



## Base Cartography Data

### Background

The Base Cartography inventory is one of 12 core inventories identified by the National Park Service as essential to effectively manage park natural resources.

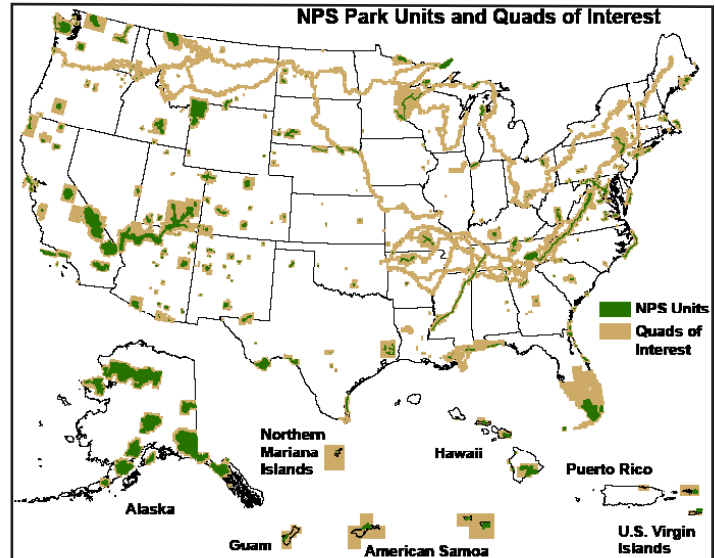
Cartographic information from this inventory provides geographic information systems (GIS) data layers to National Park resource management staff, researchers, and research partners. The inventory acquires, processes, and distributes GIS data that complement other inventory projects, as well as many GIS mapping and analysis projects throughout the Park Service.

Base cartographic inventory products are used by the National Park Service and others for many different applications, ranging from making maps, to spatial data verification, to designing monitoring sampling frameworks. For example, the digital raster graphics and digital orthophotos (see below), provide credible, high-resolution spatial information that can be used to verify the spatial accuracy of cartographic products. The thematic information content in existing digital line graph products and elevation data sets are very useful for analysis to ensure the range of landscape conditions is reflected in monitoring sampling designs.

### Products

The program delivers six customized products:

1. Digital Elevation Models (DEM) - digital files consisting of terrain elevations for ground positions at regularly spaced horizontal intervals.
2. Digital Line Graphs (DLG) - digital representations of cartographic information. DLGs of map features are digital vectors converted from maps and related sources.
3. Digital Raster Graphics (DRG) - scanned images of a U.S. Geological Survey standard series topographic map, including all map collar information.
4. Digital Orthophoto Quarter Quadrangles (DOQQ) - A digital orthophoto quadrangle is a computer-generated image of an aerial photograph in which image displacement caused by terrain relief and camera tilts has been removed.
5. National Elevation Dataset (NED) - designed to provide national elevation data in a seamless form with a consistent datum, elevation unit, and projection.
6. National Agricultural Imagery Program (NAIP) imagery -



The Base Cartography Inventory gathers USGS data for NPS units with significant natural resources. The extent for each park is determined by its Quads of Interest.

geo-referenced imagery acquired during the agricultural growing seasons in the continental U.S.

The final products, when completed, will be kept up-to-date, in a seamless format, and ready for use in ESRI GIS software packages. Some additional derived products are included, such as hillshade, aspect, and slope grids which are created from elevation data.

### Status

This inventory is currently in progress. The NPS Data Store is the primary distribution point for base cartography data; however, many of the earlier USGS quadrangle-based datasets can be downloaded through the Legacy Natural Resource FTP site, DOQQs excluded. Check both locations when searching for USGS base cartography data. Special requests for data may be made by contacting the Natural Resource GIS Program directly.

### More Information

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**NPS NR GIS Program:** <http://science.nature.nps.gov/nrgis/>  
**Data Store:** <http://science.nature.nps.gov/nrdata/>  
**Legacy NRFTP:** <http://science.nature.nps.gov/nrftp/>  
**Special Requests:** [waso-nrpc\\_nrgis@nps.gov](mailto:waso-nrpc_nrgis@nps.gov)  
**I&M Inventories:** <http://science.nature.nps.gov/im/inventory/>