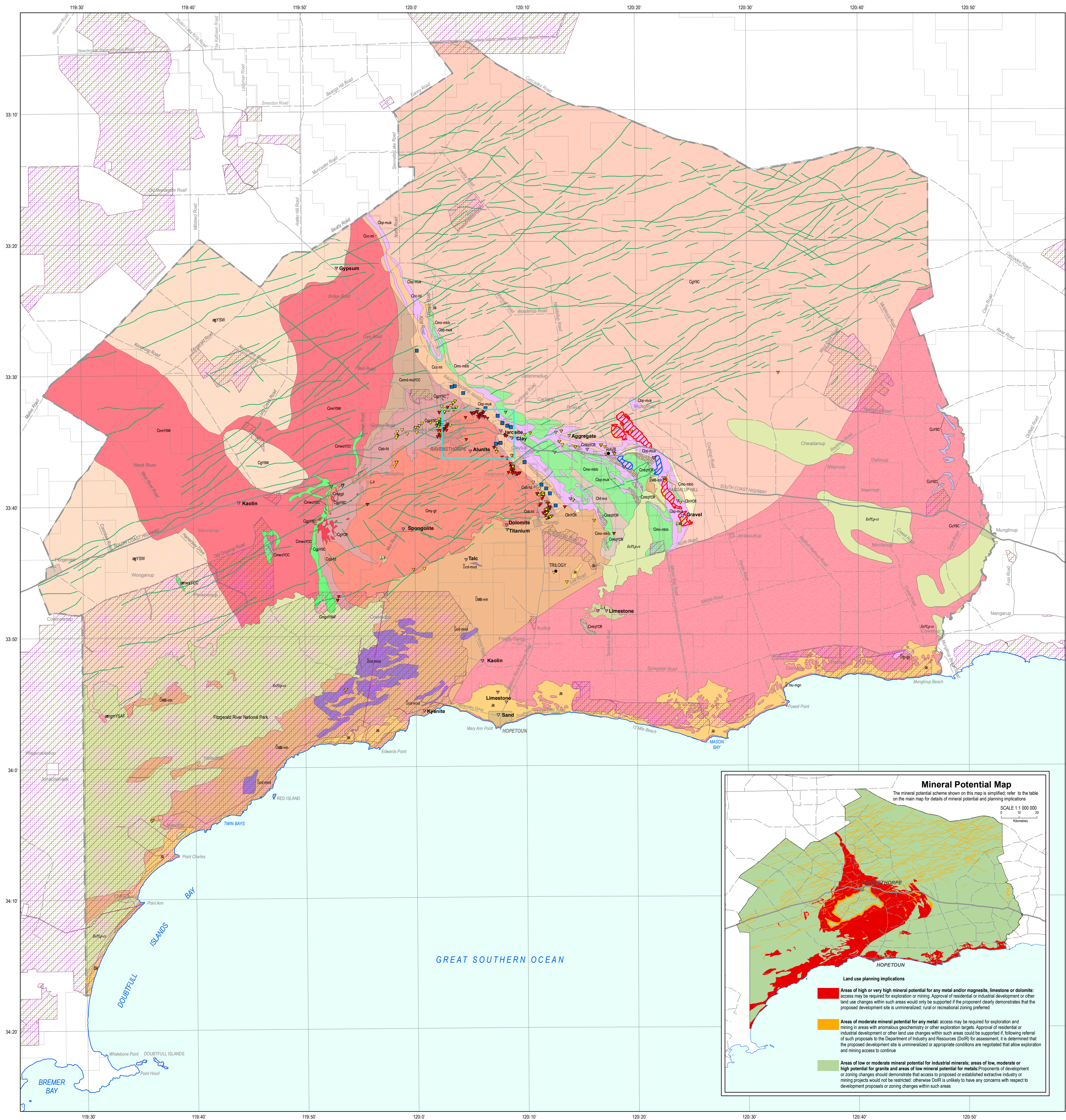


RESOURCE POTENTIAL FOR LAND USE PLANNING  
SHIRE OF RAVENSTHORPE



Rock Units (excluding unconsolidated regolith)

PHANEROZOIC	AR	Coastal limestone (calcareous) and derived beach sand and dune sand
	LL4	Calcrete
	EP1p-cs	PALLINUP FORMATION: spongolite, siltstone and sandstone
	Isd	Dolerite and gabbro dykes: four separate suites have been interpreted, mainly from aeromagnetic data
PALEOZOIC	Isd-mod	COWERDUP SILL: metadolomite and mafic schist
	Isd-mh	Quartz mica and quartzite schist, quartzite and dolomite
	Isd-py	FITZGERALD PEAKS SYENITE: syenite and quartz syenite
	Orgrwshf	Monzogranite; metamorphosed
	Orgrwshf	Granitic gneiss
	Isu-mgh	MUNGLINUP GNEISS: granitic gneiss, metamorphosed
	Cgrwsc	Pegmatite
	Cgrwsc	Granitic rocks, undivided
	Cuysc	Komatite; metamorphosed
	Ornd-muyc	Quartzofeldspathic schist and quartz mica schist interleaved with ultramafic rocks and amphibolite; minor banded iron formation
	Cgrwsc	Amphibolite and mafic gneiss
	Orngt	MANYUTUP TONALITE: tonalite; minor phases of diorite and granodiorite; metamorphosed
	Cob-fs	ANNABELLE VOLCANICS: metamorphosed felsic volcanics and volcanics; minor basalt and rhyolite
	Cgrwsc	Conglomerate, quartzite, feldspathic sandstone, metamorphosed
	Cuysc	Felsic volcanic rock, undivided; metamorphosed
	Or-ind	HATFIELD FORMATION: shale and sandstone and minor felsic volcanic and volcanoclastic rocks
	Cgrwsc	MAYDON BASALT: metabasalt with minor sedimentary rocks, dolerite, amphibolite
	Cgrwsc	BANDALLUP ULTRAMAFICS: metamorphosed komatiite basalt and pyroxenite; minor high Mg basalt and talc-rich schist
	Cgrwsc	CHESTER FORMATION: shale and massive bedded pyrite units with minor sandstone and conglomerate; minor felsic volcanics and volcanoclastics
	Cgrwsc	Granitic rocks, undivided
	Cgrwsc	Granitic and mafic gneiss, undivided

Mineral potential<sup>1</sup> (see inset map)

Very high for limestone, limestone and fill sand; low for other minerals
Very high for limestone; low for other minerals
Moderate for spongolite; low for other minerals
High for nickel and copper in mafic dykes in granitic terrain in the area north of Cheddarup; moderate elsewhere
Low for all minerals
Very high for gold, silver, base metals, dolomite and talc
Low for all minerals
Low for all minerals
High for graphite and vermiculite; low for all other minerals
Very high for lithium, tin, tantalum and beryllium
High for granite aggregate; moderate for gypsum; low for other minerals
Moderate for nickel and gold
High for gold and base metals
High for gold and base metals
Very high for gold, silver and copper within 2 km of the contact with the ANNABELLE VOLCANICS; low elsewhere
Very high for gold, silver and copper within 2 km of the contact with the MANYUTUP TONALITE; high for gold and base metals elsewhere
High for magnetite; Moderate for nickel, gold and base metals
Moderate for gold and base metals
High for gold and base metals
High for magnetite, gold and base metals; moderate for nickel
Ravensthorpe Range: High for gold, nickel and magnetite Bandallup Hill area: Very high for nickel and magnetite
Very high for iron, sulphur and manganese; high for base metals
High for granite aggregate; moderate for gypsum and dolomite; low for other minerals
Moderate-high for kaolin; low for other minerals

<sup>1</sup> Mineral potential is based on current geological knowledge and economics of mineral demand and extraction technologies. This changes with time and consequently the information presented may be amended in future. (see Mineral Potential Map)

Refer to: Hession, L.V. Ravensthorpe District, Resource Potential for land use planning. 1:115 000 scale. Geological Survey of Western Australia

Mineral occurrences, deposits and mines

Precious metal	Gold and silver deposits and former mines in the Ravensthorpe, Desmond and Kundip areas; gold and silver deposits at Tilgry, south of Kundip
Base metal	Copper deposits, former mines and prospects in the Ravensthorpe, Desmond and Kundip areas; copper mineralization at Tilgry in association with gold, silver, lead and zinc
Steel alloy metal	Nickel, cobalt and manganese deposits, mines and former mines in the Clayup/Bandallup Hill area; nickel and copper mineralization north of Cheddarup; manganese mineralization in the Fitzgerald River National Park and east of Kundip; a tungsten occurrence north of Cowerdrip
Iron	Iron ore (ironstone) and pyrite deposits in the Ravensthorpe Range
Speciality metal	Lithium, tin, tantalum and beryllium deposits near Mt Cattin and west of Quagup; a titanium and zircon prospect near Kundip
Industrial mineral	Magnetite deposits and former mines in the Clayup/Bandallup Hill area and northeast of Kundip; dolomite and talc deposits west of Kundip; limestone quarries east of Kuliba; a limestone quarry and a sand pit at Hopetoun; alunite, jarosite, gypsum, kyanite, kaolin and spongolite occurrences
Construction material	Granite aggregate (road metal) quarry near Boatup; a clay occurrence near Clayup; a gravel pit near Bandallup Hill

Department of Environment & Conservation managed lands	TRILOGY	Mining locality
Established conservation reserves (national park, nature reserve, conservation park)	HOPETOUN	Locality
Magnetite mining areas	Shire boundary	Highway
Bandallup Hill and related lateritic nickel mining areas (Ravensthorpe Nickel Operation)	Road, sealed	Road, unsealed
	Mining tenements	Live/Pending

Theme	Data Source	Data Currency	Agency
Geology	1:500 000 South Yilgarn Interpretive bedrock geology polygons and linear units, 2007	2007	Dept of Industry and Resources
Limestone	1:500 000 South Yilgarn Regolith geology, 2007	2007	Dept of Industry and Resources
Calcrete	1:100 000 Geology (GSWA) Ravensthorpe and Cockerup	1996	Dept of Industry and Resources
Pegmatite	1:500 000 State Geology (GSWA)	2008	Dept of Industry and Resources
Pallinup Siltstone	WAMINI / MINDEX *	2008	Dept of Industry and Resources
Mineral deposits	Tingitap *	2008	Dept of Industry and Resources
Minerals	GSWA Mineral Resources Bulletin 16	1996	Dept of Industry and Resources
Magnetite mining areas	1:100 000 Mineral Potential and Mineral Deposits of portion of the Shire of Ravensthorpe	2003	Dept of Industry and Resources
Nickel mining areas	GSWA	2008	Dept of Industry and Resources
Land use planning table	Landgate	2007	Landgate

\* GSWA and DoIR databases can be viewed online ([www.doir.wa.gov.au/geoview/](http://www.doir.wa.gov.au/geoview/)) or can be downloaded from the GSWA Data and Software Centre ([www.doir.wa.gov.au/datacentre/](http://www.doir.wa.gov.au/datacentre/))

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Published by the Geological Survey of Western Australia. Digital and hard copies of this map are available from the Information Centre, Department of Industry and Resources, 100 Plain Street, East Perth, WA, 6004. Phone (08) 9222 3459 Fax (08) 9222 3444 Website [www.doir.wa.gov.au](http://www.doir.wa.gov.au) Email [geological\\_survey@doir.wa.gov.au](mailto:geological_survey@doir.wa.gov.au)

The recommended reference for this map is: Kojan, C.J., 2008, Shire of Ravensthorpe, Resource Potential for land use planning, (scale 1:250 000), Geological Survey of Western Australia.

