

2013 CDI Webinar Series

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In lieu of the postponed 2013 The National Map Users Conference and CDI Workshop, CDI held a Webinar Series between August - November 2013.

USGS Leaders Blog Announcement of the CDI Webinar Series [PDF] or <http://communities.usgs.gov/blogs/leaders/?p=6681>.

More information about the Science Support Framework

All times listed are EST (Eastern)

Webinar:

- **WebEx connection: <http://usgs.webex.com> - Meeting Name "Community for Data Integration"**
- **Teleconference: (703) 648-4848 or (855) 547-8255 Code: 14654#**

Workshop recordings can be viewed using WebEx Player software unless otherwise noted.

Windows Media Player files (WMV) or MPEG-4 files should be saved and played locally. Right click link - Save As - then open with Windows Media Player.

Schedule

- **Session 1:** Public Participation in USGS Scientific Research - August 14, 2013
- **Session 2:** Data Management - September 11, 2013
- **Session 3:** Earth System Informatics - October 9, 2013 (*Rescheduled to February 12th, 2014 as Open Data Initiatives and USGS Response*)
- **Session 4:** Mobile Science - November 13, 2013

Agenda

Date	Time Period	Topic and description	Presenter	Session Chairs
Session 1 - August 14, 2013		Public Participation in USGS Scientific Research		Dave Govoni and Megan Hines
	11:00 am - 11:20 am EST	Introductions and Logistics,	Kevin Gallagher, Jennifer Carlino	Opening Recording [mp4] Opening Recording [wmv]
	11:20 am - 11:40 am EST	Citizen Scientists Study Mercury in Dragonfly Larvae at National Parks Abstract: Mercury is a globally distributed contaminant that can harm human and wildlife health, and threaten resources the National Park Service (NPS) is charged with protecting. Due in part to emissions and long-range transport from coal burning power plants, even remote national park environments receive mercury deposition from the atmosphere. ... In an effort to increase public awareness regarding the mercury issue, a citizen science project was expanded in 2012 to collect dragonfly larvae for mercury analysis in national parks. Dragonfly larvae (Odonata anisoptera) can serve as indicators of ecosystem health by characterizing the risk and potential trophic transfer of mercury. These aquatic macroinvertebrates are long-lived before emerging as adult dragonflies, widespread across the U.S., predatory, important prey for fish species, they reflect the mercury sensitivity of a specific watershed, and they are relatively easy to collect. Fourteen national parks across the U.S. participated in the pilot effort: Acadia (ME), Big Cypress (FL), Cape Cod (MA), Channel Islands (CA), Denali (AK), Great Smoky Mountains (NC/TN), Mammoth Cave (KY), Marsh-Billings Rockefeller (VT), North Cascades (WA), Rocky Mountain (CO), Saint Croix (WI/MN), Saint-Gaudens (NH), Santa Monica Mountains (CA), and Zion (UT). Over 200 dragonfly larvae samples were collected from 25 sites by about 200 citizen scientists, and sent to the University of Maine for analysis of mercury. The project will continue in 2013. Preliminary results indicate significant differences among sites, even within a park, suggesting that dragonfly larvae are useful in describing fine-scale differences in mercury risk. For example, in two ponds at Acadia National Park where marked differences in fish mercury were reported in earlier research, dragonfly larvae mercury followed the same pattern: dragonfly larvae mercury was approx. two times greater in the pond with higher-mercury fish (dragonfly mercury mean \pm SD=237 \pm 30 pgb, wet weight) as compared to the pond with lower-mercury fish (dragonfly larvae mean \pm SD=111 \pm 45 pgb, wet weight). This citizen science project engages students, teachers, and visitors in national parks, offering an example for Public Participation in USGS Scientific Research. The project also supports the 'Call to Action,' the NPS Centennial Initiative, by connecting people to parks and advancing the educational mission. Additionally, this study provides baseline data to better understand the spatial distribution of mercury contamination in national parks and expands the geographic scope of research previously conducted by scientists. Read more: Citizen Scientists Study Mercury in Dragonfly Larvae	Colleen Flanagan, Ecologist, Air Resources Division, National Park Service	Recording [mpg4] Recording [wmv]

	11:40 am - 12:00 pm EST	<p>myScience: USGS Citizen Science Project Discovery & Public Engagement Web Application</p> <p>Abstract: How may the public discover opportunities for participation in USGS scientific research? What citizen science projects are currently active within the USGS? How may PIs increase public engagement in and awareness of their citizen science projects?</p> <p>...</p> <p>To address these questions, a web application leveraging existing USGS and Community for Data Integration (CDI) work will be created to allow unprecedented public access to USGS citizen science project metadata and highlights of key science outcomes. Such an application will enable, for the first time, high-visibility, unified open access to information about projects and practices related to citizen participation in USGS research. The need for such information was identified in an Applied Earth Systems Informatics Research (AESIR)-supported study on citizen science cyber-infrastructure (Holl, 2012). This study also identified the need for innovative tools and resources to increase public engagement in and awareness of existing USGS citizen science projects and to connect and inform bureau scientists about public participation in scientific research. The proposed product, myScience: USGS Citizen Science Project Discovery and Public Engagement Web Application, will directly address these needs and benefit both USGS scientists across all disciplines and geographic regions as well as the public to whom they serve.</p>	Sally Holl, Geographer, United States Geological Survey	Recording [mp4] Recording [wmv]
	12:00 pm - 12:20 pm EST	<p>The USA National Phenology Network's National Phenology Database: A Multi-taxa, Continental-scale Dataset for Scientific Inquiry</p> <p>Abstract: The USA National Phenology Network (USA-NPN; www.usanpn.org), under the leadership of USGS, serves science and society by promoting a broad understanding of plant and animal phenology and the relationships among phenological patterns and all aspects of environmental change.</p> <p>...</p> <p>The National Phenology Database, maintained by the USA-NPN, is experiencing steady growth in the number of data records it houses. By the end of CY 2012, professional and volunteer participants in the USA-NPN national-scale, multi-taxa phenology observation program Nature's Notebook had contributed over 1.5 million observation records (encompassing four and three years of observations for plants and for animals, respectively). Data are freely available at www.usanpn.org/results/data, and include FGDC-compliant metadata, data-use and data-attribution policies, vetted and documented methodologies and protocols, and version control. Quality assurance and quality control, and metadata data associated with field observations (e.g., effort and method reporting, site and organism condition) are also documented. Data are also available for exploration, visualization and preliminary analysis at www.usanpn.org/results/visualizations. Patterns in the data collected by Nature's Notebook participants are beginning to emerge demonstrating the value of this data resource. For example, preliminary analysis indicates that plant phenology is closely tracking seasonal changes in climatological variables. This presentation will provide an overview as to the potential utility of data housed in the National Phenology Database to a broad variety of stakeholders interested in the spatial and temporal patterns of plant and animal activity on a national scale. We encourage researchers and decision makers to take advantage of this rich new data resource.</p>	Jake Weltzin, Phenology Program Coordinator, United States Geological Survey	Recording [mp4] Recording [wmv]
	12:20 pm - 12:40 pm EST	<p>CitSci.org: Cyberinfrastructure support for citizen science data integration</p> <p>Abstract: Citizen science and community-based monitoring programs are increasing in number and breadth, generating volumes of scientific data. Many programs are ill-equipped to effectively manage these data. We built a cyber-infrastructure support system for citizen science programs (www.citsci.org) to support the full spectrum of program and data management needs.</p> <p>...</p> <p>The system affords program coordinators the opportunity to create their own projects, define research questions, manage project members, build their own data entry sheets, streamline data entry, visualize data on maps and charts, automate data analyses, upload bulk legacy data files, and get feedback. Thus far, CitSci.org has engaged 70+ programs resulting in some 10,000+ species observations and some 26,900+ environmental observations. The majority of programs are grassroots efforts with conservation biology-oriented goals and objectives. Volunteers follow well documented monitoring protocols that measure a growing, yet vetted list of attributes to collect and share standardized and integrated data. The open and transparent nature of the CitSci.org system allows programs monitoring similar things to adopt the same protocols as other programs where appropriate, yet allows individual programs to develop their own protocols when necessary. Here, we discuss the unique opportunities afforded by CitSci.org to support the needs of citizen science, community-based monitoring, and grassroots conservation biology programs relevant to USGS research, while also promoting data integration across these varied programs to facilitate large-scale meta-analyses where possible.</p>	Greg Newman, Ecologist, Colorado State University - Natural Resource Ecology Laboratory	Recording [mp4] Recording [wmv]
	12:40 pm - 1:00 pm EST	Discussion and Ajourn	Dave Govoni and Megan Hines	
		<p>PPSR Q/A Session</p> <p>...</p> <p>Mercury in Dragonfly Larvae - Colleen Flanagan</p> <p>Leslie from EROS - Trying to embark on CS project and wondering about how much interaction citizens need to keep them engaged and enthusiastic. Do you find that folks that contribute get that feedback right away from your project or do you connect back with them later?</p> <p>Colleen F - We have not been tracking yet but we need to start tracking. It is difficult to follow up largely because we don't get the data right away. We are working to improve upon participation in the long term. With the continuation of the project in the parks, we are interested in following up and have the same students come back.</p> <p>CitSci - Greg Newman</p> <p>Lew Gorman - Can anyone access and use it and is there a cost?</p> <p>Greg N - Yes, this is a free system and anyone can access including federal employees, scientists, and non-profit organizations. Free and open to the public.</p>		
Session 2 - September 11, 2013	Time Period	Data Management		Heather Henkel and Viv Hutchison
	11:00 am - 11:20 am EST	Introductions and Logistics	Kevin Gallagher, Jennifer Carlino	Opening Recording [mp4] Opening Recording [wmv]
	11:20 am - 11:40 am EST	<p>The USGS Data Management Website</p> <p>Abstract: The Community for Data Integration (CDI) members identified a critical need for better data management at the U.S. Geological Survey (USGS). Increasingly, scientists need ready access to information and data management resources.</p> <p>...</p> <p>For example, many journals now require access to data prior to acceptance of a scientific paper for publication, which requires that USGS scientists know the policies and procedures for responding to such requests. The CDI Data Management Working Group recognizes that USGS data are a core part of what we do as an agency; data is costly to collect and is one of our most valuable assets. Investigating cross-discipline scientific questions requires the integration of multiple datasets and relies on well-managed, easily accessible data. At present, however, standard procedures, guidelines, and best practices are not well publicized available to, or employed by USGS researchers and programs, and there is little readily available data management support. In order to better manage our data so that it can be accessed and understood by current and future researchers, the Data Management Working Group developed the USGS Data Management Website: http://www.usgs.gov/datamanagement.</p> <p>The Data Management Website is intended to compliment and support the Survey Manual handbook, which tells researchers; needs to be done; the Website provides non-prescriptive guidance on how; Survey Manual policies can be implemented, where to find help, and who to contact. It provides a platform to share best practices in data management and serves as an educational tool for seasoned scientists as well as those new to the Survey. The website recognizes the good data management practices currently practiced in USGS, and highlights those practices wherever possible (i.e., in the Water Mission Area).</p> <p>The Data Management Website was developed around topics associated with the USGS Data Management Lifecycle. CDI Executive Leadership Team sponsors Linda Gunderson and Kevin Gallagher approved the Lifecycle, which was developed by CDI Data Management Working Group members, in FY12. For each topic, there are multiple sub-sections (e.g., Plan; includes Data Management Planning; Organize Files and Data; Data Standards; and Data Formats). Website content is organized in a consistent manner in each topic area including Description, Best Practices, Key Points, Tools, and Recommended Reading.</p>	Heather Henkel, USGS and Viv Hutchison, USGS	Recording [mp4] Recording [wmv]
	11:40 am - 12:00 pm EST	<p>The USGS Scientific Data Lifecycle Model: A Foundation to Build Upon</p> <p>Abstract: Proper data management of USGS science data is ultimately the responsibility of USGS scientists. The challenge of that large responsibility lies with the breadth of USGS scientific work, the pace of technology change, budget realities, and relatively short project cycles.</p> <p>...</p> <p>Data management and data integration have been identified in the USGS science strategy as critical areas that are essential to the success of future USGS science (U.S. Geological Survey, 2007). The goal of the USGS Science Strategy is integration of the vast capabilities of the Bureau to better serve a Nation facing significant natural science and societal challenges (U.S. Geological Survey, 2007; Burkett and others, 2011). Multiple approaches exist to achieve this end, but underlying all USGS data integration strategies is the need for accessible and high-confidence data and information from the science community.</p> <p>In 2010, the USGS Community for Data Integration (CDI) established a Data Management Working Group (DMWG) to assist the agency in properly managing, documenting, preserving, and providing access to the science data upon which the Nation relies. The DMWG set up a cross-Mission team that developed a scientific records data lifecycle model for use by scientists and technical managers. The first compilation of the model was reviewed by scientists through multiple venues, followed by review and final approval by Kevin Gallagher (Associate Director for Core Science Systems) and Linda Gunderson (Director, Office of Science Quality and Integrity, retired), the CDI executive sponsors.</p> <p>The goal of the scientific data lifecycle model is to ensure that scientific data have a longer lifespan than the original science project that collected and analyzed them. The ability to draw on established data resources in order to re-use and add to them is a critical component of today's science. This model, developed for USGS, is one way to facilitate shared recognition and understanding of the necessary steps to document, protect, and make available our most valued assets: our data.</p>	John Faundeen, USGS	Recording [mp4] Recording [wmv]

<p>12:00 pm - 12:20 pm EST</p>	<p>A Use Case for Coastal Imagery to Further Data Integration Abstract: Developing and refining use cases are effective techniques for data integration where a single data type is needed but from multiple data repositories. Within the USGS Coastal & Marine Geology Program, a small team has developed a use case for aggregating and examining photographic images to aid in response to extreme coastal storm events.</p> <p>Previous to the development of the Photo Collections from Barrier Islands use case, access to the USGS photographic collections of coastal imagery was restricted to a few researchers within the St. Petersburg Coastal and Marine Science Center (SPCMSC). Outside researchers had to contact an SPCMSC researcher to request imagery based on the small subset of images published on the USGS storm response web site (http://coastal.er.usgs.gov/hurricanes). The SPCMSC researcher would then package the requested images and send them to the outside researcher. The use case being developed allows both in-house and external researchers to search for pertinent photographs via a web-based portal without the assistance of a dedicated image specialist. The portal will be able to access multiple imagery databases, allowing the researcher to search large collections based on spatial, temporal, and/or storm event-related specifications. The initial prototype, based on the Xstorns Photographic Database, a GIS-based geodatabase, allows users to access to all Xstorns imagery interactively. Users can navigate to a geographic area of interest, or select a storm event, and see all available imagery pertinent to their search. They can view images in the web portal, select single or multiple images, select images from more than one aerial survey, or select images that represent a time series at a specific location. These images are then automatically packaged with associated metadata and made available for download.</p> <p>Additional photodatabases are now being integrated into the portal, expanding the overall breadth of the tool to make it a single access point to multiple imagery resources. Once fully implemented, this use case will become a template for increasing access to the wide extent of USGS imagery.</p>	<p>Karen Morgan, USGS</p>	<p>Recording [mp4] Recording [wmv]</p>
<p>12:20 pm - 12:40 pm EST</p>	<p>Data Management at the National Climate Change and Wildlife Science Center and the Climate Science Centers Abstract: How do you manage data across nice active science centers locations? What do you learn from data management plans? What role does a Climate Science Center Data Steward fill? How do you use open standards and web services to integrate climate information across organizational boundaries? Congress established the National Climate Change and Wildlife Science Center (NCCWSC) at the U.S. Geological Survey in 2008.</p> <p>The NCCWSC serves as the Department of the Interior's agent for the establishment, management, and coordination of a network of eight regional Climate Science Centers (CSCs), delivering scientific and technical information to help natural resource managers cope with a changing climate.</p> <p>The NCCWSC and the CSCs generate, integrate, and disseminate data and derived data products that will help resource managers develop adaptation strategies in response to climate change. The CSC enterprise needed data management policy and guidance to ensure that appropriate standards, consistent guidelines, and common strategies are used, providing linkages to and consistency with other similar systems, and fostering a true national network. The NCCWSC and the CSCs have placed an emphasis on data management and an open standards, integration-based framework for data discovery. Our approach has included the development of data management policies and guidance, data stewards for each CSC, a central repository for all CSC funded products, and an integrated search across several different partner websites and portals. This discussion will include the current status of our data management efforts, what we learned in our first year, and lessons learned from our first year.</p>	<p>Emily Fort, USGS</p>	<p>Recording [mp4] Recording [wmv]</p>
<p>12:40 pm - 1:00 pm EST</p>	<p>CDI Data Release Use Case Team: Status of effort and issues identified Abstract: This team was convened to quantify a procedure for enabling USGS employees to answer the question of whether a particular set of data is approved for release.</p> <p>The team is composed of members from the Office of Science Quality and Integrity (OSQI) and the USGS Community for Data Integration (CDI) Data Management Working Group consisting of nine members with mixed skills representing a diversity of USGS regions and Mission Areas, including data experts, approving officials, software engineers, expertise in information modeling, as well as a scribe and a facilitator. Here we discuss progress, challenges and recommendations from the team. A primary use case is presented showing the steps necessary to release data by publishing an information product in a USGS publication series. USGS data assets are conceptually categorized. Challenges to releasing data are identified such as production costs, metadata confusion and data preservation ambiguity. Recommendations or solving challenges are presented to encourage discussion.</p>	<p>Keith Kirk, USGS</p>	<p>Recording [mp4] Recording [wmv]</p>
<p>1:00 pm - 1:20 pm EST</p>	<p>Integrating USGS Data for U.S. Regional Ocean Planning: A Pilot Project Abstract: Driven by the National Ocean Policy, a science-based process of ocean planning is beginning in several U.S. regions. This effort will increase the demand for scientific data, information, and knowledge, and will necessitate the development of science-based tools to support complex policy decisions with long-term ecologic and socio-economic implications.</p> <p>As one of the premier Federal science agencies, USGS can play a leading role in providing a scientific foundation for this process. USGS is challenged to organize its scientific data and information products for inclusion in the national data portal (ocean.data.gov) and regional data portals. A team has convened to revise the 2010 guidance document A Data Integration Blueprint for USGS Participation in Coastal and Marine Spatial Planning, which was delivered to the USGS Community for Data Integration (CDI) in August 2010. The Blueprint Revision Team has launched a pilot project to develop a process to 1) identify priority data produced by science centers that are relevant to national and regional ocean planning activities and 2) ensure that these data can be readily discovered, evaluated for usability, and integrated with data from other providers. The pilot project will be guided by the Blueprint Revision Team and will include Coastal and Marine Geology Program (CMGP) data specialists from each of the three CMGP science centers (in Woods Hole, Massachusetts; Santa Cruz, California; and St. Petersburg, Florida). After completion of this pilot project, the resulting process will be documented and generalized by the Blueprint Revision Team so that it can be used across USGS to integrate and disseminate data in support of Data.Gov and similar interagency initiatives.</p> <p>Our presentation will outline the process being developed by the pilot project, and highlight the roles of a USGS data; (who communicates with regional ocean-planning bodies), the CMGP data specialists, and suitable data repositories.</p>	<p>Fran Lightson, USGS and Alan Allwardt, USGS</p>	<p>Recording [mp4] Recording [wmv]</p>
<p>1:20 pm - 1:40 pm EST</p>	<p>Defining a Data Management Strategy for USGS Chesapeake Bay Studies, a Project Level Approach Abstract: The mission of U.S. Geological Survey (USGS) Chesapeake Bay studies is to provide integrated science for improved understanding and management of the Chesapeake Bay ecosystem.</p> <p>Collective USGS efforts in the Chesapeake Bay watershed began in the 1980s, and by the mid-1990s the USGS adopted the watershed as one of its national place-based study areas. Great focus and effort by the USGS have been directed toward Chesapeake Bay studies for almost three decades. The USGS plays a key role in providing science to improve the efficiency and accountability of Chesapeake Bay Program activities. Each year USGS Chesapeake Bay studies produce published research, monitoring data, and models addressing aspects of bay restoration such as, but not limited to, fish health, water quality, land-cover change, and habitat loss. The USGS is also responsible for collaborating and sharing this information with other Federal agencies and partners as described under the President's Executive Order 13508 Strategy for Protecting and Restoring the Chesapeake Bay Watershed signed by President Obama in 2009. Historically, the USGS Chesapeake Bay studies have relied on national USGS databases to store only nationally collected sources of data such as streamflow and water-quality data collected through local monitoring programs and projects, leaving a multitude of other important project data out of the data management process. This practice has led to inefficient methods of finding Chesapeake Bay studies data and underutilization of data resources. The USGS Chesapeake Bay studies recognizes the importance of all encompassing project level data management and began coordinating in 2011 with the Eastern Geographic Science Center (EGSC) and the USGS Community for Data Integration (CDI) to investigate implementing comprehensive data management solutions to facilitate data sharing and the development of decision support tools. An Open File Report, Defining a Data Management Strategy for USGS Chesapeake Bay Studies was recently published that investigates the implementation of data management and challenges at the project level in these preliminary stages of adopting data management best practices. This presentation will discuss highlights from the Open File Report and continued efforts this fiscal year. Efforts this fiscal year include working with a subset of the USGS Chesapeake Bay studies science team to inventory data resources and create a data management workflow.</p>	<p>Cassandra Ladino, USGS</p>	<p>Recording [mp4] Recording [wmv]</p>
<p>1:40 pm - 2:00 pm EST</p>	<p>Just enough data management and other things Abstract: We can learn a lot about real-world data management by talking to research scientists. I've been talking to them informally since 1976.</p> <p>Starting in early 2012, I've learned even more by conducting structured interviews with eight research scientists and support staff at the USGS Pacific Coastal and Marine Science Center in Santa Cruz, California. Some of the lessons learned: Most scientists practice just enough data management to get their papers published, and just enough to deliver required products to funding partners. Attitudes toward data management vary widely, from Don't bother me to I'm building my own database, leave me alone, to anger about the money wasted on data management.</p> <p>Most view publishing data in USGS Data Series or Open-File Reports as a significant burden in effort, time, and money &ndash; with very little benefit. Some fear getting scooped by other scientists if their data are made public too soon, so they avoid releasing data by postponing data-management activities indefinitely. Many believe data management takes too much time away from Science. Almost nobody writes data management plans. Most struggle to answer the question What happens to your data when this project ends? Most are too busy to cooperate with professional data managers. While a project is running, their response is My data aren't ready. After a project is over, their response is I'm too busy with the next project. Most scientists divert personnel and funding for data management into collecting and processing more data, promising to manage data later. Most scientists are not interested in data-management best practices, unless provided by their immediate peers solving nearly identical problems. Most are unaware of the resources available for better data management. One scientist worries about losing several terabytes of data on a dozen hard drives scattered around the office, while a server down the hall has hundreds of terabytes of unused storage. Most perceive significant technical, security, and policy barriers to sharing data with collaborators, so they've created workarounds. Scientists and support staff are not rewarded or penalized for good or bad data management; mostly, it's ignored. A few scientists do a good job of managing data. Unfortunately, we haven't tried to find them and spread their knowledge. We will not improve data management by wishing for more cooperative scientists. We need a new approach.</p>	<p>Rex Sanders, USGS</p>	<p>Recording [mp4] Recording [wmv]</p>
<p>2:00 pm EST</p>	<p>Closing Remarks and Adjourn</p>	<p>Heath Henkel and Viv Hutchison</p>	

		<p>DM Q/A Session</p> <p>The USGS Data Management Website – Heather Henkel</p> <p>Sophia Liu - How will people be notified and educated about the new policies?</p> <ul style="list-style-type: none"> Please sit in on Data Management Working Group calls because there have been a couple people who have done presentations on it. As more information is released it will be disseminated through the working group. Will policies come out under Director's signature? <p>Is there information about the OMB process and Privacy Impact Assessment? Where is there information about the Open Data policy?</p> <ul style="list-style-type: none"> Those policies once reviewed by ELT and polished up will be announced through the Director's Message as well. <p>The USGS Scientific Data Lifecycle Model: A Foundation to Build Upon – John Faundeen</p> <p>Fran Lightsom - What is curation of data? Curation is considered bigger than preservation.</p> <ul style="list-style-type: none"> Curation as adding value to a record, series, or dataset which entails more than just preservation. You may learn more about, or add to the context of it. Curation is a bigger element that includes preservation which is more of an accepted practice or usage in Europe so far. Sofia Liu - I would also include curation as including the presentation of the data, how it is displayed. John - I would agree. It is very much wider than preservation. <p>Heather Henkel - Have you had any experience in using the lifecycle as a teaching framework?</p> <ul style="list-style-type: none"> John - Cassandra Ladino and Steve Tessler have been utilizing this in various forms already. This is starting to be road tested. Perhaps we can roll back in some feedback. We hope we will fine tune this as we get real world usage from managers and scientists Heather Henkel- It is nice to have this document because some of these data management topics are nebulous in scope. This can help us identify areas where we can provide help. We need to try to provide more support and build in functionality to respond to some of these needs <p>A Use Case for Coastal Imagery to Further Data Integration - Karen Moran</p> <p>Heather Henkel- What's the next step for the group? Will it be released externally or internally?</p> <ul style="list-style-type: none"> Karen - Final idea is that it would be made public but we haven't gotten far enough to think about releasing it. I can see this being useful and I have gotten requests from Hurricane Sandy to provide images. This would be a good tool for someone to do this. <p>GLSC - Could you please talk about your sample dataset? How large and how was it chosen? How much effort and time went into uploading and describing it?</p> <ul style="list-style-type: none"> Karen - The sample datasets were ones that we were recently working on. There are 10-12 datasets in the demo. The images as far as adding them to what is available in the demo right now is part of a process to get into xstorms internal database. Adding a dataset to that demo takes very little time. The processing takes a couple of days as most of that is automated at this point. Its a matter of deciding what it is or who it is you want. <p>Data Management at the National Climate Change and Wildlife Science Center and the Climate Science Centers – Emily Fort</p> <p>Fran Lightsom - Integrated data search is based on a common metadata standard -- what is that standard? Can I find documentation of it somewhere?</p> <ul style="list-style-type: none"> We are using the Iso19115 standard. If you go to the integrated search page you can check the FAQ page. If you want more nitty gritty details please contact me <p>Rex Sanders- do you continue to have strong support from Management for these efforts? Are scientists cooperating?</p> <ul style="list-style-type: none"> There has been strong support from management especially as the new policies form OMB and OSTP. From the scientists generally it is a work in progress. Our university scientists have been more comfortable due to their experience with NSF. One thing we found useful was to show them an example project page and let them know we want to highlight the good work they are doing. That seems to be a good way to help them understand why it is important. Some of the data management plans we have received have been great but its a new thing and it's taken a little bit of time to work through the kinks. <p>Heather - In implementing this, what are the carrot and the sticks you are using to get people to submit data management plans In some cases it is hard to withhold funds due to our funding mechanisms.</p> <ul style="list-style-type: none"> One case we have found that if they do not comply they will not receive funding. In once case we were getting to a point where we were going to remove them from the climate consortium. We are serious about it and if you do not comply you will not receive any future funding. <p>CDI Data Release Use Case Team: Status of effort and issues identified – Keith Kirk</p> <p>Please contact Keith with any questions.</p> <p>Integrating USGS Data for U.S. Regional Ocean Planning: A Pilot Project – Fran Lightsom and Allan Allwardt</p> <p>Heather - What are the near term goals for the group. Are you in a holding pattern or are there things you are focusing on?</p> <ul style="list-style-type: none"> Fran - Have submitted recommendations to geospatial platform on what their standards should be. We hope to get them back to us. Many of members of our team are working on data policies. Alan - The task force and blue print team meet regularly and a lot of the members are in both groups so we have a lot of cross pollination there. <p>Defining a Data Management Strategy for USGS Chesapeake Bay Studies, a Project Level Approach - Cassandra Ladino</p> <p>Fran Lightsom - Is the project going to have designated data stewards like CSC?</p> <ul style="list-style-type: none"> Cassandra - I wish. Right now I am acting as the data steward and trying to educate the group on data management. I am also trying to set up some of this infrastructure to demonstrate how it works. <p>Just enough data management and other things - Rex Sanders</p> <p>Can you talk about your experiences with your own science center in regards to the process of your interviews with scientists</p> <ul style="list-style-type: none"> Rex- I found through talking with scientists and counted up over 100 kinds of data types that needed to be managed. So when we talk about cradle to grave lifecycle for every chunk of data, it is difficult for projects to figure out how they are going to manage it. I think we need to focus our efforts on the data our management identifies are important. This comes in conflict with the higher level new policies but its implementation will be difficult. 		
Session 3 February 12, 2014	Time Period	Earth System Informatics/Open Data Initiatives and USGS Response ***Due to the government shutdown this session has been rescheduled to February 12, 2014***		Ben Wheeler and Viv Hutchison
	11:00 am - 11:15 am EST	Opening Remarks--Open Data and CDI	Kevin T. Gallagher, Associate Director for Core Science Systems, USGS	
	11:15 am - 11:35 am EST	Digital Government Strategy	Nancy Sternberg, Chief, Information and Investment Management, Administration and Enterprise Information	
	11:35 am - 11:55 am EST	USGS Policies and Activities Related to Open Government	Carolyn Reid, Policy Analyst, Office of Science Quality and Integrity	
	11:55 am - 12:15 pm EST	USGS Web Reengineering	Karen Armstrong or Tim Woods, Office of Communications and Publishing	
	12:15 pm - 12:35 pm EST	USGS Science Data Catalog	Mike Frame, USGS Core Science Analytics and Synthesis	
	12:35 pm - 1:00 pm EST	Open Data Q & A, Discussion, and Adjourn		

Session 4 November 13, 2013	Time Period	Mobile Science		Lorna Schmid and Tim Kern
	11:00 am - 11:20 am EST	Introductions and Logistics		Kevin Gallagher, Michelle Chang Recording [mp4] Recording [wmv]
	11:20 am - 12:00 pm EST	Mobile Framework Abstract: This session will address the previous works of the USGS Mobile Applications Framework		Lorna Schmid, Tim Kern, USGS Recording [mp4] Recording [wmv]
	12:00 pm - 12:35 pm EST	Taking phenology mobile: lessons learned from native app development Abstract: The USA National Phenology Network (USANPN), adopted mobile technology for its Nature's Notebook program in 2011. Here, we will explore benefits, complications, and lessons learned from our experience. The session will explore various mobile platforms, web services, and approaches to infrastructure, security, and more.		Alyssa Rosemartin and Lee Marsh, USA National Phenology Network (USANPN), Recording [mp4] Recording [wmv]
	12:35 pm - 12:50 pm EST	USGS Mobile Water Data Abstract: In my presentation I will discuss Mobile NWISWeb at m.waterdata.usgs.gov , why we chose a mobile web site instead of an app and how the site was architected. I am hoping to give a short demo.		Mark Hamill, USGS Recording [mp4] Recording [wmv]
	12:50 pm - 1:00 pm EST	Closing Remarks and Adjourn		
		<p>Mobile Science Q/A Session</p> <p>...</p> <p>Mobile Framework – Lorna Schmid, Tim Kern</p> <p>Alyssa Rosemartin – Comment that a lot of people don't know how much IT costs. This kind of development and care has to be an investment over time</p> <ul style="list-style-type: none"> Lorna – Hopefully there can be opportunities for partnering. If an app is important to get the science out, we can work collaboratively to figure it out but we need to make sure we are using the right data with the right technology and doing it in a secure matter. <p>Sally Holl – Comment that if a person at USGS has an appointment at another university or agency they may develop and deploy the app because it is quicker through their university.</p> <ul style="list-style-type: none"> Lorna – It is great that we can turn to our outside partners but we need to make sure USGS gets credit for the brain power and work/resources that we bring to a project. And that it doesn't get lost when we exercise other options for getting things done. <p>Unknown - How many mobile apps are out there, that are operational and apply to your framework</p> <ul style="list-style-type: none"> Tim – We have a draft inventory right now and we believe there are 6-12 native mobile apps that are in the apple store that are primarily usgs funded. Some of these are done with non-governmental organizations as well. As far as mobile websites there's probably 40-50. We outta have a better catalog of these and make sure we capture metrics on our apps. <p>Taking phenology mobile: lessons learned from native app development – Alyssa Rosemartin and Lee Marsh</p> <p>Kevin – On taxonomy and its importance in collecting data, are you working with ITIS? I applaud your efforts in the NPN and its good to see some good publications coming out from the data collected.</p> <ul style="list-style-type: none"> Alyssa – We do follow ITIS for the taxonomy. Each species on our list has the ITIS number. We have talked about using ITIS web services more effectively. <p>Kevin -Do you see any trends in increasing number of participants and how do you expect participation to trend in the coming years?</p> <ul style="list-style-type: none"> Alyssa – We are seeing a steady increase and are doing better in terms of retaining people every year. We have a generally high rate of retaining participants at 60-70%. This year we have about a 20-30% increase in the number of people joining . <p>Kevin – How would you feel about other USGS folks calling you for questions and advice and support?</p> <ul style="list-style-type: none"> Alyssa – We welcome it Lorna – We would like to make sure we include you and continue to work with you as we are moving the mobile framework forward <p>Charles Kovach with EPA – Question on how you identify your target audience? Can you talk about some of the things you considered as you were developing your interface and its level of complexity and whether there were some examples that inspired your design.</p> <ul style="list-style-type: none"> Alyssa- We thought a lot about our target audience. We have had success with retired folks and amateur naturalists who can identify species, and understand nuanced diff between stages. We have walked this line in terms of what data scientists want and what folks might be interested in contributing. The bigger success of the mobile app is making the process simpler. Lee – We've also have done things to change/improve upon our interface for our target audience by sitting down with a few and asking them questions about the usability, and process. Alyssa – The book, Don't make me think – by Steve Krug, has a great chapter about web design. 		

Attachments

- TNM-CDI 2013 Meeting %26 Workshop Themes.xlsx
 Current working version (v4) 11-27-2012
 11 27, 2012 by Govoni, David L.
- SSF_Description.pdf
 5 21, 2013 by Chang, Michelle Y.
- LeadersBlog_CDI_Webinar_Series_2013.pdf
 8 06, 2013 by Chang, Michelle Y.
- (30) Community for Data Integration-20130814 1457-1.arf
 Webex Recording for August 14, 2013 Public Participation In Scientific Research Session
 8 15, 2013 by Carlino, Jennifer
- 2013_CDI_Webinar_myScience_Holl.pdf
 Sally Holl myScience slides
 8 15, 2013 by Hines, Megan K.
- Newman_USGS_CDI_v1.pdf
 Greg Newman Citisci.org slides
 8 15, 2013 by Hines, Megan K.

- Flanagan_CDI_hg-Dragonfly-citsci.pdf 8 15, 2013 by Hines, Megan K.
- Weltzin CDI 2013_lowrez.pdf 8 15, 2013 by Hines, Megan K.
- CDI_Webinar2013_PPSR_flanagan_mp4.mp4 8 23, 2013 by Chang, Michelle Y.
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- Final_2013 CDI SSF Opening_DM_20130911.pdf
 Final Opening Presentation for Data Management Session Sept. 11, 2013 9 11, 2013 by Chang, Michelle Y.
- Final_2013 CDI SSF Opening_PPSR_20130813.pdf
 Final Opening Presentation for Public Participation in Scientific Research Aug. 14, 2013 9 11, 2013 by Chang, Michelle Y.
- (30) Community for Data Integration-20130911 1443-1.arf
 Full Webex Recording for Data Management Session September 11, 2013 9 11, 2013 by Carlino, Jennifer
- 2013_CDI_Webinar_DM-Website_HenkelHutchison-FINAL.pptx 9 11, 2013 by Henkel, Heather S.
- 2013_CDI_Webinar_NCCWSCDataMgmt_Fort.pptx 9 11, 2013 by Henkel, Heather S.
- 2013_CDI_Webinar_OceanData_Lightsom.pptx 9 11, 2013 by Henkel, Heather S.
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- 2013_CDI_Webinar_OceanData_Lightsom.pdf 9 11, 2013 by Henkel, Heather S.
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- CDI_Webinar2013_DM_morgan_wmv.wmv
9 17, 2013 by Chang, Michelle Y.
- 2013_CDI_Webinar_ChesBayDataMGMT_Ladino.pdf
9 17, 2013 by Henkel, Heather S.
- CDI DMWG August 2013 Data Release Team Update_Kirk.pdf
9 17, 2013 by Henkel, Heather S.
- Mobile NWISWeb CDI Briefing.pptx
11 13, 2013 by Chang, Michelle Y.

- >  (30) Community for Data Integration-20131113 1545-1.arf 11 13, 2013 by Carlino, Jennifer
- >  2013_CDI_Webinar_MobileFramework_Schmid_Kern.pptx 11 13, 2013 by Chang, Michelle Y.
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