

## Science Data Coordinator Network FY12 Executive Summary

In support of the USGS Mission and Science Strategy, the Core Science Systems (CSS) Mission Area formed a partnership with the Geographic Areas (now Regions) to initiate the Science Data Coordinator Network (SDCN). The SDCN works to address current and cross-cutting information management issues, expedite access to the entire portfolio of USGS authoritative information assets and products, and increase the success and impact of collaborative science projects in meeting local, multidisciplinary and strategic science objectives. The Network provides a conduit and framework for activities that help connect information investments across multiple disciplinary, geographic, temporal, and political boundaries, while assisting with identification and prioritization of local science and information management requirements. By building on existing data investments and expertise, the SDCN supports the deployment of more consistent data management and long-term preservation practices and helps facilitate integration, discovery, access, and delivery of information assets developed at the USGS.

### SDCN FY12 Membership

- **Alaska:** Carl Markon - [markon@usgs.gov](mailto:markon@usgs.gov) (Anchorage, AK)
- **Midwest Area:** JC Nelson - [jcnelson@usgs.gov](mailto:jcnelson@usgs.gov) (La Crosse, WI) and Jessica L. Thompson - [jlthomps@usgs.gov](mailto:jlthomps@usgs.gov) (Middleton, WI)
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In order to address these priority information management issues, the SDCN developed a Project Plan focusing on five tasks. Below are statements describing the purpose of each task, the planned deliverables, and a brief summary of the accomplishments for each task.

Individual task reports were created for each task, and are available at <https://collaboration.usgs.gov/wg/sdcn>. (Please note, that in order to access this site, users will need to login with their Active Directory login and password.)

#### FY12-01. Develop and Deliver Introductory Document(s)

**Purpose:** The Science Data Coordination Network (SDCN) is new and its purpose is not widely known. This task focused on generating introductory documents to be delivered to various audiences to highlight the SDCN goals and plans, and to create support for current and future activities. It was intended to provide a common resource and consistent message for all SDCN contacts as outreach efforts are initiated.

**Deliverables:** Introductory “Fact Sheets,” PowerPoint Presentations, and Website presence.

**Summary of Accomplishments:**

- Developed one-page “Fact Sheet” summaries highlighting the Charter, Project Tasks, and SDCN activities
- Created “Master” SDCN Introductory PowerPoint Presentation as well as multiple custom presentations for specific audiences
- Developed SDCN website available at:  
[http://www.usgs.gov/core\\_science\\_systems/csas/usgs\\_sdcn\\_contacts.html](http://www.usgs.gov/core_science_systems/csas/usgs_sdcn_contacts.html)
- Established site for member collaboration and document sharing; serves as a repository for past, current and future activities
- Compiled and posted correspondence and meeting summaries on collaboration site; emphasized needs, priorities, and concerns of the Regional Directors and other audiences introduced to the SDCN

**FY12-02. USGS Information Landscape Characterization**

**Purpose:** The USGS is an organization with diverse science themes, facilities, and capabilities. In order to create an information network, it is necessary to characterize and describe foundational aspects of the USGS’s information landscape. This task focused on collaboration with Regional staff to describe and document information, facilities, capabilities, and potential contacts and expertise to participate in the SDCN.

**Deliverables:** Index maps of locations, facilities, contacts and related information.

**Summary of Accomplishments:**

- Created and vetted draft maps displaying USGS Science Centers for all USGS Geographic Areas
- Updated and compiled all maps into an ESRI ArcGIS Server application
- Developed and evaluated set of attributes which can serve as a way to link the SDCN work to both the Data Life Cycle and activities in ScienceBase
- Demonstrated ESRI ArcGIS Server application at the SDCN face-to-face meeting in July
- Initiated collaboration with Core Science Analytics and Synthesis (CSAS) staff working on ScienceBase for future map activities

**FY12-03. Evaluate Asset Surveys Related to Data and Information Management**

**Purpose:** Data and information management capabilities, requirements, and needs are not well defined in the USGS. Numerous surveys, either existing or in progress, have been underwritten by various groups within the USGS. This task focused on evaluating previous survey efforts and their results; identifying gaps in information; and making recommendations for new surveys to better characterize the information management issues, needs, and capabilities. This task provided additional detail and granularity to the foundational landscape characterization.

**Deliverables:** Report and recommendations outlining future data management surveys and needs.

**Summary of Accomplishments:**

- Identified fourteen surveys for initial consideration and reviewed for appropriate scope
- Selected seven surveys for further evaluation and summarized results
- Conducted comparative analysis on collated results and documented in a spreadsheet

- Reviewed recommendations and initiated discussions with the USGS Community for Data Integration (CDI) for additional collaboration and analysis.

#### **FY12-04. Facilitate Data and Information Management Support in the USGS**

**Purpose:** General assistance for data and information management issues, best practices, and procedures are not available in a systematic and organized manner in the USGS. This task focused on evaluating the current information support environment and making recommendations to improve support for data management and related issues across the USGS.

**Deliverables:** Report and recommendations for enhancing data and information management support.

##### **Summary of Accomplishments:**

- Developed set of questions to ensure consistency in the interview process
- Developed schema to collate interview responses
- Interviewed system managers and ‘champions’ for five USGS support service systems: Enterprise GIS (EGIS), Ask-a-Librarian, Ask USGS, Ask-a-Geologist, and NWIS Help
- Collected work flow diagrams, flow charts, and supporting documentation from these support services
- Conducted comparative analysis on interview summaries and responses
- Developed consensus recommendations for improving data management support and stewardship

#### **FY12-05. Report the Accomplishments of the SDCN: Closing the Loop**

**Purpose:** Feedback on existing SDCN activities will be critical to garner future support and guide new plans and activities. This task summarizes and presents the activities of SDCN for the fiscal year; to inform the community and make recommendations for new activities for the Regional Directors and other audiences, including the CDI.

**Deliverables:** Presentations on accomplishments and recommendations for future activities.

##### **Summary of Accomplishments:**

- Created this Executive Summary report
- Created individual reports for each task listing accomplishments
- PowerPoint presentation to be developed from final accomplishment report

#### **SDCN Recommendations for FY13**

In FY12 participation on task activities and support provided to members from their Regional offices varied tremendously. We recognize that any new organization will require an adjustment period and we were able to learn from our first year, as well as enjoy the success of our work together and individually. Although membership in the SDCN in FY12 was the result of Regional Director appointments, because funding support was not included except in one case, the level of participation varied greatly among the Coordinators. Several observations pertinent to future planning for the SDCN are as follows:

- (1) to more fully perform the functions assigned to the SDCN, a 10 to 25% FTE commitment by core team members would be ideal. In the future, as data management best practices become more

integrated into the data lifecycle, the SDCN's role in data management activities will be reassessed.

- (2) Coordinators' participation in the Network would increase if funding were available for a portion of salary and related travel, and would potentially allow us to reach and involve a broader audience. Otherwise, participation in the Network by some Coordinators may be limited or impossible;
- (3) assigning a backup for each representative to share work and meeting attendance may be appropriate, as members may not be able to participate at all times for any number of reasons, and;
- (4) Mission Area Associate Directors and Regional Directors must voice their support for and encourage participation with the SDCN for us to be successful, and encourage those down the chain of command to do the same.

These topics will be discussed early in FY13 by the full membership, including the new Mission Area representatives, and recommendations regarding staffing of the core SDCN team will be made to Regional offices and our executive sponsors to promote even greater success in our second year.

### **SDCN Next Steps for FY13**

Although the SDCN group has been active, much work remains to increase awareness and utility of the SDCN, particularly with the Science Centers and scientists. Continued efforts to communicate with scientists are needed to identify their specific issues and concerns, and more importantly to build a trust relationship with them as we work to resolve their science-driven information management issues and promote long-term stewardship in the USGS. Incorporating their feedback, concerns, and recommendations into SDCN activities and priorities provides pathways for the SDCN to connect services, expertise, and capability, address their needs, and demonstrate value and relevance of the network. This will be an emphasis area in FY 2013.

The SDCN will expand its avenues of communication and improve its capacity to serve as connectors or facilitators in a larger network of people, expertise, data, and solutions that can be shared to serve our projects and the broader USGS. We will continue outreach with additional tailored PowerPoint presentations, materials, Leadership blog articles, an intranet web presence, and more outreach to the various Communities of Practice including the overall CDI, CDI Data Management Working Group, Geospatial Liaisons and others. We are hopeful that collaboration with subject-matter experts in the Communities can provide a resource to fully investigate data management and stewardship issues and serve as a readily available resource to resolve issues and provide support to users.

The SDCN has expanded representation in the SDCN to include the Mission Areas, with Coordinators appointed by the Associate Directors, thus providing additional perspectives on the type and scope of Bureau science issues. Most Science Centers will now have more than one representative viewpoint on the SCDN team, which will help to identify issues that affect all of USGS. Efforts will be also be made to include the USGS Library capabilities and expertise as we work to connect resources in the USGS to offer effective services that meet the needs of management, scientists, and data professionals. The SDCN facilitators can help foster collaboration among the Regions and Mission Areas, promote information sharing, and help promote the importance of data management and best practices in support of science. Successful facilitation will make our science more accessible, responsive, and relevant to our stakeholders.