

GOVERNMENT GEOLOGISTS MAKING MAPS

Government geologists study the rocks and landscape that make up Western Australia. By looking at and sampling rocks they can find out how and when these rocks formed. The knowledge they gain by working in the field is presented as geological maps and reports which help the community, industry and government to plan for the future



MAPPING EQUIPMENT

Geologists use digital aerial photographs, satellite images and GPS to locate outcrops on a topographic map. Field measurements are made with a compass, and details recorded on a laptop computer

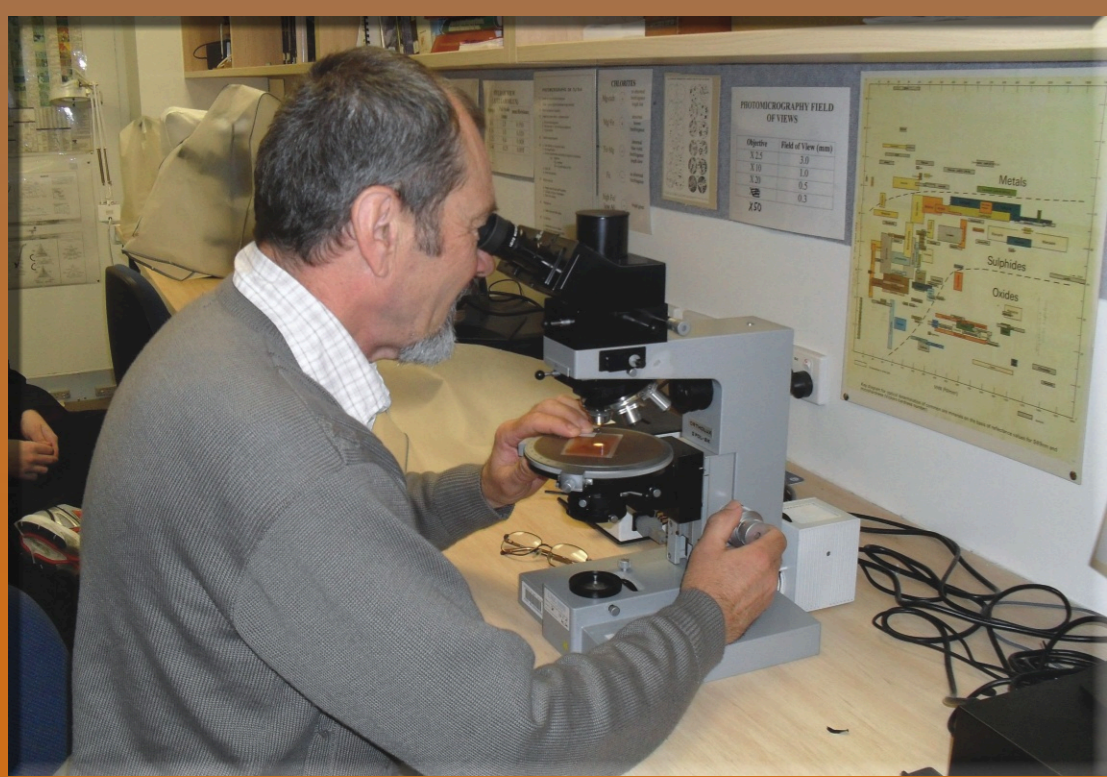
SAMPLING & SURVEYING

Helicopters are sometimes used to access remote outcrops and collect small samples



OFFICE WORK

The geological map takes shape when the geologist transfers information from the field to a digital map base on a computer



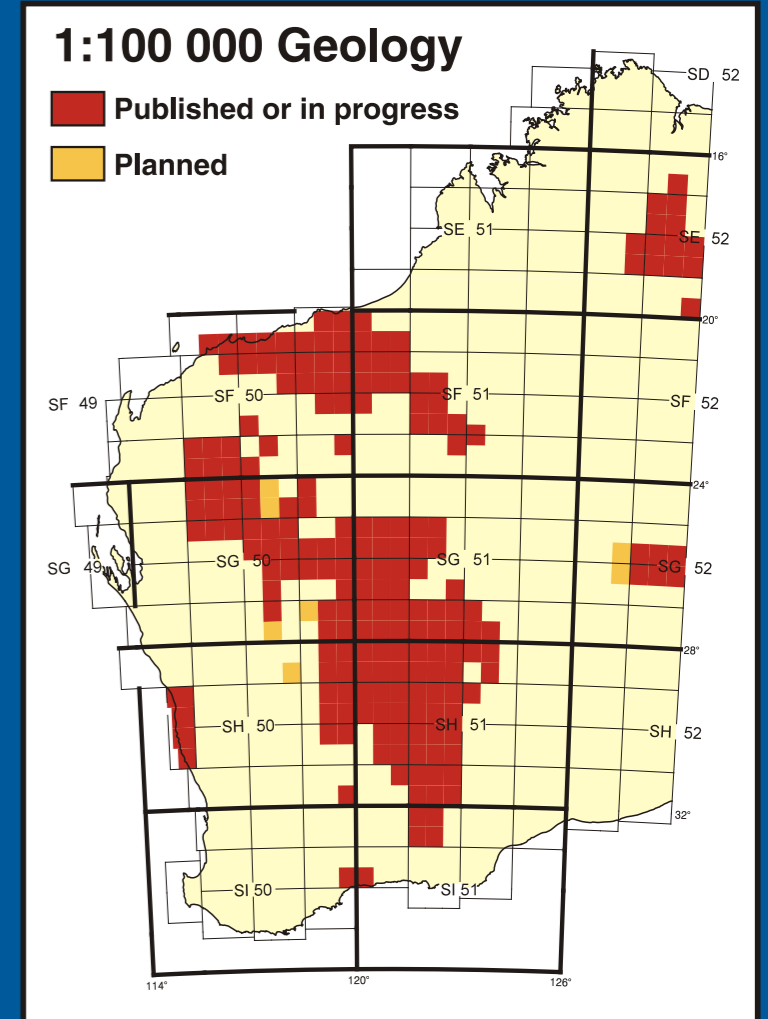
COMPUTERIZED MAPS

Computers are widely used to assemble all the geological data onto a coloured geological map



IT'S A BIG STATE

Detailed geological maps so far only cover about one quarter of the State. New mapping projects are prioritised on the basis of potential for maximum benefit to the community



CONSULTATION

Before starting a mapping project geologists consult with Aboriginal, pastoral, or mining people with interests in the land, and with Department of Environment and Conservation and other government agencies



FIELD WORK

Geologists use 4WD vehicles to get to rock outcrops. They carry camping equipment, food, water, and safety equipment including HF radio and satellite phone. They may shift camp every few days as they map an area



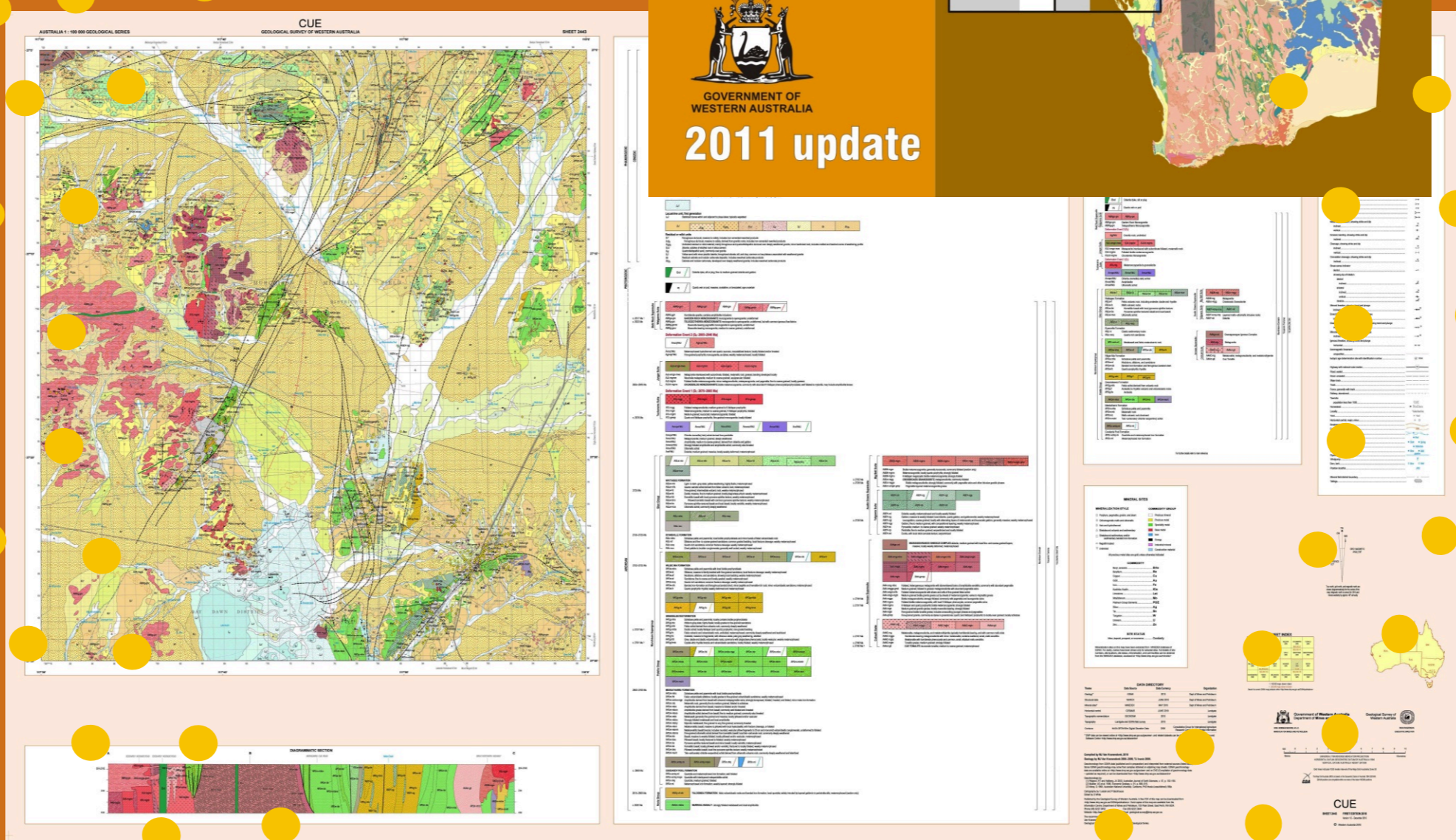
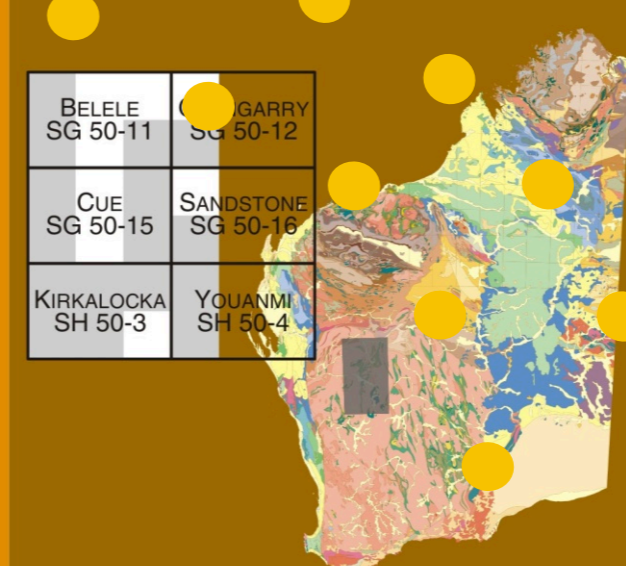
ROCK & SOIL SAMPLES

Geologists often need to collect small rock and soil samples for further study or chemical analysis



100K GIS MURCHISON

GOVERNMENT OF WESTERN AUSTRALIA
2011 update



THE FINISHED PRODUCT

Geological maps are plotted using large format printers within the department. The same geological information is also available within digital data packages

