



National Cooperative Geologic Mapping Program

FEDMAP FY 2012 Projects

3D/4D Mapping of the San Andreas Fault Zone (Graymer)

Purpose: To understand the evolution of the San Andreas Fault since its inception.

Location: California

Website: <http://geomaps.wr.usgs.gov/3D4Dmapping/index.htm>

Strategic Direction: Natural Hazards

Appalachian Blue Ridge (Southworth)

Purpose: To determine how geology has influenced the topography, water, soils, and plant and animal communities of the Appalachian Blue Ridge Mountains.

Location: North Carolina, Virginia

Website: <http://geology.er.usgs.gov/eespteam/smoky/>

Strategic Direction: Natural Hazards, Earth's Climate, Ecosystems

Big Storm Footprint on California and Future Hazards (Schmidt)

Purpose: To understand the footprint that big storms leave on the landscape, onshore and offshore.

Location: California

Strategic Direction: Natural Hazards, Earth's Climate

Framework Geology of Mid-Continent Carbonate Aquifers (Blome)

Purpose: To understand geologic controls on ground-water availability in south-central United States.

Location: Oklahoma, Texas

Website: <http://esp.cr.usgs.gov/info/platte/index.html>

Strategic Direction: Water Issues, Natural Hazards

Geohydrology of Coast Ranges Basins (Langenheim)

Purpose: To understand how geology influences ground-water availability, movement, and contamination in the western United States.

Location: California

Website: <http://geomaps.wr.usgs.gov/ug/index.html>

Strategic Direction: Water Issues

Geologic Framework of Rio Grande Basins (Hudson)

Purpose: To understand how geology influences the availability of ground-water and natural resources, and tectonic hazards in Rio Grande basins.

Location: Colorado, New Mexico

Website: <http://crustal.cr.usgs.gov/projects/rgb>

Strategic Direction: Water Issues, Natural Hazards

Geologic Framework of the Northern Basin and Range (Colgan)

Purpose: To understand the geology and tectonic history of the northern Basin and Range Province.

Location: Nevada

Strategic Direction: Energy and Minerals, Natural Hazards

Geology of Atlantic Watersheds (Schultz)

Purpose: To understand the broader context of surface and groundwater sustainability, land-use planning, ecosystem health, climate change, and sea level fluctuation.

Location: Maryland

Strategic Direction: Water Issues, Earth's Climate

Geology of Parks and Federal Lands of the Southwest (Billingsley)

Purpose: To support the National Park Service in its resource management and preservation of cultural, biologic, hydrologic, and geologic features.

Location: Arizona, California, Colorado, Nevada, Western United States

Website: http://geomaps.wr.usgs.gov/fed_land/index.htm

Strategic Direction: Water Issues, Natural Hazards, Ecosystems

Greater Platte River Basin and Northern Plains Geologic Framework Studies (Berry)

Purpose: To define the geologic framework of ecosystems in the Greater Platte River Basin Area and part of the northern Plains, including the headwaters of the Missouri River.

Location: Colorado, Kansas, Nebraska, South Dakota, Wyoming

Website: <http://esp.cr.usgs.gov/info/platte/index.html>

Strategic Direction: Ecosystems, Water Issues, Earth's Climate

Karst Applied Research Studies through Geologic Mapping (Weary)

Purpose: To understand how karst can influence ground-water availability and urbanization.

Location: Arkansas, Missouri, Virginia, West Virginia, Northern Mariana Islands

Website: <http://geology.er.usgs.gov/eespteam/Karst/index.html>

Strategic Direction: Water Issues, Natural Hazards

National Geologic Map Database (Soller)

Purpose: To make geologic maps and related databases of North America more accessible to the public.

Website: <http://ngmdb.usgs.gov/Info/home.html>

Navajo Land-Use Planning Project (Hiza)

Purpose: To provide a geologic framework to the Navajo Nation for land-use planning and natural resource management.

Location: Arizona

Website: <http://geomaps.wr.usgs.gov/navajo/index.htm>

Strategic Direction: Water Issues, Natural Hazards, Earth's Climate, Ecosystems, Human Health

Neotectonics of the Northern Mojave Desert (Miller)

Purpose: To understand Cenozoic faulting, volcanism, and depositional histories of the region as a predictor of future geologic events.

Location: California

Website: <http://geomaps.wr.usgs.gov/neotectonics/index.htm>

Strategic Direction: Natural Hazards, Earth's Climate

North Park / Medicine Bow Mountains Study (Cole)

Purpose: To improve knowledge of the timing, geometry, and controls of uplift and sedimentation and drainage in the North Park-Medicine Bow Mountains area and to produce geologic maps and three-dimensional models of the basin.

Location: Colorado, Wyoming

Website: <http://esp.cr.usgs.gov/info/northpark/index.html>

Strategic Direction: Ecosystems, Earth's Climate, Energy and Minerals, Water Census

Northern Appalachian Bedrock Mapping (Walsh)

Purpose: To improve understanding of crystalline bedrock in the Northern Appalachians.

Location: New Hampshire, Vermont

Strategic Direction: Water Issues

Pacific Northwest Urban Corridor Geologic Mapping (Wells)

Purpose: To provide geologic mapping, geophysical surveys, and research needed for earthquake hazard mitigation and ground-water resource assessments in the Seattle-Portland urban corridor.

Location: California, Oregon, Washington

Website: <http://geomaps.wr.usgs.gov/pacnw/index.html>

Strategic Direction: Natural Hazards, Water Issues

Quaternary Stratigraphic Framework of Massachusetts and Parts of Southern Michigan (Stone)

Purpose: To understand how glacial deposits influence ground-water and aggregate-resource availability.

Location: Massachusetts, Michigan

Strategic Direction: Water Issues, Mineral Resources, Earth's Climate

San Andreas Fault System in Southern California (Powell)

Purpose: To understand fault interactions in the greater San Andreas system and of the overall evolution of the fault system.

Location: California

Website: <http://geomaps.wr.usgs.gov/safsoc/index.htm>

Strategic Direction: Natural Hazards

Seismic Hazards in the Sacramento Delta (Graymer)

Purpose: To increase understanding of the seismic sources that could affect the Delta.

Location: California

Strategic Direction: Natural Hazards

U.S. – Mexico Border Geologic Framework (Page)

Purpose: To understand the geology along the U.S.-Mexico border in support of land-use management.

Location: Arizona, California, New Mexico, Texas

Website: <http://esp.cr.usgs.gov/info/borderstudies/index.html>

Strategic Direction: Mineral Resources, Water Issues, Earth's Climate, Ecosystems, Natural Hazards