Topic: Data Currently in the GIS system

GIS Data

GIS data are composed of spatial (graphic features) and attributes (Tables) data.

Spatial data includes features such as sample locations, Management Units etc.

The attributes of features as well as other information concerning the CSSA GIS are stored in tables within a single database. Attribute data includes information such as sample chemical results data, analytical methods used for various analyses, contact information etc.

The CSSA GIS

The CSSA GIS is based on ArcView GIS software and MS SQL DBMS. The spatial and attribute data are organized using an organization standard called the Tri-Service Spatial Data Standards or SDS.

There are 26 categories (SDS refers to them as entity sets) of data. Categories in bold currently contain CSSA data.

LANDFORM	FUTURE_PROJECTS
GEOLOGY	**BOUNDARY**
SOIL	CADASTRE
HYDROGRAPHY	GEODETIC
FLORA	LAND STATUS
FAUNA	TRANSPORTATION
CLIMATE	**BUILDINGS**
VISUAL	IMPROVEMENT
COMMON	UTILITIES
OLFACTORY	COMMUNICATIONS
AUDITORY	**DEMOGRAPHICS**
CULTURAL	**ENVIRONMENT_ HAZARDS**
ECOLOGY	MILITARY OPERATIONS

Table 1. CSSA GIS data layers and path

Path	Current Coverage name (SDS ver. 1.80)
1. BOUNDARY	
\boundary\boundary_jurisdiction\	bdjurpo
\buildings\buildings_general\	bggenexs

2. CADASTRE	
\cadastre\cadastre_real_estate\	cdreltrt
3. DEMOGRAPHICS	
\demographics\demographics_neighborhood\	tgr48029
\demographics\demographics_neighborhood\	tgr48091
\demographics\demographics_neighborhood\	tgr48259.
4. ECOLOGY	
\ecology\ecology_habitat\	echabeha
\ecology\ecology_habitat\	echabesa
5. ENVIRONMENT_ HAZARDS	
\environmental_hazards\env_haz_air_pollution\	ehairasp
\environmental_hazards\env_haz_air_pollution\	ehairsp_3000m
\environmental_hazards\env_haz_characterization\	ehchaspt
\environmental_hazards\env_haz_sites\	ehsitfud
\environmental_hazards\env_haz_sites\	ehsitfup
\environmental_hazards\env_haz_soil_pollution\	ehsoiplu
6. FLORA	
\flora\flora_habitat\	flbryveg
\flora\flora_habitat\	flhabveg
7. GEODETIC	
\geodetic\geodetic_usgs\	gdsgsqud
8. GEOLOGY	
\geology\geology_lithology\	gelthare
\geology\geology_lithology\	gelthfrm
\geology\geology_section\	gesectln
\geology\geology_subsurface\	gesubbhl
\geology\geology_subsurface\	gesubstr
\geology\geology_tectonic\	getecflt
\geology\geology_tectonic\	getecflz
9. HYDROGRAPHY	
\hydrography\hydrography_surface\	hysurwbd
\hydrography\hydrography_surface\	hysurwcc
10. IMPROVEMENT	
\improvement\improvement_general\	imgenfnc
\improvement\improvement_wells\	imwelwel
\improvement\improvement_wells\	listedwells
11. LANDFORM	
\landform\landform_hypsography\	lfhypelc
12. LAND STATUS	
\land_status\land_status_land_condition\	lscndlus
13. SOIL	
\soil\soil_general\	sogenare2
14. TRANSPORTATION	
\transportation\transportation_vehicle\	trvehrcl
\transportation\transportation_vehicle\	trvehrcl2

The ATTRIBUTES of these features are organized into relational groupings called tables. Two types of data tables are within the CSSA GIS, Data Tables and Domain Tables. Data Tables contain information about the 26 SDS categories. Not all of the data tables are populated, of the several hundred data tables provided for in the SDS structure, 25 tables are populated.

Table 2. Currently Populated SDS **Data Tables** used by CSSA. Rows in bold represent the major tables for determining sample locations and analytical results.

SDS Table	Definition
1. Common	
cmgenadd	This table contains information about addresses
cmgencnt	This table contains information about counties or parishes.
cmgencon	This table contains contractor information.
cmgencrd	**This table describes the positional location of points and nodes.**
cmgenctr	This table contains information about a Contract.
cmgenlab	This table contains information about a laboratory or test facility
cmgenmet	This table contains attribute table level metadata, data about the attribute data which identifies items like who collected the data, when it was collected, and the accuracy of the data.
cmgenpoc	This table contains information about individuals, personnel, and points of contact.
cmgenprj	This table contains information about projects.
cmgenven	This table contains information about commercial vendors.
cmgenwko	This table contains information about contracts or work orders.
cmmetcnt	This table contains information on the identity of, and means of communicating with, person(s) and organization(s) associated with the data set.
ehchalab	Will be removed-legacy table
ehchares	Will be removed-legacy table
2. ENVIRONMENT_ HAZAR	
ehsitaoc	**This table provideds the link between the ArcView coverage and SDS.**
ehchaspt	**This table contains data about an environmental field sample (i.e., soil, sediment, ground water, surface water, or exterior air) collection location.**
ehefmres	**This table contains a summary of the chemical results of the laboratory analysis of a field collected sample.**
ehefmsam	This table contains information about a field sample collection occurrence.
ehefmtes	Information on analytical test preparation and procedures for an environmental sample.
ehenmpro	This table contains information about an environmental hazards remediation or restoration project.
ehenmsit	This table is a parent table containing basic information about an environmental hazards site.

3. Geology	
gesubbhl	This table contains data about a borehole or boring.
gesuilit	This table contains a description of a lithologic interval at a particular location (e.g., borehole). A set of lithologic descriptions makes up the description of the lithologic column at the particular location.
4. Improvement	
imwelwel	This table contains data about water wells.
imwlimas	This table is a parent table for wells.

Domain Tables are the second types of data tables. Domain tables contain information about the range of values permissible within the attributes of graphic features and other Data Tables (i.e. domain values). Domain Tables provide a structured and consistent manor in which attributes about graphic features and other tables are recorded. For instance the string "WG", in the *ehefmres* table, field = <domainvalu> refers to ground water sample type. Values such as "wg" or "GW" are not permitted when referring to ground water sample types. This allows for consistent data population within respective tables and correct query results of the database.