ESIC NEWS

Compiled by Fred J. Anderson
NDGS ESIC Coordinator

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 Donna Bauer, publications clerk, at (701) 328-8000 or via email at ndgsmaps@nd.gov.

GENERAL INFORMATION

The North Dakota Geological Survey continues to make the following maps available through our publications office:

Iraq Planning Map (1:2,000,000) $10.00
The Middle East Graphic (1:4,500,000) $15.00
Iraq (1:1,250,000) $10.00
Baghdad (1:40,000) $10.00
Tikrit , Al Basrah, Al Mawsil, Karkuk $15.00 each.
Lewis and Clark: A Legacy of Science $10.00
National Wildlife Refuge System Map $7.00

RECENT PUBLICATIONS OF INTEREST IN NORTH DAKOTA

Bakken Formation Oil Resources in the Williston Basin

The USGS has recently published the highly anticipated assessment of undiscovered oil resources of the Bakken Formation using a geology-based assessment methodology. A brief discussion of the Bakken Formation and Bakken-Lodgepole Total Petroleum System and assessment methodology is included. A table of assessment results for undiscovered resources of oil, gas, and natural gas liquids, is featured.

Title: Assessment of Undiscovered Oil Resources in the Devonian-Mississipian Bakken Formation, Williston Basin Province, Montana and North Dakota, 2008
Fact Sheet 2008-3021
Publication ID: FS 08-3021
Available online at: http://pubs.usgs.gov/fs/2008/3021/

Simulation of Climate and Flood Risk Analysis for Devils Lake

A study of climate simulation and flooding risk for the years 2008 to 2040 for Devils Lake has recently been completed by the USGS. This study was completed in cooperation with the Federal Emergency Management Agency (FEMA) and can be used to aid in the preparation of updated flood-insurance rate maps and for planning flood-mitigation activities such as raising levees or roads. This report describes the procedures used to update previous climatic models for Devils Lake and Stump Lake and provides revised estimates of flood risk for Devils Lake.

Title: Climate Simulation and Flood Risk Analysis for 2008-40 for Devils Lake, North Dakota
Scientific Investigations Report 2008-5011
Publication ID: SIR 2008-5011
Available online at: http://pubs.usgs.gov/sir/200/5011/

Water Quality Modeling on the Red River

A recently completed collaborative study between the USGS, ND Department of Health, Minnesota Pollution Control Agency, and cities of Fargo, ND, and Moorhead, Minnesota has produced information supporting the calibration of surface water quality modeling for low-flow conditions on the Red River. Descriptions of modeling methods, model implementation, and model calibration and testing, are included.

Title: Calibration of a Water-Quality Model for Low-Flow Conditions on the Red River of the North at Fargo, North Dakota, and Moorhead, Minnesota, 2003.
Item No.: Scientific Investigations Report *2008-5007*
Available online at: http://pubs.usgs.gov/sir/2008/5007/

Red River Water Quality Data for Water- and Wastewater-Treatment Facilities

A recently completed data-series report containing six sets of water quality samples collected from 28 sites along the main stem of the Red River from January through October of 2006 is currently available online. This report features the data obtained from surface water sampling conducted in cooperation with the U.S. Bureau of Reclamation in support of construction of the 2006 water quality model for the Red River. Data from samples of inflow and outflow from seven municipal water-treatment plants along with influent and effluent samples from seven wastewater treatment plants is included.

Title: Water-Quality Data for Water- and Wastewater-Treatment Plants along the Red River of the North, North Dakota and Minnesota, January through October 2006
Item No.: Data Series 328
Available online at: http://pubs.usgs.gov/ds/328/

EDUCATIONAL MATERIALS

USGS Resources For Educators – The Geologic Time Spiral

This highly creative illustration, extracted from the USGS "Geologic Time" pamphlet, is currently available in an 8.5" x 11" page size or poster size, dowloadable directly from the USGS Education webpage. A great addition to any classroom setting and ideal for home schoolers.

This free General Information Product (GIP-58) can be downloaded at: http://pubs.usgs.gov/gip/2008/58/

USGS Homepage: http://www.usgs.gov