (SRTM). SRTM is a joint project between NASA and NIMA to map the world in three dimensions. SRTM utilized dual Spaceborne Imaging Radar (SIR-C) and dual X-band Synthetic Aperture Radar (X-SAR) configured as a baseline interferometer, acquiring two images at the same time. These images, when combined, can produce a single 3-D image. Flown aboard the NASA Space Shuttle Endeavour February 11-22, 2000, SRTM successfully collected data over 80% of the Earth’s land surface, for most of the area between 60 N and 56 S latitude.

NASA’s Jet Propulsion Laboratory in Pasadena, California is processing over 12 terabytes of raw SRTM data into preliminary, research-quality digital elevation models, on a continent-by-continent basis. This unedited preliminary data is not directly viewable in a browser. NIMA will process the preliminary data for final editing, verification, and conformance to National Map Accuracy Standards, reformatting it into their Digital Terrain Elevation Data-Level 2 (DTED-2) product format. The USGS EROS Data Center, Sioux Falls SD will archive and distribute SRTM data.

Preliminary 1-arc second (30 meter) SRTM data of the continental United States, southern Alaska, and Puerto Rico can now be obtained via electronic download from the USGS Seamless Data Distribution System-Enhanced, http://seamless.usgs.gov. An area up to 30 degrees square of raster data (1.6 gigabytes), in 100 megabyte sized files, is downloadable at no charge. SRTM data for any area are available on CD-Recordable media for a cost-to-produce fee of $32 per CD + a $45 processing and a $5 handling fee per order. Each CD holds approximately 600 megabytes of data. Preliminary, international 3 arc-second (90 meter) data will become available for download and on media as each continent is completed. Preliminary data will be replaced with validated "finished" data when received from NIMA. NIMA expects to complete final processing by July 2004.


Landsat 7 Multi-scene Products

A Landsat 7 ETM+ multi-scene or scene-shifted product ("Floating Scene") is now available from EROS Data Center. Floating Scenes can be generated from any single Landsat 7 subinterval or swath (WRS path) of contiguous data. The new Floating Scene product features a customizable scene center and scene length, which will conform to a user-specified start and end location. The available formats, media, prices, and maximum length of the Landsat 7 Floating Scene product will vary according to the level of processing:

Level 0Rp (raw uncorrected, re-formatted); Format: HDF only; Media: 8-mm tape, CD-R, DVD-R, DLT, FTP; Maximum length: 0.5 to 10 WRS scenes (CDROM limit = 4.5 scenes); Price: $475/first scene plus $200 each additional scene.

Levels 1G (systematic correction); Formats: GeoTIFF, NDF, FAST-L7; Media: 8-mm tape, CD-R, DVD-R, FTP; Maximum length: 0.5 to 3 WRS scenes (CDROM limit = 2 scenes); Price for L1G: $600/first scene plus $250 each additional scene. Levels 1P and 1T (precision and terrain correction-available to approved USGS researchers only); Formats, media, and maximum length are the same as for level 1G; Price for L1P (precision correction): $725/first scene plus $400 each additional scene; Price for L1T (terrain correction): $800/first scene plus $425 each additional scene.

A $5 handling charge applies to each order. International shipping charges also apply. Bulk order pricing is not available for floating scene products. To order Landsat 7 Floating Scenes, contact USGS EDC Customer Services, Tel: 800-252-4547 or 605-594-6151, TDD: 605-594-6933, Fax: 605-594-6589, Email: custserv@usgs.gov. Contributed by Rea Mueller, GS-N-HQ_ESIC_Bulletins@usgs.gov.

Declassified Satellite Imagery

The Department of Defense has released a second set of previously classified satellite imagery to the public. Approximately 45,000 black and white images from Declassified
Satellite Imagery-2, which were flown between 1963 and 1980, are now available for sale from USGS EROS Data Center through Earth Explorer at [http://earthexplorer.usgs.gov](http://earthexplorer.usgs.gov). Color images will be available in the near future. Browse images are available and should be checked because cloud cover is common, the quality is variable, and the determination of the frames as ascending or descending is subjective.

KH-7 images vary in length, ranging from 4 inches to 500 feet. Because of this, segment pricing has been implemented for these images. Each image will be priced according to the number of 30-inch segments in the given image. KH-9 images are 9" x 18". Declassified Satellite Imagery-2 film and print products are produced from a duplicate negative source. No digital files are available.

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Metadata information in Earth Explorer shows the number of segments in each KH-7 image, so the total price can be calculated while searching online. The size of the final print will vary depending on the original film size. In all cases the full image will be produced when a standard product is ordered. Customers will have the option to order standard or custom enlargements for their area of study. DORRAN ordering procedures have been sent to the ESIC Training Team for distribution. For more information about declassified satellite imagery and instructions for standard and custom enlargements visit the [http://edc.usgs.gov/products/satellite/declass2.html](http://edc.usgs.gov/products/satellite/declass2.html) website.

Questions about declassified satellite imagery can be sent to EDC Customer Services, custserv@usgs.gov, 1-800-252-4547. Contributed by Sheryle Girk-Jackson, sjackson@usgs.gov.

### General News

#### Is There a Future for Terraserver?

Five years ago, the US Geological Survey signed a cooperative research and development agreement (CRADA) with Microsoft which resulted in the development of Terraserver. The Microsoft CRADA with USGS for the research and development of Terraserver has been in effect for 5 years. Currently users can search for existing holdings of Digital Orthoimagery Quads (DOQs) at the FGDC Clearinghouse site, which then allows you to see the metadata for the individual DOQs.

Terraserver ([http://terraserver.microsoft.net](http://terraserver.microsoft.net)) is an online presentation of DOQs that has both a public interface and a programmable interface. Users can pull orthoimagery from Terraserver and then highlight their area of interest using their own software. They can then do data capture, creating polygons of interest. The Terraserver gets 40,000 unique users a day (and 5 million hits a day). The CRADA with Microsoft will be expiring early next year. Microsoft would like the maintenance responsibilities to go to the federal government. USGS would like to continue partnerships with agencies on this activity and is laying out a strategy on how to proceed.

#### Publicly Accessible E-Books

The University of California Press made some of its books available for public access. Worth noting is:

**Implications.** Berkeley : UC Press. URL: http://ark.cdlib.org/ark:/13030/f0h4mb01z/.

Abstract: California’s coastal zones are areas of extreme vulnerability, subject to the vicissitudes of weather and prone to erosion, landslides, and flooding. Gerald Kuhn and Francis Shepard examine and analyze these threats to coastal stability in a thought-provoking and detailed study of the coastal area of San Diego County from the nineteenth century to the present. An invaluable resource for oceanographers, geologists, meteorologists, coastal engineers, property owners, developers, and planning and regulatory agencies.

Other books in the sciences, social science, arts and humanities can be viewed from their portal at: http://escholarship.cdlib.org/uipress/subjects.html. Contributed by Peter Brueggeman, pbrueggeman@ucsd.edu.

**Powell’s Exploration of the Colorado River available Online**

John Wesley Powell’s 1875 *Exploration of the Colorado River of the West and its Tributaries* has been digitized by the University of Utah Marriott Library Digital Technologies team. The site has an image of each page and the text is searchable. It is available at: http://www.lib.utah.edu/digital/powell/. This is a companion to Dutton’s High Plateaus which was digitized earlier this year. Contributed by Barbara Cox.

**Digital Lunar Orbiter Atlas Site Updated**

The Digital Lunar Orbiter Photographic Atlas of the Moon web site has been updated. Annotations for each Atlas image have been added as well as some improved destriped imagery. Comments and suggestions are welcomed. URL: http://www.lpi.usra.edu/research/lunar_orbiter/index.html. Contributed by David Bigwood, bigwood@lpi.usra.edu.

**Mercator Globes Online**

One of the unique treasures of the Harvard Map Collection are the pair of Mercator globes - the terrestrial globe of 1541 and the celestial globe of 1551. The globes were an instant commercial success for Mercator and were the largest (42 cm.) that had been produced at that time. Generous gifts for their conservation and construction of their exhibit case came from the Pforzheimer Endowment for the Harvard College Library and White Flowers Preservation Fund. They are now on permanent exhibit just outside of the entrance to the Map Collection and will be a part of the ‘Cartographic Treasures at Harvard’ that will be an exhibit for the 2003 International Conference on the History of Cartography. Harvard’s globes are the only matched pair in the America’s.

As with any globe exhibit it is difficult to be able to view all portions of the globe in a typical exhibit case. We are thankful to Jeremy Pool (A.B. ’67), a member of the Boston Map Society, who developed a digital globe navigator and constellation menus, which allow scholars the ability to view each globe in greater detail using Mr. Sid image compression software (http://hcl.harvard.edu/mercatorglobes). Additional information is available by requesting a brochure describing the globes from maps@harvard.edu.

This online exhibit makes extensive use of frames and javascript. Please verify that you are using either Netscape Navigator or Internet Explorers version 4 or 5. At this time, the terrestrial globe navigator does not support versions 6 and 7 of Netscape. Also, a screen resolution of at least 800 x 600 is recommended to accommodate the dimensions of the globes images. Contributed by David Cobb, cobb@fas.harvard.edu.
Internet Resources

FEMA Multi-Hazard Mapping Site a Big Success

A little more than six months after it was introduced, a web site designed to give the public access to nationwide coverage of digitally available multi-hazard maps and supporting data from federal, state and local sources is operating at an annual rate of more than 800,000 hits and 225,000 unique visitors, according to officials of the Federal Emergency Management Agency (FEMA). The maps can be viewed on the Internet at http://www.HazardMaps.gov. Users can view maps by hazard theme or create custom views showing areas of hazard overlap. In addition, more sophisticated users such as state or local government technicians can download spatial data and upload their own hazard map data.

FEMA is coordinating with other agencies and the Open GIS Consortium to help develop and implement interoperability standards. This will allow hazard and infrastructure data from various sources to be displayed together without being centrally managed, avoiding inefficiencies and duplication. The site already has map layers that use this technology, including US Geological Survey (USGS) base maps. These activities and goals are consistent with e-government initiatives such as Geospatial One-Stop and the USGS' National Map. FEMA is partnering with the National Oceanographic and Atmospheric Administration and will establish other partnerships as the initiative progresses, he said. In its first month of operation, http://www.HazardMaps.gov logged 20,000 visitors and more than 150,000 hits and was named by USA Today as a Hot Site of the Day.

New NRCS Soils Web Site

From NRCS Technology News, October 2002. The new SOILS Web site (http://soils.usda.gov) has been developed by combining the popular National Soil Survey Center and Soil Survey Division Web sites. The reorganized site has a new look and offers many new features and functions, such as improved navigation and loading speed. The SOILS site not only provides user access to soil information, but also offers soil science educational material, standards for the National Cooperative Soil Survey, and a lot more. Beginning October 1, 2002, all URLs previously linked to the site hosted by Iowa State University are forwarded to the home page of the new site. Users will need to establish a bookmark for the new site, hosted at the Fort Collins NRCS Webfarm. For more information, contact: Gary Muckel, National Soil Survey Center, gary.muckel@usda.gov, (402) 437-4148.

New Seamless Data Distribution System

The USGS has released a new web site, http://seamless.usgs.gov/, that provides custom-generated digital products based on user specified geographic extents and user specified datasets. The site currently hosts seamless data for the National Elevation Dataset (NED) at 1-arc second (30m) resolution, the National Elevation Dataset (NED) at 10m resolution, the National Landcover Characterization Dataset (NLCD), and the Shuttle Radar Topography Mission (SRTM). SRTM data for global areas will be released on this web site when available.

The enhanced web site allows for access to all seamless products, accommodates instantaneous downloads for areas of up to 30 square degrees latitude and longitude in 100mb pieces, and provides the capability to bookmark the download page and to use templates. Links to information about each dataset and announcements will be posted as more seamless datasets become available and as new products and functionality are added. Seamless data is also available for sale on CD-Recordable media for any size area. The price for seamless products is based on the number of datasets ordered and the number of CDs required to hold the area requested. One CD holds approximately 600mb of data. The cost for each area ordered is $32 per CD per dataset, plus a $45 CD processing fee and a $5 handling fee. Only one area can be submitted per order. For information on the new web site or the products, please contact EDC Customer Service at 1-800-252-4547. FAX: 605-594-6589. Email: custserv@usgs.gov. Contributed by Rea Mueller.

Environmental Methods Database Available

The US Geological Survey (USGS) recently announced a new standardized web-searchable database of environmental methods that will allow scientists and managers monitoring water quality to compare data collection methods at a glance and find the method that best meets their needs. The tool also allows monitoring data to be shared among different agencies and organizations that use different methods at different times. This database was developed in conjunction with the U.S. Environmental Protection Agency (USEPA), and other partners in the federal, state, and private sectors.

The database, called National Environmental Methods Index...
(NEMI), is a free, web-based online clearinghouse of environmental monitoring methods. The NEMI database contains chemical, micro-biological and radiochemical method summaries of lab and field protocols for regulatory and non-regulatory water quality analyses. It is searchable over the World Wide Web, providing up-to-date methods information through a standard Internet connection and browser. By visiting http://www.nemi.gov users can directly access current methods information. In the future, NEMI will be expanded to meet the needs of the monitoring community; biological methods along with additional field and laboratory methods of importance to the monitoring community will be added.

NEMI is a powerful tool, providing a summary of the procedures and performance data needed to assess methods. Critical data on sensitivity, accuracy, precision, instrumentation, source and relative cost are produced as tabular reports, and full methods are linked to the summaries. Often, gathering information on various methods involves a time consuming search distill bits of necessary information (e.g., What is the holding time? Is the precision and accuracy of the selected method adequate?). A few minutes with NEMI will provide answers to these questions, and more.

NEMI is a project of the Methods and Data Comparability Board (Methods Board), a partnership of water-quality experts from Federal agencies, States, Tribes, municipalities, industry, and private organizations who all share a commitment to developing water-quality monitoring approaches that facilitate collaboration and comparability among all data-gathering organizations. Both the Methods Board, and its parent organization, the National Water Quality Monitoring Council are co-chaired by USGS and USEPA. The Council and Board are workgroups under the Advisory Committee on Water Information (ACWI), chartered in 1997 to develop a voluntary, integrated, and nationwide water quality monitoring strategy. ACWI member organizations see NEMI as an important element of this strategy. A second tool developed by the Methods Board is a common set of data elements for documenting the content and quality of monitoring data, adopted by ACWI in May 2000. These Water Quality Data Elements, also available on the Web, were also recently adopted by the Environmental Data Standards Council, a USEPA, state, and tribal partnership, and the Environmental Commissioners of the States.

**FGDC Newsletter**


**Periodical Articles**


Biodiversity for your Health. Environment v. 44, no. 9, p. 7.


Gasaway, Laura, 2002. Copyright Corner: Maps and Copyright. Information Outlook v. 6, no., 11, p. 40.


Hall, Brian and others, 2002. Three hundred years of forest and land-use change in Massachusetts, USA. Journal of Biogeography v. 29, no. 10-11, p. 1319-1335.


Low-cost options for creating a GIS. American City & County v. 117, no. 16, Nov. 2002. p. 10

Pack, T., 2002. Journey through time & space with this set of eight CDs: National Geographic offers digital access to maps published throughout the past century. Link Up v. 19, no. 4, p. 28-9.


Plewe, Brandon, 2002. The Nature of Uncertainty in Historical Geographic Information. Transactions in GIS v. 6, no. 4, p. 431-56.


Ready to Move In. Time Atlantic v. 160, no. 23, p. 36-37.


Federal, State and Local Government News

Forest Inventory & Analysis Program

The Forest Inventory and Analysis program of the Forest Service has been in continuous operation since 1930 with a mission to “make and keep current a comprehensive inventory and analysis of the present and prospective conditions and requirements for the renewable resources of the forest and range lands of the United States.” FIA is the Nation’s forest census. FIA reports on the status and trends in forest area and location; in the species, size, and health of trees; in total tree growth, mortality, and removals by harvest; wood production and utilization rates by various products; and forest land ownership. The enhanced FIA program will include information relating to tree crown condition, lichen community composition, soils, ozone indicator plants, complete vegetative diversity, and coarse woody debris. The program is managed by the Research and Development organization within the USDA Forest Service in cooperation with State and Private Forestry and National Forest Systems.

FIA provides objective and scientifically credible information on key forest ecosystem processes: how much forest there is, what it looks like, whether the forest area is increasing or decreasing, whether we are gaining or losing species, how quickly trees are growing, dying, and being harvested, and how the forest ecosystem is changing over time with respect to the soil and other vegetative community attributes.

More information about the FIA program, including the Strategic Plan for Forest Inventory and Monitoring and links to your regional FIA program staff offices, is available at the National FIA World Wide Web site at http://fia.fs.fed.us. For more information, contact the National FIA Program Staff at USDA Forest Service, telephone 703-605-4177 or via email at agilspie@fs.fed.us.

Topographic Map Prices Change

On September 1, 2002, the USGS increased the price of 1:24,000-scale, 1:25,000-scale, and 1:63,360-scale topographic maps from $4 to $6. The $5 handling charge per order remains the same. The current discount percentages and purchase quantity requirements for Business Partners, Federal and State agencies, and non-profit organizations will be maintained. Prices for the primary series maps were last revised almost 7 years ago. This change is being made to comply with requirements from the Office of Management and Budget and to accurately reflect and ensure recovery of the costs associated with the reproduction and distribution of these maps. Sales under the new price are expected to generate the revenues necessary to sufficiently recover costs of reproduction and distribution and to provide incentives to stimulate private sector involvement in the dissemination of USGS products. Further information and frequently asked questions are available on the web at: http://mapping.usgs.gov/esis/newpricesfaqs.html. Comments regarding this policy change should be addressed to Ron Lofton at 303-202-4619 or rlofton@usgs.gov. Contributed by Rea Mueller, GS-N-HQ_ESIC_Bulletins@usgs.gov.

Review of the National Map

The National Academy of Sciences is conducting a study to review the...
concept for The National Map developed by the U.S. Geological Survey (USGS). Centered on a workshop, the study will review the goals for The National Map and evaluate the approaches described in existing USGS documents to meet these goals, the potential benefits of The National Map to the Nation (e.g., for homeland security) and the role of the USGS as the proposed leader of this effort. Specific concepts to be evaluated are (1) the proposed data characteristics and recommended methods for providing consistent data for these characteristics over areas of arbitrary geographic size or shape from multiple data holdings whose characteristics will vary among sources, (2) the means described in existing USGS documents to encourage widespread use of The National Map through low-cost data in the public domain, and still encourage participation in data maintenance by public, private, and not-for-profit organizations; and (3) the roles described for the USGS and partners, including volunteers, to undertake The National Map project. The sponsor for this project is the U.S. Geological Survey. The approximate starting date for the project was July 15, 2002. A Final Report will be issued at the end of the project.

**Atlas of Natural Hazards of Hawaii’s Coastal Areas**

The US Geological Survey (USGS) recently released a report on the coastal hazards of Hawaii. The report, titled *Atlas of Natural Hazards in the Hawaiian Coastal Zone*, should allow Hawaiian citizens and regulatory authorities to better understand the relative intensity of coastal hazards in the state and their effects on the natural environment and property. It will help planners and managers effectively guide the future of coastal land use and planning. The report, prepared in cooperation with the University of Hawaii, State of Hawaii Office of Planning, and the National Oceanic and Atmospheric Administration, was co-authored by Bruce Richmond, C.H. Fletcher, a professor at the University of Hawaii; and E.E. Grossman and A.E. Gibbs, both of the USGS.

The report investigates the history and characteristics of seven potentially hazardous threats to coastal areas of the Hawaiian Islands: coastal erosion, sea level rise, major storms, volcanic and seismic activity, tsunamis inundation, coastal stream flooding, and extreme seasonal high waves. Richmond noted that the most unique aspect of the report is that it assimilates previous efforts to document Hawaiian coastal hazards and combines this information into a single comprehensive coastal hazard data set that is easy to use.

Two types of maps are included: 1) small-scale maps showing a general history of hazards on each island and summarizing coastal hazards in a readily understandable format for general use, and 2) a large-scale series of technical maps (1:50,000) depicting coastal sections approximately 5 to 7 miles in length with color bands along the coast ranking the relative intensity of each hazard at the adjacent shoreline.

To quantify the effects of individual hazards, the authors evaluated past magnitudes and occurrences of such hazards from historical records for each of Hawaii’s main islands: Kauai, Oahu, Molokai, Lanai, Maui, and Hawaii. The atlas ranks each hazard as low, moderately low, moderately high, or high for given segments of the Hawaiian coast. The atlas uses two types of maps: small-scale maps that show a general history of the hazards on each island and that summarize coastal hazards in a readily understandable format for general use, and a large-scale series of technical maps that depict coastal sections about 5 to 7 miles in length, with the relative intensity of each hazard at the adjacent shoreline ranked using color bands. Together, said Richmond, these maps should provide a strong dataset for managers to plan for hazards and to guide the future of coastal resources.

The entire atlas can be found online at [http://geopubs.wr.usgs.gov/l-map/i2761/](http://geopubs.wr.usgs.gov/l-map/i2761/). It is also available in hardcopy format for $38 (plus shipping and handling) from the USGS Earth Science Information Center, 303-202-4200 or 1-888-ASK-USGS.

**General Reference Map of the United States**

The National Atlas of the United States has published a second *General Reference* map, showing all 50 states at a scale of 1:5,000,000. Printed at 42-by-46 inches, the map has space to show Alaska’s tremendous size in comparison with the rest of the country. The map also includes geographic information about America’s rivers, lakes, coastline, and islands; its high and low elevations; each State’s area and population; and a Standard Time Zones map. The map, titled *General Reference*, stock no. 112764 is available for $7.00, plus $5.00 handling charge per order.

The previously published *General Reference* map is slightly smaller at 30-by-42 inches. The conterminous 48 States, Hawaii, and Puerto Rico are shown at 1:5,000,000-scale; Alaska is shown at 1:15,000,000-scale. This map is currently out-of-stock. It is scheduled to be reprinted in the near future. A free, colorful two-sided product announcement, titled *United States General Reference Maps*, stock no. 20688, that describes both General Reference
maps is also available. The new map and the product announcement can be ordered from USGS Information Services, Box 25286, Denver, CO 80225. (FAX: 303-202-4693). To see information on more National Atlas maps, visit the Web site at http://nationalatlas.gov. Contributed by Rea Mueller, GS-N-HQ_ESIC_Bulletins@usgs.gov.

New USGS Publications

The following order forms/price lists have been revised to show the new international shipping charges: Aerial Photographs; Earth As Art: A Landscape Perspective; Map Separates 1:20,000-, 1:24,000-, 1:25,000-, 1:62,500-, and 1:63,360-Scale Maps; Map Separates 1:100,000-Scale Maps; Map Separates 1:250,000-Scale Maps; Map Separates 1:500,000-Scale Maps; Out-of-Print Map Reproductions; Publications Catalogs; USGS GeoData Digital Elevation Models; USGS GeoData Digital Line Graphs; USGS GeoData Digital Orthophoto Quadrangles; USGS GeoData Digital Raster Graphics; U.S. Geological Survey Earthquake Maps; U.S. Geological Survey Maps, Books, and Other Published Products Order Form and U.S. Geological Survey Open-File Reports. All of these publications are online in .pdf format at: http://mac.usgs.gov/mac/ishb/pubs/publishlists/piofrl.html. A new U.S. Geological Survey Maps, Books, and Other Published Products Order Form has been printed and is available from USGS Information Services, Box 25286, Denver CO 80225. The stock number is 20730. Contributed by Rea Mueller, GS-N-HQ_ESIC_Bulletins@usgs.gov.

Procedures for ordering photographic enlargements from USGS have changed. The new procedures are outlined in a fact sheet titled Ordering Procedures for Photographic Enlargewment Products-NAPP, NHAP, and Custom, Fact Sheet 102-02, September 2002.

The price list titled U.S. Geological Survey Maps Price List has been revised. The new price list 67-0001, July 2002, reflects the new prices for topographic maps. It is available at http://mac.usgs.gov/mac/ishb/pubs/publishlists/piofrl.html. Paper copies of this price list are available from USGS Information Services, Box 25286, Denver, CO 80225 (303-202-4693).


USGS International Customers Procedure Changes

Effective August 5, 2002, the USGS Branch of Information Services and the EROS Data Center implemented a procedure change for products shipped to locations outside the United States. International customers will be responsible for shipping costs, customs fees, and any other charges associated with international shipping. This change has been developed to ensure that USGS is in compliance with international shipping regulations and that customs and other fees are not incurred by USGS. Contributed by Rea Mueller, GS-N-HQ_ESIC_Bulletins@usgs.gov.

National Wetland Inventory Maps Sales

The USGS - U.S. Fish and Wildlife Service (FWS) agreement for the sale of National Wetlands Inventory (NWI) maps ended October 1, 2002. Beginning with FY 2003, NWI maps will be available for sale from FWS cooperators and distribution centers.
only. USGS will no longer sell NWI maps. While USGS and FWS have cooperated over a long period of time to distribute NWI maps to the public, FWS decided to end the agreement, based on Administration and Department of the Interior interest in providing more outsourcing opportunities for private individuals and firms. FWS will maintain a current list of addresses and phone numbers for the cooperators run distribution centers at the http://www.nwi.fws.gov Web site. Contributed by Rea Mueller, GS-N-HQ_ESIC_Bulletins@usgs.gov.

Ecoregion Maps for Montana, Kansas, Nebraska and Utah

Three new ecoregion maps, for Montana, Kansas and Utah, are available for sale. Ecoregions show areas of general similarity in ecosystems and in the type, quality, and quantity of environmental resources; they are designed to serve as a spatial framework for research, management, assessment, and monitoring of ecosystems and ecosystem components. The maps, Ecoregions of Montana (2 sheets, stock numbers: 21633 and 21634, ISBN: 0-607-93672-x), Ecoregions of Kansas and Nebraska (stock number: 21635, ISBN: 0-607-97399-4) and Ecoregions of Utah (stock number 112579, ISBN: 0-607-98429-5) are $7 each sheet, plus $5 handling per order. Available from: USGS Information Services, Box 25286, Denver CO 80225 (FAX: 303-202-4693). Contributed by Sheryle Girk-Jackson, sijackson@usgs.gov.

Standards for Primary Series Quadrangle Maps

The latest version of Standards for Revised Primary Series Quadrangle Maps, 6/02, is now available in electronic format at http://rockyweb.cr.usgs.gov/nmposts/qmappost.html. This online version supersedes the previous edition dated 4/01. Three .pdf files are available at the site contain preliminary pages and pages that briefly describe the various changes that have been made to the standard. “Part 1: General” provides a general description of revised primary series quadrangle maps. “Part 2: Specifications” provides specific information on editing and completing revised primary series quadrangle maps. Additionally it also provides information on symbol treatment, lettering, and map collar notes. The main focus of both parts is on basic revision maps, although descriptions of the characteristics of complete revision maps and instructions for the preparation of complete revision maps have also been included. Appendices 2B, 2C, and 2D are not included in the file for “Part 2: Specifications”. These appendices are all primary series quadrangle map style sheets and can be downloaded separately. Contributed by Rea Mueller, GS-N-HQ_ESIC_Bulletins@usgs.gov.

California Earthquake Maps

The Seismic Hazard Mapping Program (SHMP) released the Whittaker Peak Quadrangle in northern Los Angeles County for Preliminary review on September 23. Also in northern Los Angeles County, Agua Dulce, Hi Vista, Matilija, Condor Peak and Lovejoy Buttes quadrangles were released for Preliminary review October 17. The public technical review comment period ends 3 months after the release date. SHMP released five Preliminary Maps on December 20th: Ventura Quadrangle, in Ventura County, and the Alameda County portions of the Hayward, Redwood Point, Mountain View and Newark quadrangles.

The SHMP issued 7 new Official Maps on December 20th: Santiago Peak in Orange County, and Pitas Point, Ojai, Oxnard (revised), Fillmore, Piru, and Val Verde (a portion in Los Angeles County), all in Ventura County. The December 20th Saticoy Quadrangle Official Release has been delayed pending further landslide analysis. With the release of the Santiago Peak Quadrangle, 18 Seismic Hazard Zone Maps covering Orange County will now be complete. The first Official Orange County map release was the Newport Beach Quadrangle for liquefaction zoning on April 7, 1997. A total of 21 quadrangles cover Orange County, impacting 33 cities. The Orange County portions of 3 quadrangles, Alberhill, Corona South and Sinton Peak, are contained within the Cleveland National Forest and will not be mapped for seismic hazards. This completion is a substantial advance in the geotechnical information available for Orange County and a milestone for the SHMP, as it is the first completely mapped county. Since the Newport Beach official map release, SHMP has refined the mapping methodologies, released 76 Official Seismic Hazard Zone maps (as of December 20th) affecting 6 counties and has received approximately 1,400 geotechnical reports.

Colorado Oil & Gas Fields Map

The Colorado Geological Survey recently announced a new Oil and Gas Fields Map of Colorado. The last oil and gas fields map was published in 1991. The new map includes new oil and gas fields, revised field outlines, and new pipelines and facilities since 1991. The easy to read oil and gas fields map will be useful to anyone interested in prospecting for oil and gas, local government planners, and state and federal government agencies.
Wyoming Oil & Gas Maps

The Oil and Gas Section at the Wyoming State Geological Survey (WSGS) has finished updating four digital oil and gas maps covering the entire state of Wyoming. The individual Map Series (MS) maps, at a scale of 1:350,000, cover the Powder River Basin (MS-51), Greater Green River Basin and Overthrust Belt of southwestern Wyoming (MS-52), Central and northwestern Wyoming basins (mostly Bighorn and Wind River basins) (MS-53), and southeastern Wyoming basins (Denver, Laramie, eastern Hanna) (MS-54).

Each color map shows boundaries of producing and abandoned oil and gas fields, producing (or produced) formations, dominant age of reservoir rocks, field designations, pipeline sizes and locations, and refinery and gas plant locations and capacities. Base map information includes public land survey gridlines, state and federal highways, major towns, railroads, extent of Precambrian and volcanic rocks, and the limits of the basin areas as well as the extent of oil shale-bearing rocks.

The updated map of the Powder River Basin shows the extent of coalbed methane development and its relation to conventional oil and gas fields for the first time. Also shown are updated gas pipeline routes that handle increased production from the coal beds. The updated map of southwestern Wyoming includes new field boundaries for the rapidly expanding Jonah and Pinedale anticline gas fields and revised boundaries for most gas producing areas on the Moxa and Wamsutter arches.

Each map is available as a plotted color map (rolled only) for $25.00 plus $6.00 for shipping and handling and 6% sales tax for Wyoming addresses. A CD-ROM containing shape files for GIS coverages (ESRI ArcInfo), free map viewing/manipulation software for digital GIS files (ESRI ArcReader), map images (LizardTech MrSid), complete metadata files, and other materials for the casual or professional user is available for $20.00 plus $5.00 for shipping and handling and 6% sales tax for Wyoming addresses. For more information please contact Rod De Bruin, rdebru@wsgs.uwyo.edu.

Rattlesnake Hills Geologic Map

Wyoming State Geological Survey recently released a reconnaissance geologic map of the Rattlesnake Hills 1:100,000-scale Quadrangle in central Wyoming. Located north of Rawlins and west of Casper, the area encompasses part of the Granite Mountains. The project was funded in part through grants from the US Geological Survey's STATemap program. Project geologists Wayne M. Sutherland and W. Dan Hauser prepared the map by compiling available geologic maps along with reconnaissance field mapping and aerial photo interpretation. The map area lies within the central part of the Wyoming craton and includes the Gas Hills uranium district, the Rattlesnake Hills gold district, and the Tin Cup ruby and jade district.

Rising gold prices make the northeastern part of the quadrangle especially interesting since it encloses the Rattlesnake Hills gold district. Significant gold anomalies were discovered in this district in 1981 by W. Dan Hauser, which led to gold exploration over the next two decades. Hauser mapped the area in detail in 1994 and 1995. Exploration in the district by some major gold companies led to several additional discoveries, including a large-tonnage, low-grade deposit that has potential to host more than one million ounces of gold. The Tin Cup district in the southwestern part of the quadrangle includes several jade occurrences, as well as the Red Dwarf corundum (ruby and sapphire) deposit. Mapping by Hauser in 1996 showed that this corundum occurrence is localized in a nearly mile-long outcrop of gneiss. Samples of corundum recovered from the deposit have been as large as 2.5 inches across.

Sutherland and Hauser identified some interesting mineral occurrences during the mapping project, including some sapphires, jade, tourmaline, and copper. Titled Preliminary Geologic Map of the Rattlesnake Hills 1:100,000-scale Quadrangle, Fremont and Natrona counties, Central Wyoming, the map, Open File Report OFR 02-2, is available over-the-counter at the WSGS office in Laramie or by mail. The black and white map (folded only) and accompanying report sell for $6.50 plus 6% sales tax when purchased over the counter. For mail orders include $2.55 postage and handling; Wyoming addresses should also include 6% sales tax. For more information contact W. Dan Hauser, dhauser@wsgs.uwyo.edu.

New Wyoming Oil and Gas Map

Map Series 55, titled Oil and Gas Map of Wyoming, 2002, by Rodney H. De Bruin, is now available from the Wyoming State Geological Survey (WSGS). This map updates and replaces Map Series 48, which was completed in 1996. The new 1:500,000-scale map was created digitally from four larger scale (1:350,000) quadrant maps of Wyoming (Map Series 51, 52, 53, and 54) published earlier this fall. To order the map contact Publications Sales at the WSGS. A CD-ROM of Map
Series 55 containing GIS coverages, viewable/plottable map images, and metadata files is under development. The full color, plotted map is available rolled only and sells for $30.00 plus $6.00 for first class postage and handling; Wyoming addresses should include 6% sales tax. For more information on this topic contact: Rod De Bruin, rdebruw@wsgs.uwyo.edu.

Employment

GIS/Map Librarian. Columbia University Libraries. Closing date: Until Filled. Submit résumés to col-recruiter@columbia.edu or Human Resources, Columbia University, Box 18, Butler Library, MC 1104, 535 West 114th Street, New York, NY 10027. Refer to search #70103010. Include your e-mail address.

Assistant Documents Librarian & Assistant Professor. University of Illinois at Chicago (UIC). Apply by September 6, 2002 with cover letter, supporting resume, and names and addresses of at least three references to Annie Marie Ford, Personnel Librarian University of Illinois at Chicago, Box 8198, Chicago, Illinois 60680, E-mail: lib-per@uic.edu, Fax: (312) 413-0424.

Geographic Information Systems Librarian. The University of Texas at Arlington Libraries. Applications due by October 21st, 2002 or until position is filled. Letter of application, résumé, and the names, addresses, and telephone numbers of three references should be sent to Julie S. Alexander, Assistant Director; UTA Libraries; Box 19497; Arlington, TX 76019-0497.

Curator of Maps (PS). Boston Public Library. Boston, MA. Submit Resume and Cover Letter to: Boston Public Library, Attention: Human Resources, 700 Boylston Street, Boston, MA 02117, Or Fax to: (617) 266-4673, Or Email to: hr@bpl.org.


Map Librarian. University Libraries University of Colorado, Boulder. Application Deadline: December 1, 2002. Send letter of application specifically addressing qualifications for the position; resume; and names, addresses, and telephone numbers of three references to Scott Seaman, Associate Director for Administrative Services, University Libraries, University of Colorado at Boulder, Boulder, CO 80309-0184. The University of Colorado at Boulder is committed to diversity and equality in education and employment.

Head, Earth Sciences and Map Library. University of California, Berkeley. Application Deadline December 6, 2002. Submit applications to Barbara Kornstein, Interim Academic Personnel Coordinator, Library Human Resources Department, 447 The Library, University of California, Berkeley, CA 94720-6000, or FAX to: FAX: 510-642-8675, or E-mail: librec@library.berkeley.edu.

Assistant Director & Instructional/Outreach Librarian. The Scripps Institution of Oceanography Library. University of California, San Diego. Rank: Assistant Librarian I - Associate Librarian III. Application consideration begins November 22, 2002 and will continue until the position is filled. Send application letter including a statement of qualifications, a full resume of education and relevant experience, and the names of at least three persons who are knowledgeable about your qualifications for this position to libraryjobs@ucsd.edu or to: Debra Ambrose, Recruitment Specialist, UCSD Library Human Resources-0175H, 9500 Gilman Drive, La Jolla, CA 92039-0175, Telephone: 858.534.1279, confidential fax: 858.534.8634.
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