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This issue of the FGDC News highlights the "Geospatial One-Stop," a major new initiative to accelerate the implementation of the NSDI.

NSDI

National Spatial Data Infrastructure

Organizations working together to find, produce, and share geographic data to solve community problems.

Geospatial One-Stop

Geographically enabling electronic government

Geospatial One-Stop initiative is one of 24 major e-government initiatives under the White House "Expanding Electronic Government" reform program. The Geospatial One-Stop project accelerates the implementation of the National Spatial Data Infrastructure (NSDI). One-Stop will allow government agencies, data users, customers, managers and private citizens access to geospatial information over the Internet through a One-Stop portal.

The goals of Geospatial One-Stop are to provide fast, reliable access to geospatial information needed for government services, facilitate government to government activities such as homeland security, align data responsibilities and resources, and establish the process for multi-sector participation in developing and implementing data and service standards. Geospatial One-Stop accelerates the completion of essential elements of the National Spatial Data Infrastructure over the next 24 months and unifies programs delivering government geospatial initiatives. Critical government-wide tasks include:

- Establishing data content standards for Framework themes by September 30, 2003
- Establishing an operational metadata inventory of governmentwide NSDI data
- Creating data acquisition marketplace by publishing metadata for planned data collection
- Launching the Geospatial One-Stop Web Portal

The Geospatial One-Stop Web Portal will be developed as an extension to the NSDI Clearing-house network and provide an around-the-clock "one-stop" access point to dependable standards-based geographic data and web services distributed

Geospatial One-Stop will accelerate the implementation of the NSDI ...

throughout many government organizations.

Department of the Interior Deputy Assistant Secretary Scott Cameron, the Managing Partner, will be guided by a Board of Directors composed of Federal agencies and representatives of State, local and tribal governments. This initiative complements the newly revised *OMB Circular A-16* in promoting continued from page 1

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better coordination among Federal agencies (see A-16 article).

"Accomplishing these goals will require leadership from our State, local, and tribal partners," says Scott Cameron. "Much work is underway on developing standards and overcoming technical, institutional and policy challenges. For the geospatial community to succeed in helping us make the Geospatial One Stop bring the National

Spatial Data Infrastructure closer to becoming a reality, we need to bring as many people to the table as are willing to participate."

Eugene Trobia. president of the **National States** Geographic Information Council, an intergovernmental partner on One-Stop, notes the key role that states play as area integrators in the development of today's existing geospatial information. "We are pleased to see this initiative... and happy to participate... State, local and tribal agencies develop some fourfifths of geographic information in existence today."

Randy Johnson, Hennepin County, Minnesota Commissioner, represents the National Association of Counties on the Board of Directors. "Counties have made a tremendous investment in geospatial information and we applaud Geospatial One-Stop's effort to improve Federal agency coordination, and avoid the tendency toward Federal 'stove-piping' of information in order to work more effectively with local governments."

Teams will convene over the next several months to review the proposed Framework standards. While much work has been done on many similar standards in the past, Geospatial One-Stop leaders hope that participation by a more diverse community will ensure the

Participating One-Stop Organizations

Department of the Interior
Department of Commerce
Department of Transportation
National Aeronautics and Space Administration
U.S. Environmental Protection Agency
Federal Emergency Management Agency
Department of Agriculture
Department of Defense
Geospatial Information & Technology
Association (GITA)

International City/County Management Association (ICMA) Intertribal GIS Council (IGC)

National States Geographic
Information Council (NSGIC)
National Association of State
Chief Information Officers (NASCIO)
National Association of Counties (NACo)
National League of Cities (NLC)

Open GIS Consortium (OGC)
University Consortium for
Geographic Information Sciences (UCGIS)
State Implementation Teams (I-Teams)
Western Governor's Association (WGA)

standards meet the needs of the broader community. To participate in one of the standards development teams or to obtain additional information and updates on the initiative, go to the Geospatial One-Stop web site at:

www.geo-one-stop.gov

Steven Cooper Pledges Support and Offers Challenges to the Geospatial Data Community



Steven Cooper, Special Assistant to the President for Homeland Security, left, and Tom Weimer, Deputy Assistant Secretary for Water and Science, Department of the Interior at the October 9 Steering Committee meeting of the FGDC.

It's time to get serious about using geospatial data for homeland security. That was the message from Steven Cooper, Special Assistant to the President for Homeland Security when he addressed the Federal Geographic Data Committee (FGDC) Steering Committee at their fall meeting in Washington D.C. Mr. Cooper stressed how Homeland Security brings additional urgency and focus to the need for geospatial data. After discussions with parties involved in the World Trade Center response, it was clear to him that all accessible geospatial information was used in the response, while information that wasn't available cost lives and property.

More funding is needed for geospatial activities, across all levels of government and the private sector. Mr. Cooper said that in 2004, the proposed Department of Homeland Security will work with the Office of Management and Budget to spearhead collaborative efforts, such as the Geospatial One-Stop E-Government Initiative currently in progress to provide a single access point for national geospatial data sets. Mr. Cooper repeatedly emphasized the need for collaboration across the geospatial community as well as for an accelerated schedule for the completion of data infrastructure building and acquisition projects. In his role within the Office of Homeland Security, Mr. Cooper is responsible for guiding the development of information integration architectures within the federal government — enabling the sharing of homeland security information with state, local and relevant private sector entities.

To address Homeland Security geospatial needs, Mr. Cooper proposes pilot project dollars be applied for new and emerging technology in the geospatial arena. The caveat is that projects must be collaborative and they must use FGDC Standards to contribute the resulting geospatial data to the National Spatial Data Infrastructure (NSDI).

Newly Revised OMB Circular A-16

Reflects Continued Top-Level Federal Commitment

The August 19, 2002 revised *OMB Circular A-16* specifies Federal agency management and reporting requirements with FGDC as the interagency coordinating body. This revised Circular supersedes an earlier revision dated October 19, 1990.

Circular A-16, "Coordination of Geographic Information and Related Spatial Data Activities," reaffirms and describes the scope of the National Spatial Data Infrastructure (NSDI), specifying a governmentwide approach to electronic development and management of spatial data, technology, standards, resources, and policies.

A key new A-16 appendix establishes a lead Federal agency for each data theme. Lead Federal agencies are responsible for providing leadership and support for the development and implementation of needed FGDC data content standards, and for the populating of those data themes through partnerships with States, Tribes, academia, the private sector, other Federal agencies, and localities.

The new revision expands coverage to more government programs, going beyond just traditional mapping programs. As revised, A-16 names the Interior Department Secretary as Chair of FGDC, with

the OMB Deputy Director for Management as Vice-Chair (or their designees).

OMB Circular A-16 applies to all agencies that collect, acquire, distribute, use, or archive analog or digital spatial data. In addition, it applies to all spatial data and geographic information systems activities financed directly or indirectly, in whole or in part, by Federal funds.

Reflecting new and increased toplevel Federal commitment to coordinating spatial data, the revision formally announced on August 15 by OMB Director Mitchell E. Daniels, Jr., is intended to improve the availability and quality of spatial data. continued from page 3

help Federal agencies avoid redundant expenditures, and leverage partnerships with other levels of government and with broad sectors of society.

In a memorandum to Executive Branch department and agency leaders, Daniels said the revised Circular requires them to:

- Implement FGDC-approved data standards;
- Document existing spatial data holdings through an online data clearinghouse;
- Demonstrate agency performance for maintaining spatial data assets;

- Support interoperable software applications; and
- Search for data or coordinate with partners before acquiring data.

The Circular links management of geographic assets to OMB oversight of agency budgets and performance and it incorporates Executive Order 12906 that established the NSDI.

New FGDC Leadership

In keeping with the revised *OMB Circular A-16* and demonstrating continued high level leadership for the NSDI, J. Steven Griles, Deputy

Secretary of the Department of the Interior, will be the FGDC Steering Committee Chair with Vice-chair Mark Forman, Assistant Director of Technology and Electronic Government for Office of Management and Budget.

Full text of the revised *Circular A-16* is available at:

www.whitehouse.gov/omb/circulars/a016/print/a016_rev.html

2002 NSDI Cooperative Agreement Program

Award Winners Announced

Twenty-nine tribal, national, regional, and local organizations win funding totaling some \$386,000 as part of FGDC's Cooperative Agreement Program (CAP), under the National Spatial Data Infrastructure.

CAP recipients this year earned awards of up to \$6,000 each for Category 1 Metadata Implementation Assistance Projects, and up to \$20,000 each for Category 2 Metadata Trainer Assistance and for Category 3 Clearinghouse Integration with OpenGIS Web Service.

The Category 4 Canadian/U.S. Spatial Data Infrastructure Project CAP awards, funded jointly by FGDC and GeoConnections Canada (www.geoconnections.org), was awarded to the U.S. Army Corps of Engineers' Detroit District, Great Lakes Hydraulics and Hydrology Office, Engineering and Technical Services, managed by Roger Gauthier. That award totals \$74,622. The counterpart award

for the Canadian lead went to the Water Issues Division of Meteorological Services of Canada, Environment Canada, in Burlington, Ontario. Wendy Leger manages that project, which was awarded \$99,702. More than 400 organizations have won CAP funding and assistance since the program began in 1994, to help encourage resource-sharing projects through use of technology, networking, and more efficient inter-organizational coordination.

This year's CAP recipient organizations and project leaders, by category:

Category 1: Metadata Implementation Assistance Projects

(for creating metadata and acquiring knowledge and experience in documenting data for clearinghouse discovery)

County of Santa Clara, Office of CIO, Priya Tallam, San Jose, CA.

Point Reyes National Seashore, GIS Branch, David Schirokauer, Point Reyes Station, CA.

County of Ventura, Public Works Agency, Dawn Robbins, Ventura, CA. Mesa Verde National Park, Allan Loy, Mesa Verde, CO.

World Resources Institute, Stephen Menard, Washington, DC

Martin County Board of Commissioners, Information Technology Services/GIS, Heather Kostura, Stuart, FL.

East Central Florida Regional Planning Council, Mark Sievers, Maitland, FL.

Muscatine Area Geographic Information Consortium, Muscatine Power and Water, Mark Warren, Muscatine, IA.

Penobscot Nation, Department of Natural Resources, Binke Wang, Old Town, ME.

The Project for Appalachian Community and Environment, Ron Hancock, West Jefferson, N.C.

St. Regis Mohawk Tribe, Environment Division/GIS Program, Aimee Benedict, Akwesasne, N.Y.

Institute for Local Government Administration and Rural Development (ILGARD), Ohio University, David Simon, Athens, OH.

Lane Council of Governments, Local Government Service Division, Cress A. Bates, Eugene, OR.

Office of Management and Budget, Ivan Santiago, San Juan, P.R.

Rhode Island Water Resources Board, Connie McGreavy, Providence, R.I.

City of Fort Worth, IT Solutions, Randy Hunt, Fort Worth, TX.

County of Albemarle, Department of Planning and Community Development, Damon Pettitt, Charlottesville, VA.

Category 2: Metadata Trainer Assistance

(provides training and support to those organizations implementing metadata)

Center for Biological Informatics, U.S. Geological Survey, Jennifer Gaines, Denver, CO.

Center for International Earth Science Information Network (CIESIN), Columbia University, Dr. Robert Chen, Palisades, N.Y.

NOAA Coastal Services Center, Coastal Information Services, Cindy Fowler, Charleston, S.C.

University of Idaho Library, Lily Wai, Moscow, ID.

Land Management Information Center (LMIC), Office of Strategic and Long-Range Planning, Christopher Cialek, St. Paul, MN.

Category 3: Clearinghouse Integration with Open/GIS Services

(to extend NSDI Clearinghouse nodes with Open GIS Consortium-compliant Web Map or Web feature software, and to accommodate viewing geospatial data from metadata in clearinghouse using embedded URL map requests)

Intergraph Corporation, Melvin (Chip) W. Carr III, Huntsville, AL.

Center for Advanced Spatial Technologies, University of Arkansas, Shane Covington, Fayetteville, AR.

University of Delaware, Research & Data Management Services, Richard S. Sacher, Newark, DE.

Center for Geographic Information Sciences, Towson University, David Sides, Towson, MD.

Vision for New York, Inc., Rob Hranac, New York, N.Y.

Wyoming Geographic Information Science Center, University of Wyoming, Jim Oakleaf, Laramie, WY.

Category 4: Canadian/U.S. Spatial Data Infrastructure Project

(to develop data framework needed for geospatial research, management, and business operations in Great Lakes region of New York, Quebec, and Ontario and to initiate integration, storage, maintenance of, and accessibility to framework data layers)

U.S. Lead: Great Lakes Hydraulics and Hydrology Office, Engineering and Technical Services, U.S. Army Corps of Engineers, Detroit District, Roger Gauthier

Canadian Lead: Water Issues Division, MSC-OR, Meteorological Services of Canada, Environment Canada, Wendy Leger, Burlington, Ontario

For additional contact information on the CAP 2002 projects download the factsheet at:

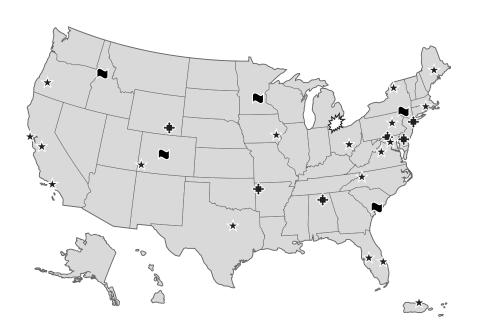
www.fgdc.gov/funding/capfact2002.pdf



Watch for the 2003 CAP Program

The CAP provides seed funds to engage organizations in building the components of the NSDI, which include metadata, national standards, Clearinghouse and Framework. The CAP is open to all U.S. organizations and seeks new participants. The CAP program does not support GIS startups, data collection or data purchases. Watch for the opening of the proposal submission period this winter. Information describing the 2003 CAP will be found on-line at the FGDC website. For more information contact David Painter at (703) 648-5513 or dpainter@fgdc.gov and visit the

dpainter@fgdc.gov and visit the FGDC website: www.fgdc.gov.



2002 National Spatial Data Infrastructure Cooperative Agreements Program (CAP)

- **★** Category 1 Metadata Implementation Assistance
- Category 2 Metadata Training Assistance
- **★** Category 3 Clearinghouse Integration with Web Mapping
- Category 4 Canadian/U.S. Framework Project

New FGDC Working Groups

The 13 FGDC Working Groups play a cross-cutting role dealing with issues that span data themes, applications and organizations. Five new FGDC Working Groups are getting underway to address homeland security, marine boundaries, forest resources, tribal, and GIS interoperability issues.

Homeland Security Working Group

Outlines First Year's Priority Plans

The Homeland Security Working Group provides a forum to specifically address homeland security implications and related requirements for geospatial information.

The group has broad representation across civilian and defense agencies leading the post-September 11, 2001, homeland security and critical infrastructure protection activities.

Over the coming year, this newly formed group has a full agenda including, among other things, plans to:

- Develop and encourage adoption of an emergency symbology standard;
- Develop "use cases" to help stakeholders describe their needs and the ways they operate;
- Identify data content and standards for homeland security in ways compatible with efforts being undertaken by Geospatial One-Stop (see related story, p.1);
- Identify those additional metadata standards unique to homeland security; and
- Define requirements for a common technical interface.

The working group also serves as an important sounding board for how the Executive Branch's homeland security proposals potentially affect the broader community of geospatial data users.

In one example, at a July 2002 meeting, RAND corporation staff briefed the group on findings from an assessment of the extent to which publicly available geospatial data might compromise the security of America's critical infrastructure.

The working group is co-chaired by Michael Domaratz, Department of the Interior/USGS, (703) 648-4434 or mdomarat@fgdc.gov, and Sue Kalweit, National Imagery and Mapping Agency, (703) 262-4426 or kalweits@nima.mil.

Marine Boundary Working Group

To Address Coastal Boundary Discrepancies

The Marine Boundary Working Group is designed to address issues pertaining specifically to legal and technical aspects of marine or maritime boundaries. The delimiting of maritime boundaries on most of the world's charts is frequently inaccurate or insufficient. Further complicating the situation, the marine boundaries depicted on these charts too often may be different from those setforth in various laws. In the United States, these discrepancies can affect many ocean-related activities, including oil, gas and mineral development, open ocean disposal zones, and enforcement of fishing and environmental laws. Key agency participants in this marine boundary effort are:

- Minerals Management Service (MMS);
- National Oceanic and Atmospheric Administration (NOAA);
- · National Park Service:
- Fish and Wildlife Service:

- · Bureau of Land Management;
- U.S. Census Bureau;
- Federal Communications Commission;
- · Department of State;
- Environmental Protection Agency;
- · U.S. Coast Guard.

Co-chairs for the group are Cindy Fowler, NOAA, (840) 740-1249 or Cindy.Fowler@noaa.gov and Lee Thormahlen, MMS, (303) 275-7120 or leland.thormahlen@mms.gov. The webpage address is:

www.csc.noaa.gov/mbwg/

Sustainable Resources Data Working Group

Focuses Early on Forest Data Issues

The new Sustainable Resources Data Working Group is moving to address standardization and implementation of criteria and indicators (C&I) for sustainability.

A key factor lying behind the new group's initial activities: Effective implementation of C&I ultimately depends on having common definitions, geographic breadth of coverage, assessment of applicable variables for each indicator, and resolution of data issues. The working group is responsible for implementing the Federal Memo of Understanding (MOU) on Sustainable Forest Management Data. The group has identified four forest data issues as being of particular concern:

- the need to agree on the definition of the terms "forest" and "rangeland";
- taxonomy and measures for non-timber forest products and services;
- development of a national strategy for monitoring human community and economic indicators; and
- forest fragmentation.

Paul Geissler, Department of the Interior/USGS (301) 497-4780 or paul_geissler@usgs.gov, co-chairs the working group along with Rick Guldin, Department of Agriculture/Forest Service, (202) 205-1507, RGuldin@fs.fed.us. The working group webpage is:

www.pwrc.usgs.gov/brd/sfd.htm.

Tribal Working Group

Seeks Federal/Tribal GIS Compatibility

The Tribal Working Group strives for greater compatibility between Federal agency and tribal geographic information systems. The group focuses on tribal participation and development of tribal geographic data and policies, building on related FGDC activities.

The group's initial objectives include adoption of common data sets and development of tribal geographic information systems. The group plans in its activities to stress education, training, natural resource and environmental management, homeland protection, and land-use planning. Co-chairs

of the working group are Ed Liu, Environment Protection Agency (202) 564-0287, Liu.Ed@epamail.epa.gov and Richard Moore, Bureau of Indian Affairs (703) 390-6306.

Geospatial Applications and Interoperability Working Group

Reaches Out to Wide Range of Users

The purpose of the Geospatial Applications and Interoperability Working Group (GAI) is to increase the scope and adoption of geospatial interoperability standards to facilitate access and use of geographic information by a broad range of users.

This group works to promote geospatial interoperability standards and specific applications projects in such areas as education, tourism, journalism, natural resource management, land-use planning, agriculture, disaster preparedness response, and commercial decision-making. The Geospatial Interoperability Reference Model (GIRM) is a guide to standards

promoted by the working group. The most recent draft, derived from NASA's Digital Earth Reference Model, includes links to both published and draft standards.

The working group, launched by FGDC slightly more than a year ago, seeks agency participants who are actively involved in geospatial data applications and interoperability standards at the strategic and programmatic level.

The working group is an outgrowth of the Digital Earth initiative, a multi-agency effort spearheaded by NASA with the ambitious goal of enabling people to virtually explore the globe, taking advantage of the wealth of global information and data that has been collected. The working group chair is Myra Bambacus, NASA, (301) 286-3215, myra.j.bambacus@gsfc.nasa.gov. The webpage address is: gai.fgdc.gov.

For more information on these and other FGDC Working Groups visit the webpage at:

www.fgdc.gov/fgdc/fgdcwg_org.html .

NEWS ABOUT NSDI INITIATIVES



The FGDC welcomes Sharon Shin as the FGDC's new Metadata Coordinator.

Sharon comes to the FGDC from the National Biological Information Infrastructure (NBII), a program coordinated under the US Geological Survey's Biological Resources Discipline. Sharon was NBII's national metadata coordinator. Sharon will perform her FGDC metadata coordination duties from Denver, Colorado and Reston, Virginia. In the coming weeks Sharon will convene the FGDC's metadata working group, to discuss how the FGDC can best assist the metadata and data communities. Also, on the FGDC Metadata drawing board is a multi-day, handson, metadata workshop to be convened in Spring 2003 at a yet to be determined location. Workshop content has been tentatively outlined but additional topics will be accommodated. This will be the first of many forums for FGDC to implement the new ISO 19115 Metadata Standard. The FGDC is committed to the implementation of the ISO standard. Watch for announcements of upcoming FGDC/ISO 19115 forums at the FGDC website. Sharon may be contacted at: Sharon_Shin@fgdc.gov.



Standards Activities

Promoting voluntary consensus standards involving broad ranges of government, industry, and other interested organizations continues to be a hallmark of the FGDC standards activity. *OMB Circular A-119* directs Federal agencies to participate in voluntary consensus standards bodies such as the International Organization for Standardization (known as ISO) and standards development organizations accredited by ISO's U.S. member body, the American National Standards Institute (ANSI). For more information, see Related Standards Activities at www.fgdc.gov/standards/related_activities.html.

Recent standards activities important for the NSDI are:

FGDC Endorses Content Standard for Digital Geospatial Metadata: **Extensions for Remote Sensing** Metadata: Over thirty remote sensing systems are currently orbiting the earth collecting data. Within the next five years, the number will increase to 50 systems. To describe geospatial data derived from remote sensing requires many metadata elements not provided in the current FGDC Content Standard for Digital Geospatial Metadata. Such metadata needs to be defined and incorporated into the structure of the FGDC Standard. To do so, these Extensions for Remote Sensing Metadata were developed and reviewed by the remote sensing community, in an effort sponsored by the FGDC Standards Working Group and led by NASA. They define metadata content for describing the sensor and platform, documenting the method and process of deriving geospatial information from the raw telemetry, and providing the information needed to determine the geographical location of the remotely sensed data. In addition, metadata to support data aggregation, describing both the components of

an aggregate data set and the larger collection of which a data item may be a member, is provided. These extensions are compatible with the framework and content of the ISO metadata standard that is close to adoption. This compatibility will facilitate the use of this standard in future development of the ISO metadata standard for remote sensing and promote support for U.S. data models in future international metadata standardization. The FGDC endorsed this standard October 2002. For more information on this standard visit www.fgdc.gov/ standards/status/csdgm_rs_ex.html

FGDC Endorses Geospatial Positioning Accuracy Standard, Part 4: Geospatial Positioning Accuracy Standard, Part 4: Architecture, Engineering, Construction, and Facilities Management, FGDC-STD-007.4-2002, provides accuracy standards for engineering drawings, maps, and surveys used to support planning, design, construction, operation, maintenance, and management of facilities, installations, structures, transportation systems, and related projects. It is intended to support geospatial mapping data used in various engineering documents. The geospatial positioning accuracy standard defines accuracy criteria, accuracy testing methodology, and accuracy reporting criteria for object features depicted on A/E/C spatial data products and related control surveys. The FGDC endorsed Geospatial Positioning Accuracy Standard, Part 4 in February 2002. The standard was developed by the FGDC Facilities Working Group chaired by the U.S. Army Corps of Engineers.

NEWS ABOUT NSDI INITIATIVES

For more information about the standard visit www.fgdc.gov/standards/status/sub1_5.html.

FGDC Endorses U.S. Grid Standard: Standard for a United States National Grid, FGDC-STD-011-2001, is designed to create a more favorable environment for developing locationbased services within the United States. By establishing a nationally consistent grid reference system, the Standard for a United States National Grid is expected to increase the interoperability of location services appliances with printed map products. Currently, location service appliances use multiple coordinate systems, and printed maps are used to establish location. While automated location service devices support multiple reference systems and convert between them, users cannot do conversions without the aid of location services appliances, calculators, or conversion tables. In addition, it is often difficult for users to accurately determine a location coordinate from paper maps when latitude and longitude are used, as they do not appear square on the flat map. Because the U.S. National Grid is based on universally defined coordinate reference systems, it can be easily extended for use internationally as a universal grid reference system.

The FGDC endorsed the Standard for a U.S. National Grid in December 2001. The standard was developed by the Public XY Project, a non-profit science and education corporation that was formed to facilitate the development and implementation of a consistent nonproprietary grid-based coordinate reference system. For more information about the Standard for a U.S. National Grid, visit www.fgdc.gov/standards/status/usng.html.

ISO Metadata Standard: ISO 19115. Geographic information: Metadata defines a consistent suite of geographic information schemata that allows geographic information to be integrated with information technology. The goal of this work item is to produce a schema for geographic information metadata. ISO 19115 is expected to be approved as an International Standard (IS) in December 2002, and adopted as an American National Standard (ANS) in March 2003. In keeping with policy to increase government reliance on voluntary consensus standards, it is expected that ANS's will eventually replace the FGDC Content Standard for Digital Geospatial Metadata, while investment in existing metadata will be maintained.

New CD-Based Geographic Information Standard Approved: Spatial Data Standard for Facilities. Infrastructure and Environment (SDSFIE) is a nonproprietary geographic information (GI) standard intended for use with commercial off-the-shelf (COTS) geographic information systems, computer aided design and drafting (CADD), and relational database software. The SDSFIE provides a catalog of geographic features that supports comprehensive master planning, environmental planning, and site planning, engineering, and lifecycle maintenance for facilities/ installations, infrastructure, and environmental applications.

The ANSI-accredited standards development organization, the International Committee for Information Technology Standards (INCITS), approved the SDSFIE as INCITS 353:2001 in November 2001. The standard is packaged with a software browse/viewer on CD. For more information about INCITS approval, visit their website at: www.incits.org/press/2001/ncits353pr.htm. For more information on the standard, visit the U.S. Army Corps of Engineers' CADD/GIS Technology Center website at: tsc.wes.army.mil/products/TSSDS-TSFMS/tssds/html.

John Moeller Retires as FGDC Staff Director



John Moeller's leadership as staff director of the Federal Geographic Data Committee came to an end this summer when he retired after 34 years in the Federal service.

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 as an advocate for sharing spatial data and for development of compatible infrastructures for applying spatial data to economic, environmental, and other social issues.

During Moeller's tenure, FGDC succeeded in advancing the National Spatial Data Infrastructure and interoperability standards, bringing together, Federal, State, tribal, and local governments along with business, academic and notfor-profit interests in effective working partnerships.

"The engagement of states, and the growing awareness of policy officials at the State level is a major milestone, as well as the growing involvement of local governments, tribal governments, and non-governmental sectors," Moeller said in a mid-summer interview just preceding his retirement. At the same time, he pointed to an ongoing need to do more in this area and recognized inherent difficulties in achieving intergovernmental and interagency cooperation "because agency systems just aren't designed for that."

To many who have worked with Moeller, his accomplishments come as no surprise.

Federal Computer Week in March of this year honored him among its "Federal 100" award winners for significantly improving government's services to its customers. His leadership role in the 1999 National GeoData Forum, in Washington, D.C., increased congressional awareness of the important roles spatial data and GIS technology play in advancing decision-making, and the value of the NSDI as the spatial foundation for facilitating data sharing and use.

What Federal Computer Week labeled Moeller's "passion for the land" originated in his time spent working in the forests of northern California and Montana and hiking in the North Woods of New Hampshire using maps to help interpret what he was seeing

"When John Moeller talks about geographic information systems (GIS), he sounds more like a poet or novelist than a scientist," the independent weekly publication reported in describing Moeller.

"When you get down to it, the thing that links all of us together and determines who we are is geography," it quoted him as saying. "That's what holds communities together: the geographic area and the landscape where you live. And that's what makes sharing geographic information so important."

After a tour in the Army Corps of Engineers, Moeller earned a master's degree in natural resource administration at Syracuse University. In various positions at Interior's Bureau of Land Management he was an early advocate for using computers to make geographic analysis easier.

As GIS came to flourish, Moeller realized that the lack of adequate standards and institutional barriers would be the primary obstacles to creating a large integrated network of GIS databases.

"A lot of people and organizations first perceived the use of standards as added workload for them, or an entirely separate activity," Moeller has cautioned. "Now we are making more and more progress in getting people to see that these are essentially good data management and technology management practices"

Notwithstanding those gains, Moeller readily acknowledges that integrating standards effectively will long remain a challenge and a work in progress.

"Some of the things that we talked about the NSDI helping us achieve are now coming into being. Certain web-based Internet services, web mapping services, and geoprocessing technologies are now really allowing us to get to technology interoperability. And that has helped people see more and more the need for standards, the need for metadata, the value of the

clearinghouse, and the opportunities for collaboration."

Throughout his tenure as FGDC staff director, Moeller strived to bring together Federal, State, tribal, local government, academic and industry officials to work in partnership to develop a coordinated NSDI that supports public and private sector applications of spatial data. His involvement in the international arena has resulted in the FGDC being recognized as the leader in fostering the development of the emerging Global Spatial Data Infrastructure.

Under Moeller's leadership, FGDC continually moved forward on new opportunities to advance the NSDI. Moeller and the FGDC worked closely with the Office of Management and Budget to revise *OMB Circular A-16*. He also led FGDC's charge to develop and implement the Administration's E-Government Geospatial One-stop initiative. (See related stories in this issue.)

In his summer interview with this

newsletter prior to his retirement,

Moeller characteristically looked ahead to upcoming opportunities and challenges (see "Latest News" at the FGDC website).

"The growing awareness of the importance of geospatial information is going to open up opportunities to engage people who previously had not thought about geospatial information," he said.

"What we are going to see in the future," he said, "is enabling individuals to develop their own maps and choose how they want their information portrayed. Some of the traditional mapping and GIS kinds of things are not going to be as much of a concern or interest. The greater concern will be to get data of the necessary quality and coverage of an area, and some simple tools."

While retired now from Federal service, Moeller isn't walking away from that challenge. He is continuing his professional career as an employee of Northrop Grumman Information Technology, TASC, in suburban Washington, D.C.

Other News:

- If you missed it, visit the GeoData Alliance's (www.geoall.net) Library for the 2002 Spring-Summer GeoData News.
- The September 2002 I-Team Newsletter ITEAM Connections can be downloaded at www.fgdc.gov/I-Team.
- Watch for the Global Spatial Data Infrastructure Newsletter that will be appearing this December 2002 at www.gsdi.org.
- Training: The FGDC and NOAA are hosting an Introduction to Coastal Metadata Training for American Indians on April 14–18, 2003 in Charleston, SC. In addition, the FGDC with the U.S. Fish and Wildlife Service are hosting GIS Introduction for Conservation Professionals for American Indians on February 10–12, May 28–30 and August 13–15, 2003. For more information on the training sessions contact Bonnie Gallahan at bgallahan@fgdc.gov.

Acting Staff Director named for Federal Geographic Data Committee

Ivan DeLoatch will be serving as the Staff Director, 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 the Chief of the Data Acquisition Branch in the Environmental Protection Agency's (EPA) Office of Environmental



Information, where he is leading the effort to establish EPA's Geospatial Program and implementing innova-

tive 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.

▶ Upcoming Conferences

2003

Mar 2 – 5 GITA 2003 San Antonio, TX

Mar 30 – Apr 2 ACSM 2003 Annual Conference Phoenix, AZ

May 3 – 9 ASPRS 2003 Annual Conference Anchorage, AK

July 7 – 11 ESRI 2003 Annual Conference San Diego, CA

Federal Geographic Data Committee

USGS, 590 National Center Reston, VA 20192