

April 1995

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Data Committee



## NEWSLETTER

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It is not too late to register for the...

### 1995 National GeoData Forum: Partnerships to Facilitate the Development, Evolution and Use of the National Spatial Data Infrastructure

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The 1995 National GeoData Forum offers an opportunity to discuss our interdependencies. It is intended to be a working session, a discussion among peers from different institutions, different levels of government, different agencies and sectors. The format will be a series of plenary presentations and panel discussions for the first day and a half. A series of challenging speakers, ranging from representatives of the United Nations to city mayors, will offer their perspectives on issues related to collecting and using geospatial data.

Bruce Babbitt, Secretary of the U.S. Department of the Interior and Chairman of the Federal Geographic Data Committee will present the keynote address: **Building NSDI Partnerships**.

On the last day of the forum, an NSDI Town Meeting will be held. The goal of the town meeting will be to identify key actions, responsible parties, and time frames for the next steps in evolving the NSDI and facilitating access to and use of geospatial data.

#### Location

The 1995 National GeoData Forum will be held May 7-10, at the Hyatt Regency Hotel Crystal City, Arlington, Virginia. The hotel is conveniently located just 4 minutes from National Airport, 30 minutes from Dulles Airport, and 10 minutes from downtown Washington, D.C.

#### Registration

More information and registration forms are available from the Federal Geographic Data Committee Secretariat, 590 National Center, Reston, VA 22092, telephone (703) 648-4621, fax to (703) 648-5755, or Internet [gdc@usgs.gov](mailto:gdc@usgs.gov).

#### NSDI Forum

"NSDI Forum", a new column in the magazine *GeoInfo Systems*, gives news on National Spatial Data Infrastructure activities including the status of the National Geospatial Data Clearinghouse and reports of the FGDC. The next column will appear in the May issue. Watch for it.

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**An Open FGDC Coordination Group Meeting will follow the 1995 National GeoData Forum, May 10, 1995, from 1:30pm until 4:00pm, in Potomac 5, Hyatt Regency Crystal City, Arlington, Virginia. The public is invited to join in a discussion of means to improve non-Federal participation in the FGDC.**

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## National Geospatial Data Clearinghouse Update

The NSDI Executive Order set January 11, 1995, as the deadline for Federal agencies to establish a process to document all new geospatial data collected or produced using the FGDC's Content Standards for Digital Geospatial Metadata.

Many agencies have put up sites on the World Wide Web using httpd (hypertext transfer protocol daemon) servers to serve geospatial data. Each site takes a somewhat different approach—one of the advantages of the World Wide Web. Making data available through Mosaic, however, remains only a partial Clearinghouse solution. Full implementation involves establishment of searching mechanisms using the Internet protocol Z39.50. In this issue, are described two sites. If you'd like to be mentioned in an upcoming issue of the newsletter or in NSDI Forum, please let us know.

To become part of the National Geospatial Data Clearinghouse, notify the FGDC that a Clearinghouse node is up and running. You can let us know you're out there by sending email to [gdc@fgdc.er.usgs.gov](mailto:gdc@fgdc.er.usgs.gov).

### USGS Clearinghouse Node

The U.S. Geological Survey formally opened its node of the Clearinghouse on January 23, 1995. Metadata that describe geology, water, and mapping data sets are available for browsing via Mosaic or similar World Wide Web client software. Many data sets are available for downloading online. A spatial searching mechanism for specific data sets based on the Z39.50 protocol is also available through the USGS Clearinghouse page. The World Wide Web (WWW) Uniform Resource Locator (URL) for the USGS Node of the National Geospatial Data Clearinghouse is: <http://nsdi.usgs.gov/nsdi/>.

### Montana Natural Resource Information System Node

The Montana GIS Interagency Technical Working Group and the Montana Natural Resource Information System, recipients of one of nine 1994 NSDI Competitive Cooperative Agreement Program awards, have developed a Clearinghouse node on the Internet. The node allows users with a World Wide Web browser such as Mosaic to access metadata (information about data), some statewide digital geospatial data, and general information such as conference announcements and the Montana GIS Newsletter. The Montana WWW Home Page URL is

<http://nris.msl.mt.gov/gis/gis.html>. Work is also under way to convert entries in the Montana Data Directory to the FGDC Content Standards for Geospatial Metadata.

Montana map layers for such themes as county boundaries, hydrology, highways, and land use, derived from different sources, are organized so that users can download a graphic interchange format (GIF) file, a metadata file, or the data themselves. Since September 1994 over 3,000 different remote users have accessed this server:

<http://nris.msl.mt.gov/gis/mtmaps.html>.

### NSDI Node

The Federal Geographic Data Committee continually updates the NSDI server. All Clearinghouse sites we know of appear in a hypertext list with live links to sites and, in some cases, data. This list can be accessed by World Wide Web browsers such as Mosaic or Netscape and with such text-based browsers as Lynx. The Internet address (URL) of the NSDI home page is <http://fgdc.er.usgs.gov>.

Suggestions for improvement are welcome. Please email comments to the address above. Use of the server continues to grow.

## Content Standards for Digital Geospatial Metadata

### Workbook on Metadata

A workbook to help managers of digital geospatial data document their data using the FGDC's Content Standards for Digital Geospatial Metadata will be published shortly in book form and as a hypertext document on the NSDI home page.

### Metadata Implementor's Workshop

A Metadata Implementor's Workshop was held on March 10, 1995 in Reston, Virginia, with video and teleconferences to Sioux Falls, South Dakota; Alexandria, Minnesota; Hanover, New Hampshire; Fayetteville, Arkansas; Denver, Colorado; and Madison, Wisconsin. The meeting served as a health check on the standard. Participants were asked to identify strengths and weaknesses of the standard and to discuss any changes that might be necessary. Questions that arose from these discussions were categorized into six groups: 1) issues of extensibility, profiles, or subsets; 2) definitions of data sets with different levels of granularity, hierarchy, and inheritance of information; 3) lineage tracking; 4) reference implementations (e.g., development of a prototype data model for relational or object-based approaches to serve as a starting point for implementors) and metadata transfer mechanisms; 5) education; and 6) editorial changes for technical corrections and to accommodate uncertainty.

Teams were formed to address each of these general areas. Each team will formulate a plan addressing the scope of the problem, identifying the resources that might be brought to bear, and setting a timetable for solving the problem. Discussions among team members will be through the NSDI-L discussion list.

Teams are actively seeking members from the geospatial data community throughout the country to work on these issues. The agenda

and a summary of the workshop are available on the NSDI home page at <http://fgdc.er.usgs.gov>. Workshop materials are also available in hardcopy from the FGDC Secretariat.

To subscribe to NSDI-L and join the discussion of these metadata issues send email to: [majordomo@fgdc.er.usgs.gov](mailto:majordomo@fgdc.er.usgs.gov) with the following message:  
subscribe NSDI-L your name (i.e. Jane Smith)  
To submit a message to other NSDI-L users send email to [NSDI-L@fgdc.er.usgs.gov](mailto:NSDI-L@fgdc.er.usgs.gov).

## National Digital Geospatial Data Framework

The NSDI Executive Order called for a plan and schedule to implement a national digital geospatial data framework by January 2000. The FGDC convened a Framework Working Group comprised of local, regional, State and Federal agency representatives to develop the plan. Members of the working group presented the concepts of the framework for discussion at several national and regional public meetings, and provided the draft report for public written review. The final draft of the report, "Development of a National Digital Geospatial Data Framework", was submitted to the FGDC Steering Committee on March 17, 1995. To receive a copy of the report send a request to the FGDC Secretariat.

### Is your agency an Area Integrator?

A key institutional role identified in the report is that of area integrator. An integrator (1) incorporates new data into the framework; (2) coordinates data creation and maintenance; (3) implements certification policies and procedures to ensure conformance to standards; (4) implements the technical standards that describe the essential characteristics of the theme data; and (5) provides guidance to data producers. In the initial implementation phase,

the FGDC will conduct framework "proof of concept" pilot projects. If your agency performs area integrator tasks and you are willing to be considered for participation in an FGDC framework pilot project, please send a brief (one-page) overview summarizing your involvement in one or more of the integrator functions to the FGDC Secretariat. The overview should include: project description, categories or themes of data collected and/or coordinated, geographic area of interest, current funding and time frames. Please include the name and agency affiliation of a point of contact.

### **NSDI Competitive Cooperative Agreement Program (CCAP)**

The NSDI CCAP has provided funding to State and local government agencies, institutions of higher education, and private organizations to encourage the development of the National Spatial Data Infrastructure in the non-Federal sector. Nine proposals were funded in 1994 to collaborating organizations in Florida, Iowa, Minnesota, Montana, North Carolina, New Jersey, New Mexico, Texas and Wisconsin. To learn more about the 1994 proposals, request the NSDI CCAP October 1994 Factsheet from the FGDC Secretariat.

The 1995 program announcement invited proposals in one of three areas: (1) implementation of the National Geospatial Data Clearinghouse (e.g., provide the means to search, query, find, access, and use geospatial data); (2) use of FGDC-endorsed standards (e.g., the Content Metadata Standard for Digital Geospatial Data and the Spatial Data Transfer Standard (SDTS); and (3) development of training and software tools to make it easier to implement the clearinghouse and standards. The 1995 program announcement closed on February 21, 1995. Forty-seven proposals were received. Awards

will be announced by July 1. Look for the 1996 program announcement this fall.

### **Cooperative Participation in Support of NSDI**

FGDC supports cooperation among all parties with a stake in the development and use of geospatial data. To encourage such partnerships, FGDC recognizes groups through a Cooperating Group Agreement.

The Texas Geographic Information Systems Planning Council under the chairmanship of Nancy Vaughn has been recognized through such a cooperating agreement.

For more information about becoming a cooperating group, contact the FGDC Secretariat.

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### **Spotlight on FGDC Subcommittees**

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**Bathymetric Subcommittee**  
**Department of Commerce**  
**National Ocean Service**  
**Frank Maloney, Chair**

### **Coastal Zone 95: A Spotlight on Solutions**

Coastal Zone 95 (CZ95), to be held in Tampa, Florida, July 16-21, 1995, will provide an opportunity for an in-depth exchange of ideas and techniques for solutions to ocean and coastal management issues.

One of the CZ95 programs of particular interest to the FGDC community is an "Open Forum" on the (NSDI), especially those aspects relating to the coastal zone. The time and location of the forum are:

Federal Geographic Data Committee:  
Coastal GIS Open Forum  
Monday, July 17, 1995  
Hyatt Regency Hotel  
Buccaneer Room  
1:00 to 4:00 p.m.

This Forum is open to all CZ95 participants. Representatives of many Federal, State, and local government agencies will be participating and sharing their experiences as they begin to implement the metadata standard and clearinghouse. CZ95 attendees who have an interest in GIS, in consolidating data requirements and locating data in Federal agencies, in building framework data sets, and in learning more about the availability of partnership grants for cooperative coastal zone projects are urged to participate in this technical meeting.

In addition to the open forum, there are a number of technical sessions, exhibits, and poster displays that describe various aspects of the NSDI and the use of GIS technology in the coastal zone. For more information about the open forum or other technical aspects of the meeting, contact Millington Lockwood, Executive Secretary of the FGDC Bathymetric Subcommittee at (301) 713-3070x147, or e-mail [mlockwood@ocean.nos.noaa.gov](mailto:mlockwood@ocean.nos.noaa.gov).

Registration costs for CZ 95 will be \$235 in advance (before June 16) and \$285 after June 16. More information on registration will be available when the CZ 95 Preliminary Program is ready sometime in April. To request a preliminary program or an Exhibitor's Prospectus, please contact Matt Menashes, CZ95 National Coordinator, by voice at (301)713-3086 ext. 105, by fax at (301)713-

4370 or via e-mail at [mmenashes@coasts.nos.noaa.gov](mailto:mmenashes@coasts.nos.noaa.gov).

**Cultural and Demographic  
Subcommittee  
Department of Commerce  
Bureau of the Census  
Fred Broome, Chair**

The FGDC's Subcommittee on Cultural and Demographic data has set a challenging 1995 agenda. The Subcommittee is concerned with economic, health, population, agricultural, historic, and other cultural data. While possessing characteristics in common with other types of geospatial data, cultural and demographic data have distinguishing characteristics as well. These data represent human activity and may well represent the majority of the data transferred over the national information highway.

Developing a content standard for cultural and demographic metadata tops the Subcommittee's agenda items. While many aspects of cultural and demographic data sets may be thoroughly described using the content standards for digital geospatial metadata, the content standard for cultural and demographic metadata will form the basis for describing the topical aspect of highly diverse and interrelated sets of geospatially referenced cultural and demographic data. Using the content standard for cultural and demographic metadata will allow metadata producers to (1) create metadata to identify the cultural and demographic content of data sets; and (2) facilitate the production of geospatial metadata.

The Subcommittee plans to complete its initial work on the profile for cultural and demographic metadata in April. The standard will then proceed through the FGDC's 14-step standards process, including public review. Inquiries on the Subcommittee's work may be directed to Fred Broome or Leslie Godwin at

the Geography Division, U.S. Census Bureau, Washington, DC 20233-7400; telephone (301) 457-1056; e-mail fbroomer@census.gov.

**Geodetic Control Subcommittee  
Department of Commerce  
National Geodetic Survey  
Captain Lewis Lapine, Chair**

**Interagency Council Coordinates  
GPS Use**

A Global Positioning System (GPS) Interagency Advisory Council (GIAC) recently has been formed within the Federal Geodetic Control Subcommittee (FGCS) of the Federal Geographic Data Committee (FGDC). The GIAC will be chaired by the Chief of NOAA's National Geodetic Survey, who also chairs the FGCS. The GIAC will assist the Department of Transportation's Position-Navigation (Pos-Nav) Executive Committee in coordinating Federal civilian GPS activities.

A joint task force commissioned by the Secretaries of Transportation and Defense studied the rapidly growing uses of GPS technology and recommended forming the GIAC and the Pos-Nav executive committee. The task force's report, "The Global Positioning System (GPS): Management and Operation of a Dual Use System," published in December 1993 outlines priorities and requirements for both civilian and military GPS applications.

In his role as FGDC Chairman, Secretary of the Interior Babbitt, requested of Secretary of Transportation Peña, recognition of the FGCS as the interagency coordination committee. This linkage will strengthen the ties among the GPS navigation, positioning, and timing communities. The FGCS coordinates the planning and execution of geodetic, land, and resource surveys, and develops surveying standards and specifications. In the future, FGCS will coordinate GPS positioning and

timing applications within the Federal Government.

For more information, contact:

Captain Lewis A. Lapine  
Chief, National Geodetic Survey, N/CGI  
U.S. Department of Commerce, NOAA  
1315 East-West Highway, Station 8657  
Silver Spring, MD 20910  
Telephone:(301) 713-3222, Fax: (301) 713-4175

**Wetlands Subcommittee  
Department of Interior  
U.S. Fish and Wildlife Service  
Bill Wilen, Chair**

**Pilot Study in Wicomico County,  
Maryland**

The Wetland Data Coordination Working Group of the FGDC Wetlands Subcommittee has completed a pilot study to evaluate the consistency of Federal and State wetland data collected in Wicomico County, Maryland. The study is part of a strategy being implemented by the Wetlands Subcommittee to improve the coordination of government collection of wetland data used for the development of status and trends and inventory estimates. The Wetlands Subcommittee report, "Strategic Interagency Approach to Developing a National Digital Wetlands Data Base" is available from the FGDC Secretariat.

In the Wicomico County study area, wetland data were compared from the U.S. Fish and Wildlife Service National Wetlands Inventory, the Natural Resources Conservation Service Wetlands Inventory and National Resource Inventory, the NOAA Coastal Change Analysis Project, and the State of Maryland Water Resource Administration. The USGS's Mapping Application Center assisted the Working Group in implementing the analysis

through the use of Geographic Information System (GIS) technology.

In addition, two field tests were conducted in order to compare wetland delineations made on the ground with those recorded in the Federal and State data sets.

The four data sets with polygon data disagree in over 90 percent of the area that at least one of the four data sets delineates as wetland. This disagreement is not just among wetland classes or systems, but rather on the fundamental question of whether or not an area is a wetland. Comparisons between the National Resource Inventory, which has point data, and the four data sets with polygon data produce similar results. In these comparisons, there is disagreement in over 99 percent of the points that are classified by at least one data set as wetland.

The results highlight the difficulties associated with delineating wetlands in forested areas using remotely-sensed data.

As a result of this study, additional research on effective ways to delineate wetlands in forested areas is continuing both within Wicomico County and elsewhere.

The report "Coordination/Integration of Wetland Data for Status and Trends and Inventory Estimates," describing the Wicomico County study is scheduled for publication in 1995. The report, will be available from the FGDC Secretariat.

### FGDC Contact Information

The FGDC Newsletter describes the activities of the spatial data community and the development of a national spatial data infrastructure. Subscriptions are free of charge. Correspondence or contributions may be directed to the FGDC Secretariat as indicated below:

Mail FGDC Secretariat  
590 National Center  
Reston, VA 22092  
Voice (703) 648-4533  
Fax (703) 648-5755  
Email gdc@usgs.gov

FGDC Information and Documents  
FTP via Internet  
Address: isdres.er.usgs.gov (130.11.48.2)  
User name: anonymous  
After connecting: cd gdc  
README.DOC file has current information on the files in each subdirectory.

### FGDC Publications

To subscribe to the newsletter or request the FGDC's publication list, please complete the information below and return it to the FGDC Secretariat by facsimile or mail. Be sure to provide the information requested below in your message.

Name/Position

Organization

Street Address

City/State/Zip (Postal Code)/Country

Telephone/FAX

Email

- Please add me to the newsletter mailing list.
- Please send me the FGDC publication list.
- I am currently on this mailing list. This is a new address.

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## Upcoming Conferences

May 1-2	Arkansas GIS User's Forum	Fayetteville, Arkansas
May 2	NE Illinois Arc Info User's Group	Chicago, Illinois
May 7-10	National GeoData Forum	Crystal City, Virginia
May 11-12	Third Annual Pennsylvania GIS Conference	State College, Pennsylvania
May 22-26	ESRI User's Conference	Palm Springs, California
June 6-8	Towson State University GIS '95	Towson, Maryland
June 12	Upstate New York URISA Chapter Meeting	Rochester, New York
July 16-20	URISA Conference & Exposition	San Antonio, Texas
Oct 4	Joseph F. Poland Symposium on Land Subsidence	Sacramento, California
Nov 14-16	GIS/LIS '95	Nashville, Tennessee

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U.S. Department of the Interior  
U.S. Geological Survey  
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