

# Federal Geographic Data Committee Newsletter

2009 Winter Edition

## GSDI-11 Eleventh Global Spatial Data Infrastructure Conference Rotterdam, The Netherlands June 15-19, 2009

The combined efforts of INSPIRE (European SDI Program), GEONOVUM (Dutch SDI Advocacy Council), JRC (Joint Research Council, Italy), EUROGI (European Umbrella Organization for Geospatial Information), Delft University, and the GSDI to stage the Eleventh International GSDI conference in Europe proved an overwhelming success. The conference theme of Convergence: Building Bridges to Address Global Challenges was fully addressed throughout the course of the meeting.

While the goal of the GSDI meeting was to further the building of National SDIs globally, INSPIRE used the forum as a benchmark reporting meeting on how the many EU SDI funded projects were fairing. GEONOVUM used the conference as its annual SDI and GI technical conference.

Close to 1200 participants were attracted along with 26 exhibitors and 80 represented ations - the largest GSDI conference ever convened. The forum featured 31 workshops, 67 parallel sessions, 9 plenary sessions, 12 roundtable discussions, along with a whole host of business and committee meetings. In all, about 300 technical papers and 80 posters were presented.

The preconference day included 31 workshops – all of which were very popular. Each day of the conference itself, had separate themes.



Ivan DeLoatch, FGDC Executive Director giving Keynote address at GSDI-11

The first day had the opening and two plenary sessions with a global focus. Day two was focused on the INSPIRE Progress meetings, and day three centered on GEONOVUM initiatives. The final day had an opening plenary on private sector initiatives and the closing plenary discussed conclusions and the launch of the next GSDI, INSPIRE and GEONOVUM meetings.

Dr. Abbas Rajabifard, Director for Spatial Data Infrastructures and Land Administration, University of Melbourne, Australia was inaugurated as the President of GSDI, and Dr. David



Ivan in Panel Discussion ***SDI Convergence: Progress, Visions and Bridging Across Regional Efforts*** (left to right)

- John McLaughlin, President and Vice-Chancellor University of New Brunswick Discussion Leader)
- Africa: Chukwudozie Ezigbalike, Chief, Geo-information Systems Section, United Nations, Economic Commission for Africa
- North America: Ivan DeLoatch, Executive Director, Federal Geographic Data Committee, USA
- Europe: Alessandro Annoni, Joint Research Council, European Commission
- Asia-Pacific: Greg Scott, President, UN Permanent Committee on GIS Infrastructure for Asia and the Pacific
- South and Central America: Santiago Borrero, Secretario General, Instituto Panamericano de Geografia e Historia (IPGH)

Coleman, Professor and Dean of Engineering, University of New Brunswick, Canada, was elected as President Elect. Professor Bas Kok of Delft University and the Dutch Kadastre becomes immediate Past President. All will serve in these roles until GSDI-13 in 2011.

Ivan DeLoatch, Chair of the US Federal Geographic Data Committee (FGDC), was reelected to a second term as North American Region representative to the GSDI Board. He also participated in the conference by giving a Keynote presentation, sitting on a panel plenary discussion representing the FGDC, and giving the opening paper in the GEISS session. Doug Nebert, FGDC, Senior Advisor for Geospatial Technology, co-chair of the Technology Working Group, conducted one of the most popular workshops – Spatial Data Infrastructure Fundamentals, and participated in the GEOS session. Alan Stevens, FGDC, Scientist Emeritus, managed the paper review process and developed the technical program for the GSDI components of the conference in

close collaboration with other principal organizations.

GSDI-12 is scheduled in Singapore in October, 2010 and will be hosted by the Singapore Land Authority. The theme will be Spatially Enabled Societies. This theme is high on the UN agenda.

### **FGDC's Bonnie Gallahan is Retiring!**

After over 34 years of service to the Federal government, Bonnie Gallahan will retire in January 2010. Bonnie began her career at the Pentagon, Department of Defense in 1975. She then received an academic scholarship to Arizona State University and received her BS degree in Natural Resource Management. Upon graduation, she moved to the Bureau of Land Management, Department of the Interior in Phoenix, AZ. There she was responsible for preserving and interpreting historic ghost towns, American Indian sacred sites, developing trail systems and camp-

grounds, and designating wilderness areas. Subsequently she returned to Virginia and worked at the Federal Energy Regulatory Commission, and later served as an environmental protection specialist for the U.S. Coast Guard. This position involved inspecting and preserving historic lighthouses nationwide. She returned to the BLM budget office and served in the Department of the Interior on Secretary Babbitt's staff as a cultural resource specialist. In 1998, she began her tenure as the Tribal Outreach and Education Coordinator with the Federal Geographic Data Committee (FGDC). Additionally, Bonnie has served on the U.S. Board of Geographic Names representing USGS and focusing on Native American Names issues. Since then, Bonnie has been a wonderful asset to the FGDC and a terrific colleague to those of us who have had the pleasure of working with her. The publication of the FGDC newsletter would not have happened without her. She will be greatly missed by her colleagues. We wish her the best in her future endeavors!

## Metadata: ISO Editor Review v2

FGDC performed the second annual review of metadata editors, which support the International Standards Organization (ISO), 19115 Geographic Information: Metadata standard. FGDC Metadata Working Group volunteers reviewed vendor updated information from last year's editor review. The original review, which was published May 2008, was a three-stage process: first, features were collected from the developers; second, a user's review was collected for all the tools; and third, the results were compiled. The vendors were queried on the operating environment, metadata development, and metadata management. In the 2009 review, editor vendors were asked to update their 2008 'feature' information and indicate any plans to support North American Profile of ISO 19115. The update will include several new editors.

Detailed editor information may be found at <http://www.fgdc.gov/metadata/iso-metadata-editor-review>.

## Online Training!

The NSDI Online Training Program materials are prepared in direct response NSDI Stakeholder training requests and requirements. Current lessons are reviewed and updated annually and new lessons are added throughout the year. Lessons can be downloaded and edited for custom training or reviewed online. Work is underway to convert the presentation-style lessons to an interactive online training system. The following lessons are currently available from: <http://www.fgdc.gov/training/nsdi-training-program/online-lessons>.



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|--|
| What is Metadata                             |
| Value of Metadata                            |
| NAP Development of ISO 19115                 |
| Introduction to Geospatial One-Stop          |
| Discover and Access Data Using geodata.gov   |
| Publishing Metadata to geodata.gov           |
| Introduction to Geospatial Web Services      |
| Introduction to NSDI Standards               |
| Framework Data Themes:                       |
| Transportation Base Standard                 |
| Transportation- Roads                        |
| Governmental Boundaries                      |
| Hydrography                                  |
| Introduction to the CAP                      |
| How to Submit a CAP Proposal                 |
| How to Implement Your NSDI CAP Project       |
| Introduction to Geospatial Business Planning |

## NOAA and FGDC Metadata Training MOU

In August 2009 the FGDC signed a MOU with NOAA-National Coastal Data Development Center to provide metadata training. The agreement calls for NOAA to provide up to six workshops in U.S. coastal regions with travel support by FGDC. In 2008 successful metadata training was carried out by NCCDC in Louisiana, Mississippi, and Florida with the USGS Geospatial Liaisons as workshop contacts. In 2007, a similar agreement was successful with the Texas GIS coordinator as the host. The USGS Geospatial Liaison Offices for California and Washington have already expressed interest in the 2009 agreement.

The typical workshop is one day in duration, with lecture and hands-on experience with a metadata creation tool. The content includes the one-day metadata workshop curriculum found on: <http://www.fgdc.gov/training/metadatacurriculum/?searchterm=metadata%20curriculum>.

## Metadata Training Accomplished for Earth Science and Cyberinfrastructure Communities

The 2008 NSDI CAP Program Cat.1 Metadata Training project funded to the Center for Intelligent Spatial Computing at George Mason University is successfully accomplished. Teamed up with the American Association of Geographers (AAG)'s Cyberinfrastructure Specialty Group (CISG) and the Earth Science Information Partnership (ESIP), CISC conducted the training for over 200 students and professionals from the Earth Science, Cyberinfrastructure, and geospatial communities within over 10 workshops, sessions, and classes. The training covered metadata standards, database, protocol, search, harvest, catalogue service, invoking interfaces and integration for applications.

The training workshops are aligned with the annual meetings of AAG, semi-annual

meetings of ESIP, and classes within George Mason University and Virginia Tech.

To support the training activities, CISC



Metadata Training Workshop in AAG 2009

developed several geospatial web portals with metadata services maintained for air quality, water, and spatial cyberinfrastructure communities. These services support metadata standards including FGDC metadata, ISO 19115(19119), NASA DIF, ANZLIC metadata and Dublin Core. Both CSW 2.0.1 and CSW 2.0.2 were deployed. The metadata were periodically harvested by the Geospatial One Stop portal and Global Earth Observation System of Systems.

With the accomplishment of this project, ESIP, AAG CISG, and other organizations and individuals, received metadata training within the context of Earth Science and Cyberinfrastructure. The attendees ranged from beginners to advanced metadata users. Aligned with the FGDC metadata curriculum, we provided basic information about metadata to the beginners, such as catalogue, search and query, and how metadata can be applied to their own domains. For the advanced users, we taught them how to create a catalogue service for their own data sets and how to integrate with other catalogues. The program was well received and directly linked to real applications.

(Contributed by Chaowei Yang, Hannes Wu, Rob Raskin, Sharon Shin, and Bonnie Gallahan).



Metadata Training in Advanced GIScience Class at George Mason University

## Cross-Border SDI based on WFS Deployed

At 5,500 miles, the US and Canada share the world's longest common border, and identifying critical infrastructures is a vital function for organizations in the cross-border region. With this requirement in mind, a collaborative project has developed, deployed and demonstrated the foundations of an online network to help identify critical infrastructure during emergencies and everyday operations.

The network is based on OGC Web Feature Service (WFS), Filter Encoding and GML standards, data from Montana and Natural Resources Canada, and software CubeWerx and The Carbon Project. The WFS are located in Montana and Quebec. Cross-border users are able to access the two secure data services across the US-Canada border, navigate through their content, and access critical infrastructure data using free geospatial viewers such as Gaia, CarbonArc PRO interoperability extensions for ArcGIS, and web browsers.

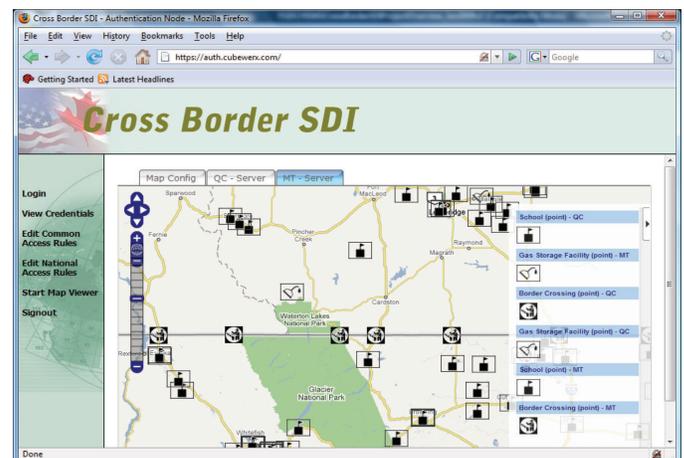
The Cross-Border SDI Project is part of the 2008 National Spatial Data Infrastructure (NSDI) Cooperative Agreement Program (CAP) - and brings together a collaborative group committed to joint US-Canadian Spatial Data Infrastructure including: the Montana Department of Administration; the

Centre for Topographic Information, Natural Resources Canada; Canada's Department of National Defense; United States Federal Government partners, and industry partners L-3 Communications GS&ES, GCS Research of Missoula, Montana, CubeWerx and The Carbon Project.

For more information or to learn how to participate, please contact [info@TheCarbonProject.com](mailto:info@TheCarbonProject.com). Recent Cross-Border SDI demos are available online at <http://carboncloud.blogspot.com/2009/03/cross-border-demo-using-secure-sdi-wfs.html>.

## Next Steps for Fifty States

The Fifty States Initiative fosters the development of the National Spatial Data Infrastructure (NSDI) by supporting state efforts to improve geospatial coordination through the use of



strategic and business plans. Over the past five years the Fifty States Initiative has successfully raised the profile of the NSDI within state and local geospatial communities. The next steps for the program involve consolidating those gains, supporting the implementation of the plans, and beginning the process of measuring where the nation stands on NSDI development.

Successful statewide strategic planning efforts are winding down and a new focus on assisting states in actualizing the goals identified through strategic planning is needed. There are seven specific recommendations which the FGDC will move its focus toward:

1. Create improved measurements of success.
2. Create a Best Practices Library of case studies for common issues and opportunities.
3. Shift emphasis from strategic planning to business planning.
4. Advance implementation of state strategic and business plans.  
Move forward to better engage regional, county and local governments.
5. Align the initiative with other Federal funding programs.
6. Strengthen Fifty States Initiative communications and outreach.

There is ample evidence that the Fifty States Initiative has been extremely valuable to states and has led to meaningful statewide coordination improvements that are essential for NSDI development. The next steps identified above are catalyzing these gains and laying the foundation for a more robust NSDI.

## Hawaii's Fifty States Initiative Project

A unified vision of the role of the Hawaii Geographic Information Coordinating Council (HIGICC) was formulated. The HIGICC is a non-profit organization run by volunteers from Hawaii's geospatial community. Funding provided through the Fifty States Cooperative Agreements Program, enabled HIGICC to collect information through online surveys, group interviews, and individual meetings with key stakeholders. The resulting strategic and business plan goals were both internally and externally focused—internal to strengthen the Board's governance, solidify the Council's finances, and focus the organization's efforts; and external to improve outreach to the geospatial and broader communities, and coordinate data acquisition, development, and synthesis among stakeholders.

The Strategic and Business plans were approved by HIGICC's Board and the results shared at a September 2009 conference sponsored by HIGICC and the Hawaii Congress of Planning Officials, "Building Resilient Communities." While there are many challenges ahead, including coordinating and motivating volunteers, and continuing to reach out to underrepresented segments of the broader geospatial community, it the nature of this island community to work together to create better products and services through stronger and more supportive relationships.

For further information on Fifty State activities in Hawaii, please contact Henry B. Wolter ([hwolter@usgs.gov](mailto:hwolter@usgs.gov), 808-587-2409) the U.S. Geological Survey Geospatial Liaison for Hawaii and Pacific Basin Islands and an ex-officio member of HIGICC.

## **FGDC Secretariat Staff**

### **Executive Director**

Ivan DeLoatch  
Phone: 703-648-5752  
E-mail: [ideloatch@fgdc.gov](mailto:ideloatch@fgdc.gov)

### **Deputy Executive Director**

Ken Shaffer  
Phone: 703-648-5740  
E-mail: [kmschaffer@usgs.gov](mailto:kmschaffer@usgs.gov)

### **Program Assistant**

Carol Petr Greenough  
Phone: 703-648-4150  
E-mail: [cpetr@fgdc.gov](mailto:cpetr@fgdc.gov)

### **Program Assistant**

Vanessa Hardnett  
Phone: 703-648-4142  
E-mail: [vhardnett@fgdc.gov](mailto:vhardnett@fgdc.gov)

### **Senior Technology Advisor**

Doug Nebert  
Phone: 703-648-4151  
E-mail: [ddnebert@fgdc.gov](mailto:ddnebert@fgdc.gov)

### **Senior Policy Advisor**

John Mahoney  
Phone: Seattle, WA 206-220-4621  
E-mail: [jmahoney@fgdc.gov](mailto:jmahoney@fgdc.gov)

### **Senior Program Manager**

Lewis Sanford  
Phone: 703-648-4152  
E-mail: [lsanford@fgdc.gov](mailto:lsanford@fgdc.gov)

### **FGDC & GSDI Secretariat**

Alan Stevens - Professor Emeritus  
E-mail: [astevens@gsdi.org](mailto:astevens@gsdi.org) or  
[asteve1@usgs.gov](mailto:asteve1@usgs.gov)

## **Framework & Cooperating States Coordinator**

Milo Robinson  
Phone: 703-648-5162  
E-mail: [mrobinson@fgdc.gov](mailto:mrobinson@fgdc.gov)

### **Metadata Coordinator**

Sharon Shin  
Phone: Denver, CO 303-202-4230  
E-mail: [sharon\\_shin@fgdc.gov](mailto:sharon_shin@fgdc.gov)

### **Standards Coordinator**

Ms. Julie Binder Maitra  
Phone: 703-648-4627  
E-mail: [jmaitra@fgdc.gov](mailto:jmaitra@fgdc.gov)

### **Training & Education / Tribal Liaison**

Bonnie Gallahan  
Phone: 703-648-6084  
E-mail: [bgallahan@fgdc.gov](mailto:bgallahan@fgdc.gov)

### **NSDI CAP Coordinator**

Brigitta Urban-Mathieux  
Phone: 703-648-5175  
E-mail: [burbanma@fgdc.gov](mailto:burbanma@fgdc.gov)

### **Webmaster**

Vaishal Sheth  
Phone: 703-648-5930  
E-mail: [vsheth@fgdc.gov](mailto:vsheth@fgdc.gov)

### **Program Analyst/LOB/Communications**

Roxanne Lamb  
Phone: 804-261-2653  
E-mail: [rhlamb@fgdc.gov](mailto:rhlamb@fgdc.gov)

### **Program Analyst**

Arista Salimi Maher  
Phone: 703-648-6283  
E-mail: [amaher@fgdc.gov](mailto:amaher@fgdc.gov)

## 2010 Upcoming Conferences

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|-----------------|--------------|---------------------|
| February 17-19  | ESRI Fed UC  | Washington, DC      |
| March 6-10      | NSGIC Mid-Yr | Annapolis, MD       |
| April 25-29     | GITA         | Phoenix, AZ         |
| April 18-22     | MAGIC        | Kansas City, MO     |
| April 26-30     | ASPRS        | San Diego, CA       |
| July 12-16      | ESRI         | San Diego, CA       |
| July 16-20      | NACO         | Reno, NV            |
| September 12-16 | NSGIC Annual | Minneapolis, MN     |
| September 14-17 | GIScience    | Zurich, Switzerland |

590 National Center  
Federal Geographic Data Committee  
U.S. Geological Survey  
12201 Sunrise Valley Drive  
Reston, VA 20192

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