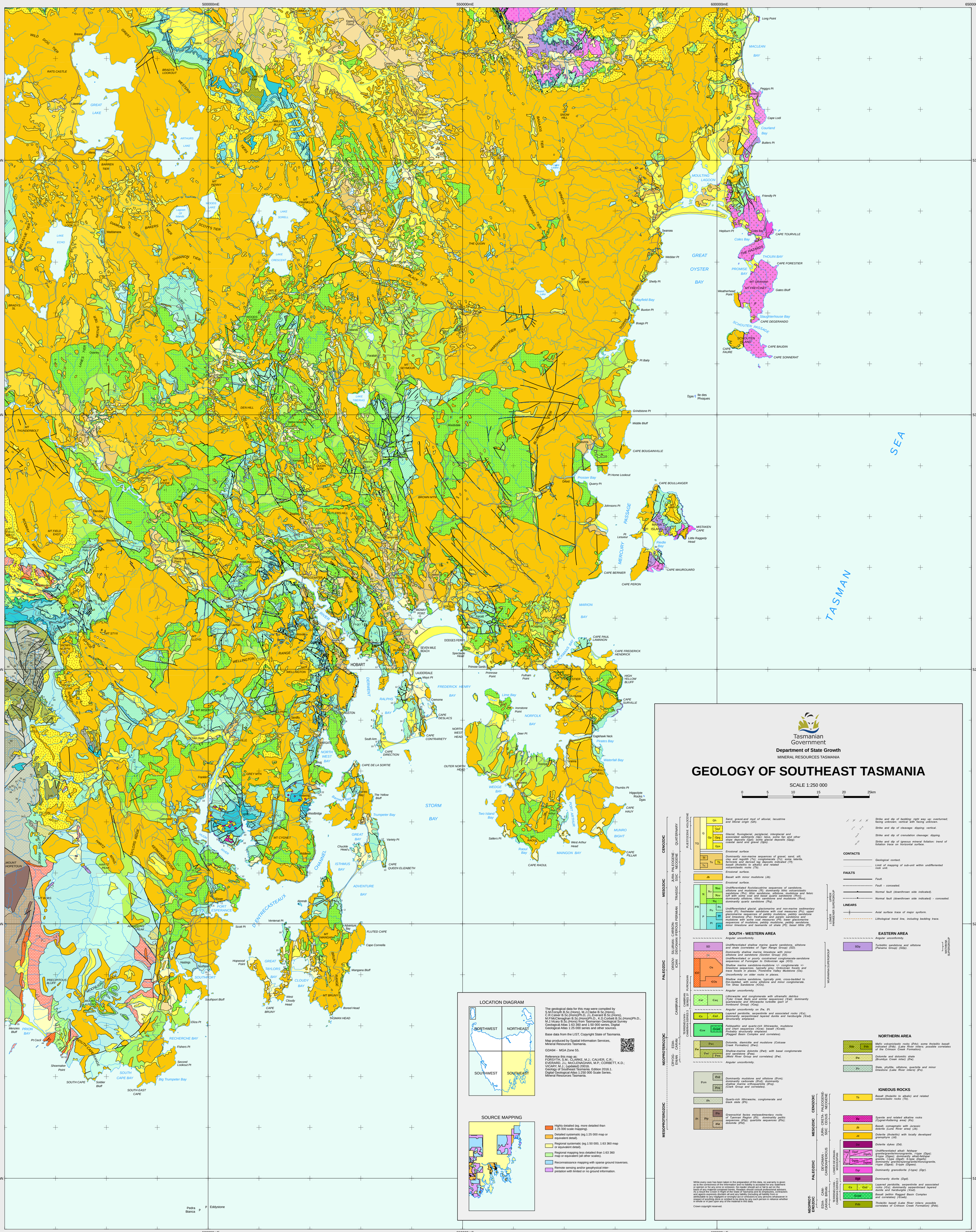

LOCATION DIAGRAM

The geological data for this map were compiled by S.M.Forsyth B.Sc.(Hons), M.J.Clarke B.Sc.(Hons), C.R.Calver B.Sc.(Hons)Ph.D., J.L.Everard B.Sc.(Hons), M.P.McClenaghan B.Sc.(Hons)Ph.D., K.D.Corbett B.Sc.(Hons)Ph.D., M.J.Vicary B.Sc.(Hons) from Tasmanian Geological Survey
Geological Atlas 1:63 360 and 1:50 000 series, Digital Geological Atlas 1:25 000 series and other sources.

Base data from the LIST, Copyright State of Tasmania.

Map produced by Spatial Information Services, Mineral Resources Tasmania.

GDA94 - MGA Zone 55.

Reference this map as:
FORSYTH, S.M.; CLARKE, M.J.; CALVER, C.R.; EVERARD, J.L.; McCLENAGHAN, M.P.; CORBETT, K.D.; VICARY, M.J.; (updated) 20016.
Geology of Southeast Tasmania. Edition 2016.1. Digital Geological Atlas 1:250 000 Scale Series. Mineral Resources Tasmania.

SOURCE MAPPING

- Highly detailed (eg. more detailed than 1:25 000 scale mapping).
- Detailed systematic (eg.1:25 000 map or equivalent detail).
- Regional systematic (eg.1:50 000, 1:63 360 map or equivalent detail).
- Regional mapping less detailed than 1:63 360 map or equivalent (all other scales).
- Reconnaissance mapping with sparse ground traverses.
- Remote sensing and/or geophysical interpretation with limited or no ground information.

Tasmanian Government
Department of State Growth
MINERAL RESOURCES TASMANIA

GEOLOGY OF SOUTHEAST TASMANIA

SCALE 1:250 000

0 5 10 15 20 25km

CENOZOIC	QUATERNARY	PLEISTOCENE HOLOCENE	Q	Qh — Sand, gravel,and mud of alluvial, lacustrine and littoral origin (Qh).
			TQ	Qpf — Glacial, fluvioglacial, periglacial, interglacial and associated sediments (Qp); talus, some fan and other slope deposits (Qpt); some glacial deposits (Qpg); coastal sand and gravel (Qps).
				Qp: Qpg, Qps
	PALEOGENE - NEOGENE			Erosional surface
				Tf, Ts, Tb, Tc — Dominantly non-marine sequences of gravel, sand, silt, clay and regolith (Ts); conglomerate (Tc); some laterite, ferricrete and derived lag deposits indicated (Tf); basalt (tholeiitic to alkalic) and related volcaniclastic rocks (Tb).
MESOZOIC	JURA-CRETACEOUS			Erosional surface.
				Jb — Basalt with minor mudstone (Jb).
	TRIASSIC			Erosional surface.
			TR	Rv, Rhv, Rvv, Rq — Undifferentiated fluviolacustrine sequences of sandstone, siltstone and mudstone (TR); dominantly lithic volcaniclastic sandstone (Rv); lithic sandstone, siltstone, mudstone and felsic tuff with some coal and basal quartz sandstone (Rhv); dominantly siltstone, lithic sandstone and mudstone (Rvv); dominantly quartz sandstone (Rq).
PERMIAN			PR	Pc — Undifferentiated glacial, glaciomarine and non-marine sedimentary rocks (P); freshwater sandstone with coal measures (Pc); upper glaciomarine sequences of pebbly mudstone, pebbly sandstone and limestone (Pu); freshwater and paralic sandstone and mudstone with some coal measures (PR); lower glaciomarine sequences of mudstone, pebbly mudstone, pebbly sandstone, minor limestone and tasmanite oil shale (Pl); basal tillite (Pb).
			P	Pu, Pl, Pb
PALEOZOIC	SILURIAN - CARBONIFEROUS	DEVONIAN		Angular unconformity.
			SD	Undifferentiated shallow marine quartz sandstone, siltstone and shale (correlates of Tiger Range Group) (SD).
				Dominantly shallow marine limestone with minor siltstone and sandstone (Gordon Group) (Go).
	ORDOVICIAN			Undifferentiated or poorly constrained conglomerate-sandstone sequences of Furongian to Ordovician age (€O).
			Os	Shallow marine sandstone-mudstone +/- conglomerate +/- limestone sequences, typically grey, Ordovician fossils and trace fossils in places. Florentine Valley Mudstone (Os).
			€O	Unconformity on older rocks in places.
				Shallow marine sandstone, typically pink, cross-bedded to thin-bedded, with some siltstone and minor conglomerate. Tim Shea Sandstone (€Os).
			€Os	Angular unconformity.
	CAMBRIAN	FURONGIAN	€ad, €aq	Lithicwacke and conglomerate with ultramafic detritus (Tyler Creek Beds and similar sequences) (€ad); dominantly quartzwacke and lithicwacke turbidite (part of Ironbound Group) (€aq).
				Angular unconformity on Pw, Pt.
		TERRENEUVIAN - CAMBRIAN SERIES 2	€s, €sd	Layered peridotite, serpentinite and associated rocks (€s); dominantly serpentinised layered dunite and harzburgite (€sd). Structurally emplaced.
			€cw, €cwb	Feldspathic and quartz-rich lithicwacke, mudstone and chert sequences. (€cw); basalt (€cwb). Probably structurally emplaced. (Ragged Basin Complex and correlates).
NEOPROTEROZOIC	EDIACARAN - CAMBRIAN		Pwc	Dolomite, diamictite and mudstone (Cotcase Creek Formation) (Pwc).
	CRYOGENIAN - EDIACARAN		Pw, Pwl, Pwa	Shallow-marine dolomite (Pwl); with basal conglomerate and sandstone (Pwa). (Weld River Group and correlates) (Pw).
				Angular unconformity.
MESOPROTEROZOIC			Pcm, Pcd, Pcq	Dominantly mudstone and siltstone (Pcm); dominantly carbonate (Pcd); dominantly shallow marine orthoquartzite (Pcq). (Clark Group and correlates).
			Ph	Quartz-rich lithicwacke, conglomerate and black slate (Ph).
			Pt, Pto, Pts, Ptd	Greenschist facies metasedimentary rocks of Tyennan Region (Pt): dominantly pelitic sequences (Pto); quartzite sequences (Pts); dolomite (Ptd).

Strike and dip of bedding: right way up; overturned; facing unknown; vertical with facing unknown.

Strike and dip of cleavage: dipping; vertical.

Strike and dip of crenulation cleavage: dipping.

Strike and dip of igneous mineral foliation: trend of foliation trace on horizontal surface.

CONTACTS

Geological contact.

Limit of mapping of sub-unit within undifferiented rock unit.

FAULTS

Fault.

Fault - concealed.

Normal fault (downthrown side indicated).

Normal fault (downthrown side indicated) - concealed.

LINEARS

Axial surface trace of major synform.

Lithological trend line, including bedding trace.

SOUTH - WESTERN AREA

EASTERN AREA

			Angular unconformity.
WURAWINA SUPERGROUP	MATHINNA SUPERGROUP	SDp	Turbiditic sandstone and siltstone (Panama Group) (SDp).

NORTHERN AREA

		€Pdv, €Pdb	Mafic volcaniclastic rocks (€Pdv); some tholeiitic basalt indicated (€Pdb). (Lake River inliers; possible correlates of the Crimson Creek Formation).
		€Pw	Dolomite and dolomitic shale (Brumbys Creek inlier) (€Pw).
		€Pp	Slate, phyllite, siltstone, quartzite and minor limestone (Lake River inliers) (€Pp).

IGNEOUS ROCKS

CENOZOIC	JURA-CRETACEOUS	PALEOGENE - NEOGENE	Tb — Basalt (tholeiitic to alkalic) and related volcaniclastic rocks (Tb).
MESOZOIC			Sk — Syenite and related alkaline rocks (Cygnet-Kettering area) (Ks).
			Jb — Basalt, comagmatic with Jurassic dolerite (Lune River area) (Jb).
			Jd — Dolerite (tholeiitic) with locally developed granophyre (Jd).
			Dd — Dolerite dykes (Dd).
PALEOZOIC	DEVONIAN - CARBONIFEROUS		Dgsf, Dgaf, Dgas, Dgass, Dgass — Undifferentiated alkali- feldspar granite/granite/monzogranite, I-type (Dga); S-type (Dgas); dominantly alkali-feldspar granite, I-type (Dgaf); S-type (Dgafs); dominantly granite/syenogranite/monzogranite, I-type (Dgas); S-type (Dgass).
			Dgr — Dominantly granodiorite (I-type) (Dgr).
			Dgd — Dominantly diorite (Dgd).
NEOPROTEROZOIC	EDIACARAN - CAMBRIAN	TERRENEUVIAN - CAMBRIAN SERIES 2 / LOWER DEVONIAN - MISSISSIPIAN	€s, €sd — Layered peridotite, serpentinite and associated rocks (€s); dominantly serpentinised layered dunite and harzburgite (€sd).
			€cwb — Basalt (within Ragged Basin Complex and correlates) (€cwb).
			€pb — Tholeiitic basalt (Lake River inliers; possible correlates of Crimson Creek Formation) (€pb).

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WARNING: INKS ARE LIGHT SENSITIVE.

THIS MAP IS EDITION 2016.1
BASED ON A STATEWIDE DATASET
Map generated: 14-Jul-2023