

## Areas That Should Be Covered Validated

## Case Study 14:

## Archaeological Records in a Geographical Information System: Research in the American Southwest

## Heather Daly and Ann Forman, UBC Version 1, July 2005

Creator of the Fonds		
TOPIC	SPECIFICS	SOURCE
Name	Center for Desert Archaeology (CDA), working within the Coalescent Communities in Arizona Project (A.D. 1200-1540).	FR, pg. 1
Location	Tucson, Arizona	FR, pg. 1
Origins	Grew out of former Arizona Division of the Institute for American Research, a not-for-profit organization founded in 1982	FR, pg. 7
Legal Status	Private not-for-profit.	FR, pg. 7
Legislation	Legally incorporated in 1989. The not-for-profit aspects of Arizona Division of the Institute for American Research became the Center for Desert Archaeology; the for-profit aspects became Desert Archaeology, Inc.	CDA Web site
	<ul> <li>Specific legislation includes:</li> <li>National Historic Preservation Act 1966</li> <li>Archaeological Resources Protection Act 1979</li> <li>Native American Graves Protection and Repatriation Act 1990</li> <li>Environmental Policy Act 1966</li> <li>Wilderness Act 1964</li> <li>Arizona Antiquities Act 1973</li> <li>Arizona Historic Preservation Act 1982</li> <li>Arizona Burial Protection Act 1990</li> <li>Arizona Revised Statutes</li> </ul>	FR, pg 4-6
	Impact of the legislation on the specific activities and records under study is not available in the Final Report. Impact of the legislation on archaeology is extensively detailed in the Report (pg. 4-6) and Appendix A.	FR, pg. 4- 6; App. A
Norms	Impact of the normative rules, principles, codes, and qualifications on the specific activities and records under study is not available in the Final Report. Impact of these on archaeology in general is detailed in	FR, App. B

	Appendix B.	FR, pg. 2
	Impact of related projects: the development of the AZSITE database affected the design of the Coalescent Communities database.	
	Receives private funding in addition to significant state and federal funding. Federal funding includes:	FR, pg. 10
Funding	<ul> <li>a 1997 Arizona Humanities Council grant</li> <li>a 1999 National Science Foundation grant</li> <li>a 2001 National Endowment for the Humanities grant</li> <li>Arizona Heritage Fund</li> </ul>	FR, pg. 7; CDA Web site
	The Final Report states that "the acceptance of state and federal funding carries with it various administrative responsibilities," but further elaboration is not available in the Report. Some information is available on the CDA Web site.	FR, pg. 7
Resources	Access to shared resources: initial data was shared between Coalescent Communities database and AZSITE database.	FR, pg. 2
	Infrastructure and equipment: No information is available in the Report.	
	Employees: Preservation Archaeologists (7) and-Preservation Fellows (3). Preservation Archaeologists: day to day operations, Preservation Fellows: research. One of the preservation archaeologists develops	FR, pg. 7
	and manages the GIS and database. Most have PhDs and specialized skills.	FR, pg. 26
Structure	Governed by four-member Board of Directors: President, Vice-President, Treasurer, and Secretary. In addition, there is a six-member Advisory Board. The President is also CEO: William H. Doell, Ph.D. In addition, there is one Programs Manager, one Office Assistant, and one Content Editor ( <i>American Southwest</i> ).	CDA Web site
	Procedures are described as being "ad hoc"; there is documentation about the procedures. Further information about the internal policy and regulations is not available in the report.	FR, pg. 7
Mandate	To promote "the stewardship of archaeological and historic resources in the American Southwest and Mexican Northwest through active research, preservation, and public education".	
Philosophy	Increase knowledge and understanding about the preservation of the past.	CDA Web site
Mission	"The CDA has initiated and sponsored numerous research and community preservation projects, as well as educational workshops and exhibits. In addition, the CDA has an active publications program to disseminate information to a wider audience."	
Functions	<ul> <li>Administration</li> <li>Publication (American Southwest journal)</li> <li>Research</li> <li>Preservation (of key prehistoric sites)</li> <li>Public Education</li> </ul>	CDA Web site
Recognitions	Not available in the Final Report.	

Administrative and Managerial Framework			
TOPIC	SPECIFICS	SOURCE	
General Description	Not available in the Final Report.		
Type of activities	Not available in the Final Report.		
Documents resulting from activities	Not available in the Final Report.		
Existence of a RM and/or archives program	Existence of RM features: the CDA has no existing records management or archival program. Not every record is kept. The Center for Desert Archaeology is actively migrating electronic records to new versions of software and hardware to avoid obsolescence.	PPT, Sept.29 (Randy), slide 7; FR pg. 28	
Individuals responsible for preservation	Not available in the Final Report.		
Existence of preservation strategies	Fonds: the Center for Desert Archaeology fonds. Fonds is organized around special project and grants (series). Most records remain active or semi-active.	FR, pg. 8	
Legal Requirements and Constraints	Not available in the Final Report. Impact of the legislation on the specific administrative activities and records is not available in the Final Report. Impact of the legislation on archaeology is extensively detailed in the Report (pg. 4-6) and Appendix A.	FR, pg. 4- 6; App. A	
Normative Requirements and Constraints	Not available in the Final Report. Impact of the normative rules, principles, codes, and qualifications on the specific administrative activities and records under study is not available in the Final Report. Impact of these on archaeology in general is detailed in Appendix B.	FR, App. B	
Technological Requirements and Constraints	As specifically related to the administrative activities and records, this information is not available in the Final Report.		
Digital entity b	peing studied		
General Description	The digital entity is a GIS database, "Coalescent Communities." It has been created to provide answers to archaeological research questions relating to the aggregation and migration of prehistoric peoples (American Southwest). It is related to the research function of the Center for Desert Archaeology. Consists of pre-recorded archaeological site data from multiple documents, repositories and researchers which exist in various formats.	FR, pg. 15 FR, pg. 2	
	No procedures manuals have been created for the creation, management, or preservation of the Coalescent Communities GIS.	FR, pg. 7	

Type of activities	<ul><li>Research</li><li>Data Input</li><li>Data Analysis</li></ul>	FR, pg. 14, 15
Documents resulting from activities	The database and related GIS are created by an archaeologist at the Center for Desert Archaeology. This archaeologist is responsible for producing all of the outputs from the GIS, which include maps for publications, printouts of maps and tabular data for other researchers and analysis relevant to different research projects.	FR, pg. 2
Existence of preservation strategies	The Coalescent Communities Project is a series within the "Center for Desert Archaeology fonds. Within the series, there are aggregations of files related to specific analyzes on projects. Records highly related to those of AZSITE.	FR, pg. 8 FR, pg. 21 FR, pg. 23
Individuals responsible for preservation	The Coalescent Communities GIS is created under the authority of the GIS Preservation Specialist within the organization. Other than burning data to CDROM, no preservation strategies are being used.	FR, pg. 7 FR, pg. 28
Legal Requirements and Constraints	Not available in the Final Report. Impact of the legislation on the specific digital entity is not available in the Final Report. Impact of the legislation on archaeology is extensively detailed in the Report (pg. 4-6) and Appendix A.	FR, pg. 4- 6; App. A
Normative Requirements and Constraints	Ethical constraints: Practicing culturally sensitive archaeology; protecting archaeological site information.  Impact of the normative rules, principles, codes, and qualifications on the specific digital entity under study are not available in the Final Report. The Impact of these on archaeology in general is detailed in Appendix B. General ethical constraints are available in the Report on pg. 25.	FR, pg. 25
Technological Requirements and Constraints	Equipment: Peripherals include plotter printers that are sometimes used to print large scale color maps from the GIS. A digitizer tablet is also sometimes used, which digitizes archaeological sites from paper based maps.  Architecture: "Coalescent Communities Database is maintained in Microsoft Access. Tables or portions of the database are sometimes manipulated and exported into Microsoft Excel."	FR, pg. 23
	Media: textual and graphic. ""The core data setis represented in text and numeric characters, while the individual project components and their outputsaregraphicor textual and graphic in natureor output maps that may include both graphic elements alongside tabulated data."	FR, pg. 16 FR, pg. 18- 19
	Form: Spreadsheet/flat files, wp files, maps, images (jpeg), and files related to ArcView 3.2 and 8.2. ArcView is an ESRI product, with addins downloaded from the ESRI Web site. ArcView is the software platform for the GIS. This software produces the following file types: (.shp, .shx, .dbf, .sbn, .sbx and .prj files). Adobe Portable Document Format (.pdf), ASCII text (.txt), Access (.mdb), Excel (.xls), Word (.doc), Endnote (.lib).	FR, pg. 18-
	Image files, word processing files, flat files in Microsoft Excel, and files	19

created in the GIS application software are all managed separately due to their separate computing environments, file formats and formal differences in content, context and structure.
The impact of technological requirements and constraints on the form and content of the digital entity is not explicitly stated in the Final Report.