

RESOURCE POTENTIAL FOR LAND USE PLANNING

MOUNT MANNING RANGE REGION

Geology

- Alluvial materials related to palaeodrainage systems
- Metamorphosed sedimentary and felsic-volcanic rocks
- Metamorphosed mafic volcanic and intrusive rocks
- Metamorphosed layered mafic intrusive
- Metamorphosed ultramafic rocks
- Metamorphosed banded iron-formation and iron-rich sedimentary rocks
- Granite and gneiss

Mineral potential

- High for gypsum, alunite, salt, building materials, uranium; deposits known
- Moderate to high for copper-lead-zinc; deposits known
- High for gold; deposits known. Moderate for copper-lead-zinc-silver; mineralization known
- Moderate to high for nickel, vanadium; deposits known
- Moderate to high for nickel-cobalt, gold; deposits known
- Moderate for magnesite; deposits known
- High for iron, gold; deposits known
- Facing stone; potential where minimal jointing

Regional planning recommendations

Changes should not restrict exploration or mining

No planning implications

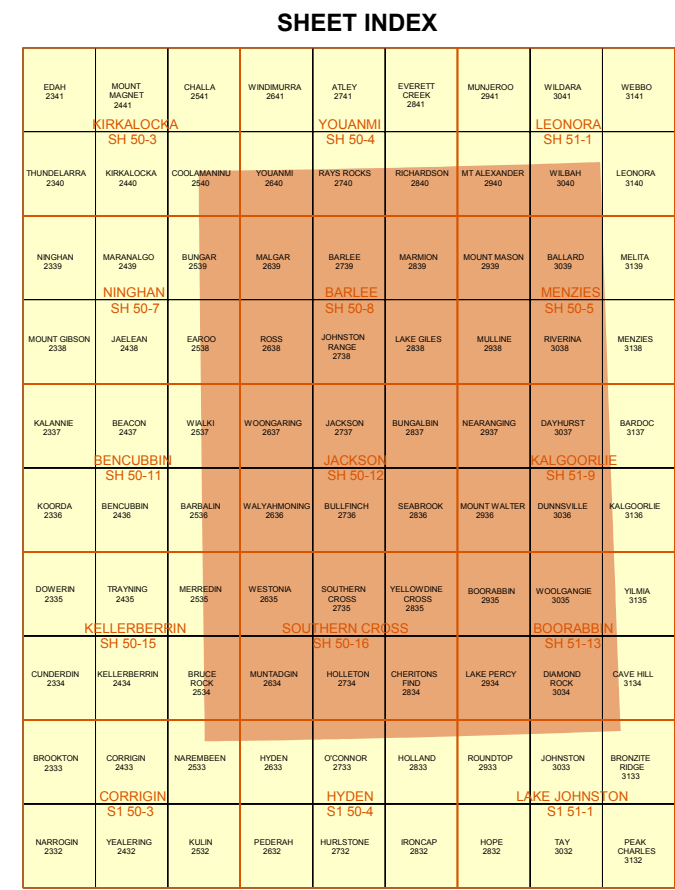
Conservation land tenure and proposals

- Existing Mount Manning Range Nature Reserve
- Proposed extensions to Mount Manning Range Nature Reserve
- Other conservation reserves
- Pastoral leases affected by Department of Conservation Land Management (CALM) proposals
- Unallocated Crown land, managed by Department of Conservation Land Management (CALM) (much of it was previously pastoral lease)
- Other proposed conservation areas

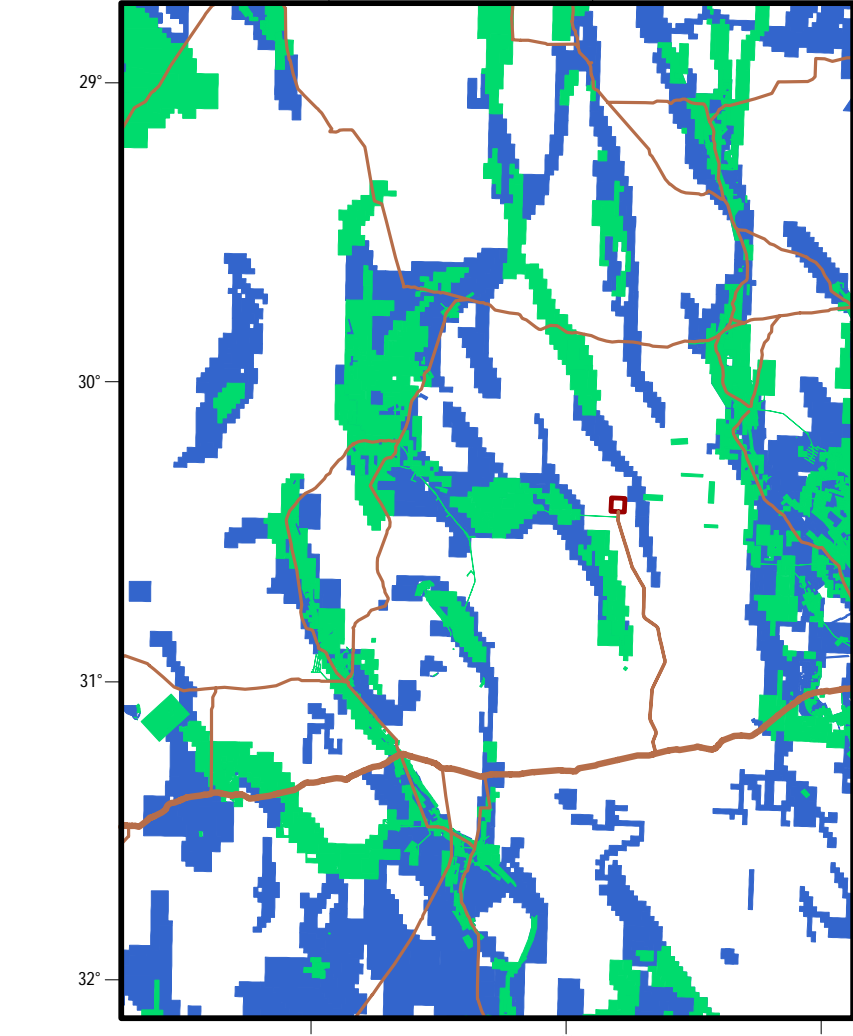
- Geological boundary
- Major faults
- Highway / Major road
- Minor road
- Railway
- Homestead
- Localities
- Shire boundary
- Watercourse
- Playa/salt lake

Mineral occurrences, deposits, and mines

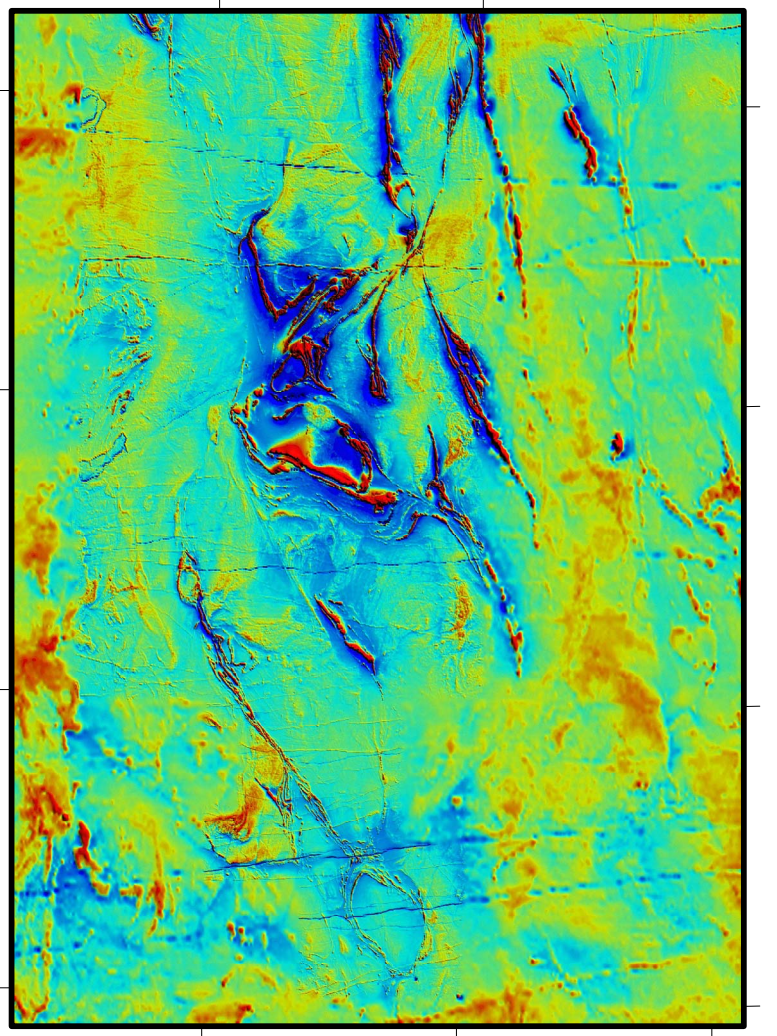
- Precious mineral — emerald
- Precious metal — gold
- Steel industry metal — nickel
- Base metal — copper, lead, and zinc
- Iron (named deposits or mines shown and Mount Jackson deposits J1 to J4 shown)
- Energy — uranium
- Industrial mineral — andalusite, dolomite, gypsum, kaolin, limestone, magnesite, mica, pegmatite (includes feldspar, beryl, and lithium), pyrite, quartz, silica sand, talc, and vermiculite
- Construction material — sand, gravel, and crushed rock



MINERAL TENEMENTS AND APPLICATIONS AS AT JUN 2005



TOTAL MAGNETIC INTENSITY



DATA DIRECTORY			
Theme	Data Source	Date Currency	Agency
Geology	GSWA* (1:500 000 Interpreted bedrock geology of Western Australia)	APR 2005	Department of Industry and Resources, WA
Geophysics	GSWA Geoscience Australia	APR 2005	Department of Industry and Resources, WA Department of Industry, Tourism and Resources, Commonwealth
Mineral occurrences (non-confidential)	WAMIN MINDEX	FEB 2005 FEB 2005	Department of Industry and Resources, WA Department of Industry and Resources, WA
Mining Act Tenements	TENGRAPH	JUN 2005	Department of Industry and Resources, WA
Existing and proposed reserves	CALM	JAN 2005	Department of Conservation and Land Management, WA
Former and existing pastoral leases	TENGRAPH	NOV 2003	Department of Industry and Resources, WA
Topography	DLI and GSWA field survey	AUG 2004	Department of Industry and Resources, WA

* GSWA and DLI databases are viewable online www.doir.wa.gov.au/databases/geology/, search www.doir.wa.gov.au/GSWA/OverviewCentre or can be downloaded from the GSWA Data and Software Centre www.doir.wa.gov.au/GSWA/OverviewCentre


Compiled by M. J. Freeman and C. J. Kojan, 2005

Cartography by S. Mulligan, 2005

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SCALE 1: 500 000

UNIVERSAL TRANSVERSE MERCATOR PROJECTION
Map Grid of Australia Zone 50

20 000 0 40
Kilometres

The Map Grid of Australia (MGA) is based on the Geocentric Datum of Australia 1984 (GDA84).
GDA coordinates are compatible with coordinates with zone 50 of the World Geodetic System 1984 (WGS84).

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