



# Chattahoochee River National Recreation Area

## *Geologic Resources Inventory*

GIS Data Explanation, June 10, 2015

Geologic-Geographic Information Systems (GIS) data related to Chattahoochee River National Recreation Area is delivered in WinZip (zip) archive files. These data are a product of the NPS Geologic Resources Inventory (GRI) program which is funded by the Inventory and Monitoring (I&M) Division, and administered by the NPS Geologic Resources Division (GRD).

Geologic-GIS data for Chattahoochee River National Recreation Area consists of two maps that together provide complete coverage of the park and surrounding area. Data files for the northern extent park map are identified by the prefix CHTN (Chattahoochee Northern), whereas those for the southern portion of the park with the prefix CHTS (Chattahoochee Southern). The two maps weren't compiled as source map scales are considerably different, 1:500,000 for CHTN and 1:100,000 for CHTS, and contacts and features don't easily align across their common map boundary. Files common to both maps have the prefix CHAT, the park's four letter (NPS) code. In addition to the above maps there is also a large-scale (1:24,000) bedrock geology map for parts of the Sandy Spring 7.5' quadrangle, as well as a shoals and underwater hazards map of the park's river extent. Files for the Sandy Spring 7.5' quadrangle map have a prefix of SASP (GRI abbreviation for SANDy SPriings, whereas those for the shoals and underwater hazards map have a prefix of CHSH (GRI abbreviation for CHAttahoochee Shoals and Hazards).

Geologic-GIS data are provided in ESRI 9.3 personal geodatabase (.mdb) and 9.3 shapefile (.shp) formats, as well as 2.2 KML/KMZ format for use with Google Earth software. WinZip files containing a geodatabase are identified with a "gdb.zip" suffix, whereas those containing shapefile data have a "shp.zip" suffix, and those containing KML data have a "kml.zip" suffix. In addition to GIS data, each GIS data WinZip file also contains the following files: 9.3 layer (.lyr) files complete with data layer symbology, FGDC-compliant metadata (.txt), a GRI ancillary map information 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 Chattahoochee River National Recreation Area, 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 SASP and CHSH data is, however, in ESRI 10.1 file geodatabases with supporting ESRI 10.1 files (.mxd and .lyr), and as 2.2 KML data files.

For GIS datasets 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., chtn\_geologic\_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).

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., chts\_metadata.txt). Information concerning source data is also in the Source Map Information GIS table (chatmap), and repeated in the GRI ancillary map information document (.pdf) file.

The Google Earth KMZ files, chtn\_geology.kmz, chts\_geology.kmz, sasp\_geology.kmz and chsh\_shoals\_and\_underwater\_hazards.kmz, each contain a limited version of their full spatial dataset (limited features and symbology). Google Earth software is available for free at: <http://www.google.com/earth/index.html>. The KMZ file possesses on-line links to the GRI program and its products, as well as to this readme document (on-line version), the FGDC-compliant FAQ metadata (in .html format), and the GRI ancillary map information (.pdf) document pertaining to this dataset. The readme (.pdf) document, .html FAQ metadata file, and ancillary map information (.pdf) document are also included with the KMZ WinZip file, and users are encouraged to use these files (outside of Google Earth) should accessing the on-line versions via Google Earth be an issue. Users can also download Google Chrome (free at: <http://www.google.com/chrome/>) to view these files should their default browser not open these files in Google Earth.

Users of this data are cautioned about the locational accuracy of features and should not assume that features are exactly where they portrayed in Google Earth, ArcGIS or other software used to display the data. Refer to the positional accuracy report and use constraints within a map metadata record for additional information concerning the positional accuracy of features in a GRI dataset. Users are also encouraged to only use the Google Earth data for basic visualization, and to use the GIS data for any type of data analysis or investigation.

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, gri\_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: <http://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](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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For information about using GRI digital geologic-GIS data, 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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