Current Issues in the Appraisal and Selection of Geospatial Data

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Framing a National Strategy for the Appraisal and Selection of Geospatial Data
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• Conducting an NDIIPP project to develop an online resource center to serve as a clearinghouse for resources about the preservation of geospatial data
• Guided by an interdisciplinary advisory committee of geospatial data experts
• Taking a user-centered, iterative development approach
• Conducted a survey on expectations of 464 participations
• Designing site and identifying resources on geospatial data preservation, including appraisal and selection
Use of Clearinghouse

I would use an online clearinghouse for geospatial data preservation for (choose all that apply):

- Discovering new tools, resources, and vendors to facilitate preservation: 72.6% (199)
- Facilitating my current work responsibilities: 62.0% (170)
- General learning about the topic: 53.3% (146)
- Assisting others in my organization in meeting their work responsibilities: 50.0% (137)
- Linking with other experts with similar interests: 50.0% (137)
- Improving my skills for possible new work: 42.3% (116)
- Sharing my experiences and expertise in preservation with others: 39.1% (107)
- Teaching courses on geospatial data management and preservation: 18.6% (51)
- Other: Describe in text box: 6.6% (13)

Based on answers from 274 respondents
SEDAC LTA Appraisal and Selection Process

• Initial review and recommendation for nomination to LTA
  – Data previously approved by SEDAC User Working Group for transfer
• Scientific Evaluation of Resources for Nomination to the LTA
  – Lead Project Scientist evaluates data and proposes levels of service
• Preparation of Resources Selected for Nomination to the LTA Board
  – Prepare SIP and evidence to demonstrate data meet selection criteria
• Nomination of Digital Resources to the LTA Board
  – Lead Project Scientist presents data and evidence to LTA Board
• Appraisal by LTA Board using selection criteria
  – Data meeting all selection criteria are approved for accession
• LTA Board Assignment of levels of service for approved data
  – Levels of service are assigned for preservation and dissemination
Selection Criteria for SEDAC LTA Data Appraisal

Scientific or Historical Value
– citation, research, and educational use as published in refereed scientific publications/reports from recognized committee of scientists

Potential Usability and Use
– evidence of usability, usefulness, and sufficient usage by the community interested in human dimensions of the environment. Adequate evidence indicate potential for future use justifies costs of long-term archiving

Uniqueness of Data (non-redundant stewardship)
– not being preserved in any form in another archive and is at risk of loss if not accessioned into the Long-Term Archive

Relevance to LTA Mission
– currently endorsed or approved by community interested in human interactions in the environment. For the short-term, relevance includes content germane to SEDAC mission and SEDAC strategic plan

Documented for Accessibility
– completeness and correctness of documentation to facilitate future discovery, access, and use

Technological Accessibility (feasibility)
– received in format meeting technical criteria for the Service Level designated for the resource

Legality and Confidentiality
– unrestricted permissions for preservation and future dissemination. No information that is confidential or prohibited from dissemination

Non-Replicability
– data replication not feasible, excessively costly or prohibitive
LTA Levels of Service for Dissemination of SEDAC Data

• Restricted Dissemination:
  – The resource and its Dissemination Information Package (DIP) are not accessible by the public.
  – The discovery metadata for the resource is included in the LTA restricted access catalog.
  – Access to the restricted resource is granted in compliance with the restrictions specified for the resource.
  – Limited user support is provided for a restricted resource that is authored by SEDAC in compliance with the restrictions specified for the resource.
  – The use of restricted resources and services is evaluated and reported.

• Public Dissemination:
  – The Dissemination Information Package (DIP) for the resource is freely accessible by the public in digital form.
  – The discovery metadata for the resource is included in the LTA public access catalog.
  – Contact information for user support is provided on the LTA public access catalog.
  – Responses are provided for legitimate requests to correct publicly disseminated documentation or access capabilities.
  – Answers or referrals are provided for scientific and technical questions about publicly disseminated resources.
  – Changes are described for publicly disseminated resources or services.
  – The use of publicly disseminated resources and services is evaluated and reported.
LTA Levels of Service for Preservation of SEDAC Data

• Preserve Content in Original Formats:
  – Content is maintained in Original Formats on accessible system for the specified retention period.

• Preserve and Maintain Content in Supported Formats:
  – Content received in Supported Formats is maintained on accessible system and is migrated to current Supported Formats.

• Supported Formats:
  – ASCII Text (txt, xml, html)
  – Comma Separated Values (csv)
  – Image Files (png, jpg, tif, gif)
  – Portable Document Format (pdf)
Contrasting Challenges for Appraisal and Selection of Geospatial Data

- Appraisal for future users and uses
  - Looking beyond current scientific disciplines
    • Evolution of scientific fields and methods
  - Needs of diverse user communities
    • Beyond education, research, and decision-making: popular culture
  - Future services and applications
    • Evolution of technology for data preservation and dissemination

- Selection commits to ongoing future costs for services
  - Support for preservation environment
    • Managing technology will require professionals with specialized skills
  - Support for dissemination and use
    • Will documentation be sufficient without current expertise?
  - Continuing appraisal and selection
    • Will data have an advocate when facing competition among resources?