

## Category 1 – 2007

### FGDC Endorsed Standards Implementation Assistance and Outreach

Agreement Number: IA760310268  
Project Title: NBII Outreach and Training Program for FGDC Content Standard for Digital Geospatial Metadata  
Report Type: **Final**  
Report Date: 9/30/08  
Organization: National Biological Information Infrastructure (NBII)  
12201 Sunrise Valley Drive  
Reston, VA 20192  
[www.nbii.gov](http://www.nbii.gov)  
Project Leader: Vivian Hutchison  
206-526-6282 x329  
[vhutchison@usgs.gov](mailto:vhutchison@usgs.gov)

**Project Narrative:** In 2007, the FGDC awarded the NBII a Category 1 CAP Grant that was to be used for Metadata Outreach and Training Assistance. The purpose of this NBII metadata project is to provide outreach assistance to, primarily, US Geological Survey (USGS) Biological Resources Discipline (BRD) Science Centers and their partners so that, as a world renowned science research agency, the USGS should be setting an example of best practices in biological informatics.

The focus of the outreach activities was on US Geological Survey Science Centers specializing in biology, though other workshops were also planned to reflect the NBII mission to provide training to broad audiences. Visits were made to 7 USGS Science Centers, and, additionally, there were 7 other workshops given. Several key successes resulted from the project. At many of the Science Centers, scientists were required to attend the overview presentation explaining metadata, clearinghouses, and the value of metadata. There was often maximum capacity at the second session, a hands-on training using Metavist software. A second meeting with individual scientists was scheduled at each Center to provide additional information about specific datasets, and ways in which the NBII could assist in the metadata process for these Centers and their scientists.

These visits accomplished a starting point for USGS science in that scientists were given the tools to create metadata records, instruction on how to create records properly and how to submit them to Clearinghouses. The success of this grant is reflected in the number of people who were informed about metadata, and will work with their Science Centers to establish metadata creation as a best practice. One challenge that results from this grant is the follow up needed to keep metadata in the forefront of practicing scientists and to keep Center Directors on top of their Center's data management practices.

**Accomplishments:** The NBII has visited 7 USGS BRD Science Centers since the start date of the project and has conducted 7 workshops for conferences related to USGS-NBII activities. The USGS Science Centers accepted the offer of a planned visit and presentation through a phone conference with Center Directors. Each Center planned to host NBII for 1 ½ days, during which a presentation called "Metadata from a Data Management Perspective for USGS Managers" was presented during a morning session, and "Creating Metadata Records Using Metavist" was presented during an afternoon session. Each participant in each session was provided with a notebook of instructional materials. During the afternoon session, participants used laptops to practice with the software. NBII met with small focus groups on the second day to arrange a strategy for metadata production and NBII assistance in creating records.

**Challenges:** The most evident challenges to this type of project involve the follow up with each Center. In order to pro-actively prevent the natural tendency for participants to file away materials from the workshop and return to their research, the NBII arranged to meet with the management

of each Center on the second day to reinforce the importance of metadata creation and offer assistance. Center Directors were open and enthusiastic in some cases about the prospect of metadata production taking place for their Center. The next step for NBII is to follow up with the individual Centers and remind them of the presentation, help them implement a program, and extend the offer of metadata creation assistance once again

**Training and Outreach Assistance:**

Total Number of Workshops - **14** (October 2007 – September 2008)

Duration: 1 day (+ ½ day strategy meeting)  
Venue: USGS Columbia River Research Laboratory  
Organization Name: USGS Columbia River Research Laboratory  
Organization Type: government  
Number of participants: 19  
Level of proficiency: creators  
Means of Instruction: lecture and computer assisted

Duration: 1 day (+ ½ day strategy meeting)  
Venue: USGS Florida Integrated Science Center  
Organization Name: USGS Florida Integrated Science Center  
Organization Type: government  
Number of participants: 17  
Level of proficiency: creators  
Means of Instruction: lecture and computer assisted

Duration: 1 day (+ ½ day strategy meeting)  
Venue: USGS National Wildlife Health Center  
Organization Name: USGS National Wildlife Health Center  
Organization Type: government  
Number of participants: 35  
Level of proficiency: creators  
Means of Instruction: lecture and computer assisted

Duration: 1 day (+ ½ day strategy meeting)  
Venue: USGS Alaska Science Center  
Organization Name: USGS Alaska Science Center  
Organization Type: government  
Number of participants: 8  
Level of proficiency: creators  
Means of Instruction: lecture and computer assisted

Duration: 1 day (+ ½ day strategy meeting)  
Venue: USGS Upper Midwest Environmental Science Center  
Organization Name: USGS Upper Midwest Environmental Science Center  
Organization Type: government  
Number of participants: 52  
Level of proficiency: creators  
Means of Instruction: lecture and computer assisted

Duration: 1 day (+ ½ day strategy meeting)  
Venue: USGS PIERC – Hilo Field Station  
Organization Name: USGS PIERC  
Organization Type: government  
Number of participants: 13  
Level of proficiency: creators

Means of Instruction: lecture and computer assisted

Duration: 1 day (+ ½ day strategy meeting)  
Venue: USGS PIERC – Honolulu Science Center  
Organization Name: USGS PIERC  
Organization Type: government  
Number of participants: 18  
Level of proficiency: creators  
Means of Instruction: lecture and computer assisted

Duration: ½ day  
Venue: University of Vermont  
Organization Name: Northeast Arc Users Group  
Organization Type: varied -- conference  
Number of participants: 14  
Level of proficiency: creators  
Means of Instruction: lecture and computer assisted

Duration: ½ day  
Venue: The Hotel Captain Cook  
Organization Name: Alaska Marine Science Symposium  
Organization Type: varied -- conference  
Number of participants: 18  
Level of proficiency: creators  
Means of Instruction: lecture and computer assisted

Duration: ½ day  
Venue: The Hotel Captain Cook  
Organization Name: Alaska Marine Science Symposium  
Organization Type: varied -- conference  
Number of participants: 9  
Level of proficiency: creators  
Means of Instruction: lecture and computer assisted

Duration: 1 day  
Venue: Coos Bay, OR  
Organization Name: Oregon Geospatial Enterprise Office  
Organization Type: government  
Number of participants: 10  
Level of proficiency: creators  
Means of Instruction: lecture and computer assisted

Duration: 1 day  
Venue: Medford, OR  
Organization Name: Oregon Geospatial Enterprise Office  
Organization Type: government  
Number of participants: 15  
Level of proficiency: creators  
Means of Instruction: lecture and computer assisted

Duration: 1 day  
Venue: Knoxville, TN  
Organization Name: Inter-American Biodiversity Information Network (IABIN)  
Organization Type: government  
Number of participants: 12  
Level of proficiency: creators

Means of Instruction: lecture and computer assisted

Duration: 1 day

Venue: Chattanooga, TN

Organization Name: Conservation Biology Conference

Organization Type: government

Number of participants: 11

Level of proficiency: creators

Means of Instruction: lecture and computer assisted

Duration: 1 day

Venue: Reston, VA

Organization Name: USGS-NBII

Organization Type: government

Number of participants: 10

Level of proficiency: creators

Means of Instruction: lecture and computer assisted

### **Status of Metadata Service:**

Metadata resulting from this CAP Grant is served in a NDSI registered CH node on the NBII Clearinghouse. Each partner contributing records through a web harvest system is also registered with GOS and harvested by the GOS program. Numerous metadata files have been created for this project, though exact counts are difficult to measure. Although the CAP Grant has been completed, the NBII will continue to provide a metadata framework for organizations engaged in biological and ecological sciences. The program currently supports a Clearinghouse consisting of over 40,000 records; a Quality Assurance Quality Control program; a Metadata Creation Assistance program; and Metadata Training. Although funding is limited, the NBII will be able to continue to conduct training workshops – just not as frequently as was made possible through the CAP Grant opportunity.

### **Feedback on Cooperative Agreements Program**

The CAP Program is very organized and showing strength in staying in touch with its grant participants. FGDC staff is always helpful and prompt when answering questions about the program. Further, FGDC has provided metadata leads to grant participants that help expand the audience for outreach and allow more participants to attend workshops. One suggestion that FGDC might consider is a way to better facilitate the interaction of grant recipients. A “kick-off” meeting at the beginning of the grant period was helpful, but there might also be a concluding meeting at which recipients could report on their projects’ successes and challenges. Such a forum would also allow recipients to share metadata records resulting from their projects more easily. It is unfortunate that federal government agencies are no longer eligible for the grant, but hopefully the grant has proven that this type of program is successful and can be carried on beyond the CAP...