DESERT
MANAGERS GROUP

June 11, 2001

Memorandum

To: Desert Managers Group

From: DOD and DOI DMG Coordinators

Subject: Spatial Data Standards

Attached for your use are the spatial data standards that were developed by the Data Management Work Group and adopted by the DMG at its last meeting. The purpose of these standards is to facilitate sharing of spatial or geographic data among DMG participants. Also included is the minimum metadata that should be documented for each data set that will be made available for sharing. The metadata requirements were developed based on Federal Geographic Data Committee standards and are designed to document the source, vintage, limitations, and other basic characteristics of a data set.

Generally, the attached standards should be used for any in-house or contracted GIS data sets that will be made available for sharing. This includes, but is not limited to:

1. All GIS data developed and used in your ongoing or completed land management plan;
2. Plant or animal distributions or sightings;
3. Location of roads, trails, campgrounds, right-of ways, mines, and other types of human development; and
4. Land ownership

To facilitate implementation of these standards, Managers should instruct their GIS manager/staff to adopt these standards for all ongoing and new spatial data projects. The completed data sets should then be provided to the Mojave Desert Ecosystem Program (MDEP), which will serve as the clearinghouse for all spatial data. The point of contact at MDEP is Michael Kurth at (760) 255-8842.

At the last DMG meeting, the managers agreed to provide five (5) corporate data sets to the MDEP to jump-start the clearinghouse. This could include any data set developed for your area/park by your office/agency and commonly requested by the public, private contractors, other offices within your own agency, or other agencies. Please direct your GIS manager to provide these data sets to the MDEP point of contact by July 20, 2001.

Over the next several months the Data Management Work Group will be working to define the role and responsibility of MDEP as a California desert data clearinghouse. Please encourage your staff to attend and actively participate in upcoming Work Group discussions.

Attachment

cc Data Management Work Group
Michael Kurth, MDEP

Attachment
Desert Managers Group Standards for Spatial Data
June 11, 2001

Purpose: The purpose of these standards is to facilitate sharing of spatial or geographic data among DMG participants. These standards were adopted by the Desert Managers on February 22, 2001.

Scope: The DMG standards for spatial data should be used for any in-house or contracted GIS data sets that will be made available for sharing among the DMG partners. This includes, but is not limited to:

1. All GIS data developed and used in your ongoing or completed land management plans;
2. Plant or animal distributions or sitings;
3. Locations of roads, trails, campgrounds, right-of ways, mines, and other types of human development; and
4. Land ownership

Geospatial Data:

a. The projection for geospatial data is Universal Transverse Mercator, Zone 11, North American Datum 1983 (NAD 83), in meter units.

b. The output formats for geospatial data are:

   1. Arc/Info coverages and grids using the Arc Interchange format (.e00)
   2. Geotiff format for single-band raster (imagery based) data such as Digital Ortho Quads and Digital Raster Graphics
   3. MrSID format for compression of exceptionally large single-band raster data sets
   4. ESRI Grid Stack or ERDAS Imagine for multi-band raster data such as Landsat Thematic Mapper ™ and Multispectral Scanner (MSS)
   5. Gzip as the standard application for compressing files for storage and transfer

Metadata: Spatial data shall employ Federal Geographic Data Committee (FGDC) metadata standards. The metadata attributes listed below are a subset of the full FGDC metadata standards. This minimum subset shall be used for data sharing until full FGDC compliance can be achieved.

a. **Description:** Provide a brief narrative (abstract) description of the data set and its intended purpose. The description should clearly characterize the purpose, use, and limitations of the data set.

b. **Time Period of Content:** Define the period of time when data was released as a reference to currentness of the data.

c. **Status:** Describes the state of the data set (progress – completed, in progress, planned, etc.) and the frequency with which changes and additions are made after initial completion (maintenance of the data set).

d. **Spatial Domain:** Defines the limits of coverage using North, East, West, and South bounding coordinates expressed as latitude and longitude or northing and easting.

e. **Keywords:** List of common words or phrases that describe the subject (theme), geographic location (place), and time frame (temporal), of the data set.

f. **Access Constraints:** Restrictions and legal prerequisites for accessing the data set. Includes any constraints applied to assure protection of privacy or intellectual property and any special restrictions or limitations for obtaining the data set.

g. **Use Constraints:** Restrictions and legal prerequisites for using the data set. Includes any constraints applied to assure protection of privacy or intellectual property and any special restrictions or limitations for using the data set.

h. **Point of Contact:** List points of contact information for individuals or organizations that know the data set. Includes primary person and position, primary organization, address, telephone number, fax number, TTD/TTY number (hearing impaired), email address, hours of operation, and any additional contact information.

i. **Data Set Credit:** A list of contributors to the data set. Includes name, position, organization, address, telephone number, fax number, email address.

j. **Security Information:** Defines handling restrictions imposed on a data set due to national security, privacy, or other concerns. Names the classification system, handling restrictions, and provides additional information regarding handling.

k. **Entity and Attribute Information:** Describes and defines intent and content of graphic features (Entities) tabular fields (Attributes). For example, an attribute for raw field values would describe the methodology for data acquisition. An attribute for derived values using raw field data would describe and present the mathematical formula for data reduction.

Questions or comments on these standards should be directed to:

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