



White Sands National Monument

Geologic Resources Inventory

GIS Data Explanation, October 10, 2012

Geologic-Geographic Information Systems (GIS) data related to White Sands National Monument is delivered in WinZip (zip) archive files. These data are a product of the Geologic Resources Inventory (GRI), a component of the National Park Service (NPS) Inventory and Monitoring (I&M) program, administered by the NPS Geologic Resources Division (GRD).

Geologic-GIS data for White Sands National Monument consist of a dedicated park map providing complete coverage of the park and surrounding area, as well as a geomorphic dune field map. Data files for the dedicated park map are named using the park four letter code (WNSA) as a prefix, whereas the geomorphic dune field map is identified by the prefix WSDF (White Sands Dune Field). In October of 2012, data as well as ancillary documents and files pertaining to the WSDF map were updated after additional edits and comments were provided by the source map author.

Geologic-GIS data are provided in ESRI 9.3 personal geodatabase (.mdb) and 9.3 shapefile (.shp) formats. WinZip files containing a geodatabase are identified with a "GDB.zip" suffix, whereas those containing shapefile data have a "SHP.zip" suffix. In addition to the GIS data, each WinZip file also contains the following files: 9.3 layer (.lyr) files complete with data layer symbology, FGDC-compliant metadata (.txt), a GRI map help document (.pdf) file that contains geologic unit descriptions, as well as ancillary information and any graphics from all source maps used to produce the GRI digital data for White Sands National Monument, and this file. Geodatabase WinZip files also include an ESRI 9.3 ArcGIS map document (.mxd) file that presents all of the GIS components of a GRI digital map in a user-friendly format for viewing and data analysis. The shapefile WinZip files contain individual shapefile metadata (.shp.xml and .dbf.xml) files for quick reference in ESRI 9.3 ArcCatalog.

The GRI recommends extracting all map files for a particular GRI map to a single directory folder. The provided ArcGIS map document (.mxd) file and layer (.lyr) files use relative paths to access GIS data files that are located in the same folder. When adding GRI GIS data to a new or existing ArcGIS map document (.mxd) file, users should add layer (.lyr) files (e.g., wsdf_geomorphic_units_gdb.lyr) in order to ensure that the GIS data will be displayed with the appropriate title, symbology and labels ("_gdb" appended to a layer file name denotes a layer file to geodatabase GIS data, whereas "_shp" denotes a layer file to shapefile GIS data).

The ArcGIS map document (.mxd) must also be located in the same directory folder as the ArcGIS map document (.mxd) file to ensure the file opens correctly.

Detailed information concerning the source data used by the GRI is listed in the Source Citation sections(s) of the included map metadata record (e.g., wsdf_metadata.txt). Information concerning source data is also in the Source Map Information GIS table (whsamap), and repeated in the GRI help map document (.pdf) file.

For detailed information regarding GIS parameters such as data attribute field definitions, attribute field codes, value definitions, and rules that govern relationships found in the data, refer to the NPS Geology-GIS Data Model document, gre_gdb_ggdm_v2dot1.pdf (available at: <http://science.nature.nps.gov/im/inventory/geology/GeologyGISDataModel.cfm>).

Digital geologic-GIS data in these WinZip files and all other digital geologic-GIS data prepared as products of the GRI program are available to download from the NPS Data Store Search Application: <https://irma.nps.gov/App/Reference/Search>. To find GRI data for a specific park or parks select the appropriate park(s), enter "GRI" as a Search Text term, and then select the Search Button.

For a complete listing of Geologic Resources Inventory products and direct links to the download site, visit the GRI publications webpage: http://www.nature.nps.gov/geology/inventory/gre_publications.cfm.

For more information about the Geologic Resources Inventory Program, visit the GRI webpage: <http://www.nature.nps.gov/geology/inventory>, or contact:

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To provide feedback or to inquire about the use of GRI products, contact Bruce Heise (contact information listed above).
For information about the status of GRI digital geologic-GIS data for a park, contact:

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