

The logo for the Association of American State Geologists (AASG) features the letters "AASG" in a large, bold, serif font. A stylized, light-colored swoosh or wave graphic is positioned behind the letters, extending from the right side of the "G" and curving upwards and to the left.

Association of American State Geologists

The text "GEOLOGIC MAPPING" is written in a bold, yellow, sans-serif font. It is set against a dark, textured background that resembles a rock surface with some light-colored veins or cracks.

AASG

The Association of American State Geologists (AASG) speaks for the State Geologists of the 50 United States and Puerto Rico. Founded in 1908, AASG seeks to optimize the role that State Geological Survey agencies play in delivering benefits to the people of the U.S., in relation to economic prosperity, natural hazards, and public health, as well as appreciation and preservation of our natural heritage

Position Statement

AASG calls for all geologic map users to support the National Cooperative Geologic Mapping Program, now in its 25th year, remains a critically important means of creating maps of regions never mapped in detail and of optimizing new and updated geologic map production by State and Federal Geological Surveys across the U.S.

Background

Up-to-date and progressively more web-accessible geologic mapping is essential to any water, energy, mineral resource, engineering, health, hazard, habitat, or research-related application that requires knowledge of what lies underground—

Resources—Well water, the principal drinking water source in many regions, is running short locally as demand increases; readily available sources of sand, gravel, and stone for construction are key factors in the success of communities; and management of the full spectrum of mineral and subsurface energy sources requires geologic maps to ensure supplies and support wise stewardship.

Engineering—Infrastructure and other construction require subsurface maps to guide siting and design, as well as to manage costs and ensure safety related to foundation conditions, drainage, and variable geologic conditions; this information is also essential in guiding subsurface pipe and cable installation.

Hazards—Geologic maps are used to locate hazards; explain and reduce damage caused by earthquakes, landslides, volcanoes, sinkholes, coastal erosion, and other hazards; and aid in safe and economic infrastructure design and siting of critical facilities.

Public Health—Geologic maps are needed for groundwater protection, in ensuring the integrity of waste disposal sites, in cleaning up underground pollution, and in explaining naturally occurring hazardous elements such as arsenic and radon.

Research and Habitat Protection—Geologic mapping yields discoveries and guides our understanding of Earth history and evolution, while being essential to land and habitat restoration and protection, such as wetland protection.

Everyone benefits directly or indirectly from ongoing geologic mapping. Federal agencies, State and local governments, industry, educators, and the public depend on the information provided by geologic maps to carry out their missions. Efficient production of new geologic maps at county, state, and national scales, in both paper and digital format, requires coordination between Federal and State Geological Surveys. Concurrently there is much progress in the coordination of topographic, soil, and geologic mapping, as needed by users. This mapping, which is a public good and the job of State and Federal agencies, provides needed context for site-scale investigations by consultants and local agencies. Many cases of natural disasters and groundwater contamination can be cited in which major savings could have been realized had mapping been completed and consulted in advance.

