# **Esic News**

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The NDGS is an affiliate of the Earth Science Information Center (ESIC) network. The U.S. Geological Survey coordinates the nationwide ESIC network, which provides information about geology, hydrology, topography, and land use in the form of maps, books, reports, and aerial, satellite, and radar images, and related products. ESIC also publishes and distributes earth-science data in digital form. As an ESIC office, the NDGS can assist the public in locating earth-science materials dealing with North Dakota. For more information, contact Elroy Kadrmas, Linda Hagen, or Lorraine Manz by phone at (701) 328-8000.

# **GENERAL INFORMATION**

### **BLM Maps Updated**

The U.S. Geological Survey has updated the 1:100,000-scale metric topographic editions of the BLM Surface Management Status and Surface Minerals Management Status Maps for the following 30 x 60 minute quadrangles:

Glendive, MT-ND Wibaux, MT-ND

#### Montana Natural Resource Information System

The Montana Natural Resource Information System (NRIS) is a program of the Montana State Library. NRIS makes information on Montana's natural resources easily and readily available to government agencies, business and industry, and private citizens by serving as a clearinghouse and referral service to link users with the best sources of information. The NRIS website is interactive and provides access to map and data applications that cover a wealth of geographic and geologic themes, with a special section on Montana streams and wetlands. Other features include a thematic mapper, which allows the user to interactively build maps & create reports containing Montana data, and a Montana USGS topographic maps "TopoFinder" containing an excellent search facility that offers a township/range/section option as one of its search tools. The TopoFinder will also access aerial photos for most of the state.

To learn more about these and other interactive map and data applications for the state of Montana visit the NRIS website at: <u>http://nris.state.mt.us/interactive.html</u>.

#### **New National Atlas Maps**

Two new maps have been published as part of the National Atlas of the United States®: a Shaded Relief Map of North America and the Presidential Elections 1789-2000 Map.

The Shaded Relief Map of North America was created from digital elevation data and uses 23 distinct color tones to depict broad elevation ranges and detailed surface features. The terrain is "illuminated" from the northwest with a simulated sun angle of 45 degrees. Within each color range, the lightest tones represent fully illuminated steep slopes and the darkest steep areas in shadow. Shaded relief is a particularly effective method for portraying topography as it produces an easily interpreted image of the landscape and a good impression of general elevation.

The map measures 42½ by 37½ inches, is published at the scale of 1:10,000,000, and covers all of North America.

The new Presidential Elections map illustrates the results (electoral votes by political party and state) for all fifty-four presidential elections from 1789 to 2000. Results of the 2000 election are depicted on a small electoral map and a larger, more detailed map that shows the winner of the popular vote at the county level.

Both the Shaded Relief Map (stock #112733) and the Presidential Elections Map (stock #112283) are available from USGS Information Services, Box 25286, Denver, CO 80225 for \$7.00 plus a \$5.00 handling charge per order. For more information about these and other maps and the National Atlas, visit the Atlas website at <a href="http://nationalatlas.gov">http://nationalatlas.gov</a>.

### Geographic Face of the Nation - Land Cover Map

This colorful map was compiled by the USGS in partnership with the Environmental Protection Agency. The Geographic Face of the Nation - Land Cover Map portrays a seamless National Land Cover dataset (NLCD) derived from early to mid-1990s Landsat Thematic Mapper Imagery for the entire contiguous United States. The data are represented by a classification scheme comprising 21 categories with a spatial resolution of 30 meters applied consistently across a mosaic of 48 individual state databases.

The NLCD was produced as a digital dataset to be used in geographic information systems (GIS) for regional–scale environmental analyses, such as watershed management, natural resource inventories, and transportation modeling. NLCD data are used by numerous federal agencies to meet their land management responsibilities. At full resolution (30 meters), coverage of the lower 48 states requires approximately 14 gigabytes of data. Full resolution digital data for individual states can be downloaded free of charge at <a href="http://landcover.usgs.gov/natllandcover.html">http://landcover.usgs.gov/natllandcover.html</a>.

The Geographic Face of the Nation - Land Cover Map (stock #112765) measures 54 x 35 inches and is published at a scale of 1:4,000,000. It is available from USGS Information Services, Box 25286, Denver, CO 80224 for \$7.00 plus a \$5.00 handling charge per order.

#### USGS Partners with MapMart.com to Serve Geographic Data

The USGS and MapMart.com, (IntraSearch) have formed a partnership to distribute USGS geographic data to make more public domain data available at no charge while enabling the private sector to have a greater role in the distribution of USGS data.

The USGS Spatial Data Transfer Standard Digital Elevation Models (SDTS DEMs) being distributed by MapMart.com describe the topography of the land surface. Private industry, government, non-governmental organizations, and individual citizens depend on a common set of base information that describes the Earth's surface. They use this information as a tool for economic and community development, land and natural resource management, health and safety services, emergency management, defense, and environmental protection.

SDTS data contribute to the National Map, a seamless, continuously maintained set of geographic base information that will serve as a foundation for integrating, sharing, and using other data easily and consistently. Additional information about USGS STDS data is available at: <u>http://mcmcweb.er.usgs/sdts</u>.

MapMart.com is the latest commercial vendor to partner with the USGS to distribute free SDTS DEMs on the Internet. MapMart.com is an online resource for the location and acquisition of a variety of digital map data. MapMart.com's interface allows users to zoom in to an area of interest and to determine digital data availability and select quadrangles to be ordered. MapMart.com also sells numerous digital data products. The ordering of digital data can be done at different map scales, and in several mapping software formats. More information about MapMart.com can be found at: <u>http://www.mapmart.com</u>. USGS SDTS DEMs will continue to be available for free from GIS Data Depot at: <u>http://www.gisdatadepot.com</u>. USGS partners will continue to receive SDTS versions of the DEMs as they are made available by the USGS. Native format DEMs are still available for sale from the USGS on various media through Earth Explorer (<u>http://www.gisdatadepot.com</u>.).

## Earth Observing-I Satellite Data

The USGS and NASA are teaming up in an attempt to extend the useful life of the Earth Observing-I (EO-I) technology demonstration satellite. The initial operations period for the satellite, launched in November 2000, was successfully completed in November 2001. Operations were extended through February 2002 with funding support provided by NASA, and are continuing on a month-by-month, pay-as-you-go basis, depending on user demand.

The USGS EROS Data Center (EDC) will archive and sell data collected by two of the EO-I sensors: Hyperion, the first hyperspectral instrument to be flown on a civilian satellite, and Advanced Land Imager (ALI), which provides data similar to the Landsat-7 Enhanced Thematic Mapper Plus (ETM+). Data acquired during the first year of operations are considered archived. Collection of new data is driven by user's scheduling Data Acquisition Requests (DARs) to task instruments through EDC in conjunction with the Flight Operations Team at the Goddard Space Flight Center in Maryland. Data processed as a result of a DAR will become part of the archive three months after they are distributed to the requester. Both old and newly collected data are considered to be in the public domain.

EO-I data are sold at the cost of satellite operation, data processing, and customer interface costs, and consequently are not cheap. The first-scene acquisition attempt by either sensor is priced at \$2000. Previously captured data can be ordered from the EO-I archive at \$500 per scene. A small number of sample scenes are also available free of charge via electronic retrieval.

For information about the EO-I satellite visit the NASA website at: <u>http://eoI.gsfc.nasa.gov</u>. Information on products, prices, data, and ordering is available at: <u>http://eoI.usgs.gov</u>. Orders may be submitted through the website. Customers who need assistance with ordering and DARs should call EDC Customer Service on (605) 594-6151.

#### **EDUCATIONAL MATERIALS**

#### **Publications Status Report**

The USGS teacher packets "Map Adventures" and "Exploring Maps" are now permanently out of stock, but may still be accessed, along with other teaching packets, on the USGS The Learning Web site at: <u>http://www.usgs.gov/education</u>.

The following General Interest Publications are also currently out of stock:

Aerial Photographs and Satellite Images Map Projections – both folded and flat Planetary Maps Collecting Rocks Earthquakes Volcanoes Maps of the United States The Hydrologic cycle

Elevations and Distances is out of stock, but is being reprinted.

The following brochures have recently been reprinted and are now back in stock: Dinosaurs: Facts and Fiction

Fossils, Rocks, and Time USGS Maps Topographic Map Symbols (revised)

Copies are available from USGS Information Services, Box 25286, Denver, CO 80225.