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#### **Background and Description**

A primary role of the University of California San Diego Libraries is to "collect, organize, preserve and provide access to a diverse array of information resources in support of the University's goals of excellence in research and teaching." As expected, San Diego is a primary geographic focus of research and teaching across the university, and San Diego's geospatial information tells multiple stories simultaneously. These are stories of our politics, history, society, culture, infrastructure, economics, biology, and people. Preserving these data allow us to preserve our stories for use in research and academic curricula across the disciplines in addition to serving as a valuable asset for the regional community.

The San Diego Endangered Geospatial Data Project ('The Project') proposes active collection, maintenance, preservation and access to snapshots of San Diego County via its geospatial information. SD Endangered Data is firmly grounded in San Diego because of a collection scope and geographic extent of San Diego County and its immediate environs; however, this project is nested with larger campus with and University of California through collaborations with partners at San Diego SuperComputer Center (SDSC) and UC Santa Barbara, within the larger State of California's efforts to preserve geospatial data, and rests upon the broader foundation created by United States' National Digital Information Infrastructure Preservation Program (NDIIPP). Within NDIIPP, opportunities for expansion of this project exist and there are two highly relevant projects that will be used as a basis for the San Diego Endangered Geospatial Data Project: 1) National Geospatial Data Archive (NGDA) and 2) North Carolina Geospatial Data Archiving

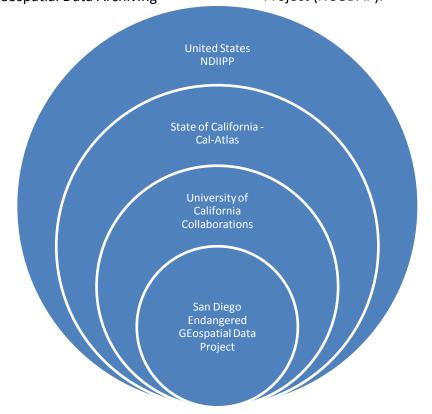


Figure 1 - San Diego Endangered Geospatial Data Project and its relationship to other efforts

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- San Diego's geospatial resources are unique and endangered once gone, they are irreplaceable. UCSD Libraries have been the only entity that has consistently collected San Diego geospatial resources since 2006. The manner in which this has happened to date is one that is not sustainable for the long haul and is not inclusive of many of the geospatial resources in our region; this is because it solely originates from the efforts of the GIS Coordinator. There is no formal process in place or agreed upon procedures with the data producers, and the ratio of one GIS Coordinator to several data producers cannot be managed holistically or effectively. As the collection grows and deepens, UCSD Libraries will build value in this asset through assured persistent access to a critical mass of historical and contemporary digital geospatial information for San Diego.
- While they recognize the value in preserving San Diego's geospatial information resources, the agencies which create the data are most concerned with only current data for their immediate operational needs and are not trained, skilled or prepared to save any data other than the most current.
- There is no entity charged with preserving San Diego's geospatial information resources at the local, state or national level. In March 2009, the State of California created and appointed Mike Byrne as its first Geographic Information Officer (GIO). It is part of the State GIO's plan to capture and preserve the State's geospatial resources through Cal-Atlas, however, it is unclear that this resource has long-term support at the state level, or that there is any data curation that will take place beyond simply keep the bits and bytes alive. (More information available at <a href="http://www.cio.ca.gov/Government/Governance/gisdata.html">http://www.cio.ca.gov/Government/Governance/gisdata.html</a>)

### **Potential Collaboration Partners**

San Diego SuperComputer Center

San Diego Regional GIS Council and member agencies

**UC Santa Barbara** 

State Geographic Information Office

USGS Southern California Liaison

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#### **Other Related Projects**

NGDA - <a href="http://ngda.org">http://ngda.org</a>

#### **Objectives:**

- Create a new national federated network committed to archiving geospatial imagery and data.
- Investigate the proper and optimal roles of such a federated archive, with consideration of distant (dark) backup and migration, directly serving content to users, vs. referring requestors back to the originators of the data for copies or assistance, active or passive quality/integrity monitoring, application of metadata, federated searching, dissemination of metadata, etc.
- Collect and archive major segments of at-risk digital geospatial data and images.
- Develop best practices for the presentation of archived digital geospatial data.
- Develop partner communication mechanisms for the project and then ongoing.
- Develop a series of policy agreements governing retention, rights management, obligations of partners, interoperability of systems, exchange of digital objects, etc.

North Carolina Geospatial Data Archiving Project - <a href="http://www.lib.ncsu.edu/ncgdap/">http://www.lib.ncsu.edu/ncgdap/</a>

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### **SD Endangered Geospatial Data Process Diagram**

SD agency creates GIS data

Process flow change rather than new work Explore common metadata template Licensing questions?

SD agency sends copy of GIS data, with metadata, to UCSD

Archived GIS data is accessible

Web accessible interface Management TBD Database tech TBD Search by geography, theme, creator & file type

Archived GIS data is fed into larger State of CA archive UCSD archives GIS data

Storage size
Storage location
Archive in perpetuity
Private versus public

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### **Major Project Elements**

# Infrastructure

- Preservation and backup
- Benefits of digital library use versus more traditional backups

# Content

- Selection (collection development plan)
- Acquisition
- Curation/records management
- Metadata

# Access

- Interface
- Metadata manipulation
- Public/Private

# **Best Practices**

- Policies
- Procedures

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## **Main Points and Questions**

- GIS data is current 1st priority
  - o UCSD will take hardcopy geospatial information too
- Are you interested?
- What we would like to do next
  - o Gather interested partners
  - o Inventory of data
  - o Discuss process options