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Hands-on Metadata Training for National Park Service Personnel in the New England Region

Interim Report

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The Environmental Data Center (EDC) at the University of Rhode Island (URI), and the National Park Service (NPS) have collaborated to provide hands-on metadata training to NPS staff at several National Parks within the Northeast Region. The parks that have received assistance to date are Cape Cod National Seashore, Fire Island National Seashore, Acadia National Park, and Gateway National Recreation Area.

As proposed, the GIS Specialist for Cape Cod National Seashore (CACO) traveled to the EDC in mid-October. During his visit, the GIS Specialist received training in using ArcCatalog and the NPS Metadata Editor to write FGDC- and NPS-compliant records. The GIS Specialist created metadata for 35 datasets which he plans to post to the NPS Data Store for online distribution. Rebecca Bannon of the EDC reviewed these records and provided specific advice for improving the clarity and compliance of these metadata documents. The EDC continues to provide CACO with support and instruction as the park moves forward in documenting and posting data.

In November, the EDC provided training and oversight to Gateway National Recreation Area (GATE). The GIS Specialist at GATE and a student intern had created metadata for a number of datasets, but they were not confident that these records were compliant. Rebecca traveled to GATE to review existing records, identify errors, and provide training in posting records to the NPS Data Store. During Rebecca's time at GATE, metadata were completed for 68 datasets and these records were posted to the NPS Data Store for online distribution. Where appropriate, the GIS data files were also posted to the Data Store. The GATE GIS Specialist was able to move from a moderate level to a high level of competency in data documentation. The timing of this training was particularly important, as this GIS Specialist will soon be transferring to another National Park. Her proficiency in writing metadata will ease the transition to a new GIS Specialist at GATE and will ensure that good metadata practices are established throughout the Park Service as she moves into her new position. The student intern at GATE plans to pursue a career in GIS; the training he received will provide him with a strong foundation in proper data management, including documentation.

A third park that has improved its metadata practices as a result of this project is Acadia National Park (ACAD). The GIS Specialist at ACAD is already proficient in writing metadata, but a relatively small amount of data has been documented and posted to the Data Store. Funding of this CAP project prompted the formulation of a Five Year Metadata Production Plan at ACAD that will result in continued and increasing posting of metadata from the park. This project encouraged the park to develop new strategies that will make metadata completion and posting a priority for the GIS Specialist. This will ultimately be more fruitful than a single week dedicated to metadata training. The EDC will continue to provide support to ACAD as they work to implement this new metadata plan.

Fire Island National Seashore (FIIS) received metadata training during a preliminary phase of this project. Through this FGDC award, we have been able to continue to provide support to the Park Planner at FIIS. We reviewed records for the Park Planner and assisted her in distributing metadata and data through the NPS Data Store. Data documentation and distribution is an ongoing process at FIIS, and the EDC will continue to provide assistance as needed.

The efforts funded through this CAP grant have succeeded in removing barriers to data documentation at four parks in the Northeast Region. Data management needs and methods vary greatly from one park to another, and this FGDC funding has allowed the EDC to provide training tailored to the needs, abilities and situational barriers to the metadata process at each park. This flexibility has allowed us to achieve our goal of enabling NPS GIS staff to be independent and proactive metadata creators and to post significant additional volumes of metadata to the NPS Data Store. The NPS Data Store, available at URL http://science.nature.nps.gov/nrdata/index.cfm, is a portal for data and metadata from all National Parks. At this stage of the CAP project, over 100 records have been posted or are being prepared for posting online.

There are additional benefits of this project beyond the creation and distribution of metadata. This training opportunity encouraged the parks to organize and prioritize their data. As a result, the datasets documented and distributed through this project are core datasets that are vitally important to the park and the Northeast Region GIS community. Another benefit of this effort is the increased awareness of the importance of metadata on the part of NPS Park Supervisors. Supervisors such as David Manski (ACAD), Carrie Phillips (CACO), Mike Reynolds (FIIS), and Doug Adamo (GATE) have become more familiar with the arguments in favor of maintaining current metadata and now they all explicitly support their staff's efforts in this direction.

Follow-up support and quality control is the main focus of the next phase of this project. The EDC continues to work with the parks in the Northeast Region to answer questions, to review documents, and to assist in posting data and metadata. Another goal of the project is to update online metadata assistance provided through the NPS Field Technical Support Center Website. This website will be updated to reflect the needs of Park Service staff identified through this project as well as changes in technology since the website was created. This online help will increase the reach and longevity of the efforts funded through this CAP grant.

Individuals receiving metadata training:

Diane Abell, Park Planner, Fire Island National Seashore, diane_abell@nps.gov
Mark Adams, GIS Specialist, Cape Cod National Seashore, mark_adams@nps.gov
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Individuals receiving outreach assistance:

Karen Anderson, GIS Specialist, Acadia National Park, karen_anderson@nps.gov

Feedback on the Cooperative Agreements Program

- What are the program strengths and weaknesses?
- One of the strengths of this program is the flexibility allowed to those receiving funds. The barriers to proper data documentation vary among parks. Some parks need training, some need motivation, and others need help prioritizing the work to be done. This program allowed us to provide all of these forms of assistance to parks in our region.
- Where does the program make a difference? This program provides much-needed funds for projects that might otherwise not be funded. In the case of the EDC and NPS, it can be difficult to find money for documentation of legacy data and for ongoing maintenance of high-quality metadata. This CAP grant has made this important work possible.
- Was the assistance you received sufficient or effective? Yes, Sharon Shin and others we have worked with at FGDC have been helpful and easy to work with.
- What would you recommend doing differently? This program is geared heavily toward large training workshops, which is different than the approach we have taken in our project. In working with the National Park Service, the EDC has found that more individualized training is more productive than a large class format in actually getting metadata records written. Perhaps FGDC could encourage more small-scale projects as well as the large-scale seminars.
- If you were to do this again, what would you do differently? So far this project has gone very well, and I don't think we would change our approach. We have been able to tailor our training and oversight to the needs of the parks, which has allowed us to be highly successful in completion and distribution of metadata records.