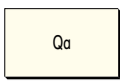


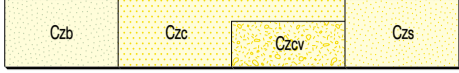
PHANEROZOIC

CAINOZOIC

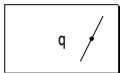
QUATERNARY



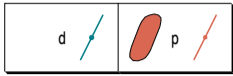
Qa Alluvium—clay, silt, sand, and gravel in channels and floodplains



Czb Black soil — clay and silt
 Czc Colluvium and rubble — sand, gravel, conglomerate, and sedimentary breccia forming sheet-wash fans and scree slopes
 Czcw Colluvium and alluvium — partly consolidated clay, silt, sand, and gravel forming dissected valley-fill deposits
 Czs Colluvium and alluvium — partly consolidated clay, silt, sand, and gravel; adjacent to drainage

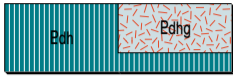


q Quartz veins, of various ages



d Dolerite dyke
 p Pegmatite dyke

c.1790 Ma



Edh **HART DOLERITE:** dark grey dolerite
 Edhg Pink to grey granophyre

Kimberley Group



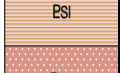
KING LEOPOLD SANDSTONE: white to pale brown, medium- to coarse-grained quartz sandstone and pebbly quartz sandstone



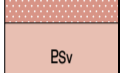
Dacite porphyry, fine-grained, massive or flow-banded



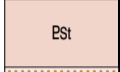
BEDFORD SANDSTONE: white to pale brown, well-sorted quartz sandstone



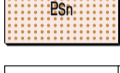
LUMAN SILTSTONE: green and brown siltstone and grey shale



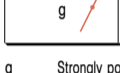
LANSDOWNE ARKOSE: purple-brown, grey, and white feldspathic sandstone and arkose; minor quartz sandstone and micaceous siltstone



VALENTINE SILTSTONE: grey and green, flaggy, laminated siltstone; minor rhyolitic ashstone and tuff



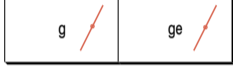
TUNGANARY FORMATION: buff and grey feldspathic sandstone and quartz sandstone; brown and green siltstone and phyllite; minor chert



O'DONNELL FORMATION: grey, white, and purple-brown granule sandstone and coarse-grained quartz sandstone; laminated siltstone; minor arkose and pebble conglomerate

c.1835 Ma

Speewah Group



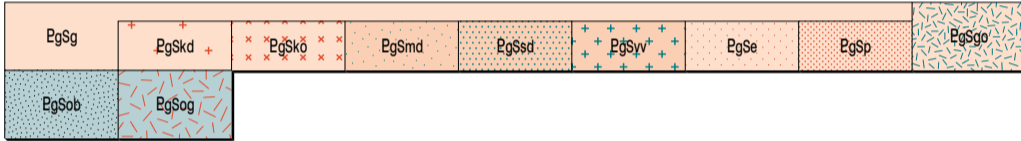
g Strongly porphyritic, tonalite to monzogranite dyke; coarse phenocrysts of plagioclase and K-feldspar
 ge Fine- to medium-grained, even-textured biotite granite dyke



Massive troctolite, olivine gabbro, and olivine gabbronorite

c.1835–1800 Ma

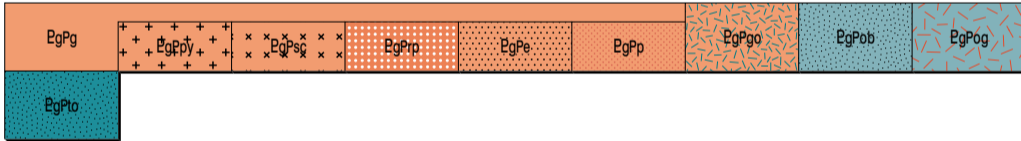
Sally Downs supersuite



EgSg Undivided granitoid rock
 EgSkd **KEVINS DAM MONZOGRANITE:** medium-grained, even-textured and weakly porphyritic biotite monzogranite
 EgSko **KOONDOLLOO MONZOGRANITE:** foliated to massive, medium- to coarse-grained biotite monzogranite
 EgSmd **MABLE DOWNS TONALITE:** medium- to fine-grained, foliated, hornblende-biotite tonalite; minor quartz diorite; extensively recrystallized
 EgSsd **SALLY DOWNS TONALITE:** medium-grained, even-textured biotite-hornblende tonalite; minor biotite-bearing quartz diorite and biotite leucogranite
 EgSsv **VIOLET VALLEY TONALITE:** massive to weakly foliated, medium-grained biotite tonalite and granodiorite; locally with hornblende
 EgSe Medium-grained, even-textured biotite monzogranite
 EgSp Medium- to coarse-grained, porphyritic biotite monzogranite and granodiorite
 EgSgo Net-vein complexes: abundant granitoid veins in mafic igneous rock; numerous rounded to angular inclusions of mafic igneous rock in granitoid rock
 EgSob Biotite-bearing norite, gabbronorite, and minor gabbro
 EgSog Biotite-bearing norite, gabbronorite, and minor gabbro with veins of intermediate hybrid rock; mafic and hybrid rock cut by abundant veins of coarse-grained porphyritic tonalite and granodiorite

c.1865–1850 Ma

Paperbark supersuite

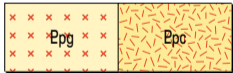


EgPg Undivided granitoid rock
 EgPpy **PANDANUS YARD MONZOGRANITE:** medium-grained, even-textured or weakly porphyritic biotite monzogranite
 EgPsc **SURVEY CREEK MONZOGRANITE:** medium- to coarse-grained, porphyritic biotite-hornblende monzogranite
 EgPrp Rapakivi-like granite: coarse-grained, foliated, biotite-bearing
 EgPe Medium-grained, even-textured biotite monzogranite
 EgPp Medium- to coarse-grained, porphyritic biotite monzogranite and granodiorite
 EgPgo Net-vein complexes: abundant granitoid veins in mafic igneous rock; numerous rounded to angular inclusions of mafic igneous rock in granitoid rock
 EgPob Biotite-bearing norite, gabbronorite, and minor gabbro
 EgPog Biotite-bearing norite, gabbronorite, and minor gabbro with veins of intermediate hybrid rock; mafic and hybrid rock cut by abundant veins of coarse-grained porphyritic tonalite and granodiorite
 EgPto **TOBY GABBRO:** biotite- and quartz-bearing gabbronorite and gabbro

c.1865–1850 Ma

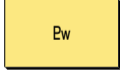


Foal Creek intrusion
 Eafi Massive leucogabbro and troctolite
 Eafg Amphibole-bearing melogabbro and olivine gabbro

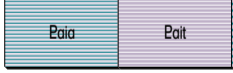


Epg **GREENVALE PORPHYRY:** massive, dark grey quartz-feldspar porphyry; medium to coarse phenocrysts of quartz, K-feldspar, and plagioclase
 Epc **CASTLEREAGH HILL PORPHYRY:** massive, fine-grained feldspar porphyry; fine phenocrysts of plagioclase and K-feldspar

c.1865–1850 Ma



WHITEWATER VOLCANICS: thick-bedded, crystal-rich, non-welded and welded acid ignimbrite and lava flows; minor agglomerate, lapilli tuff, and volcanoclastic sedimentary rock



Spring Creek intrusion
 EaiA Leucogabbro, leucogabbronorite, and anorthosite; rhythmic cycles
 Eait Troctolite, olivine gabbro, olivine leucogabbro, and olivine gabbronorite; rhythmic cycles
 EaiG Olivine gabbro, olivine gabbronorite, gabbronorite, and leucogabbro; weakly layered

c. 1840 Ma



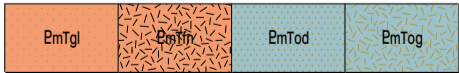
Sally Malay intrusions
 Eaya Leucogabbro, leucogabbronorite, and anorthosite; rhythmic cycles
 Eayg Olivine gabbro, olivine gabbronorite, gabbronorite, and leucogabbro; weakly layered
 Eayp Peridotite, dunite, wehrlite, harzburgite, and olivine gabbro

c. 1850 Ma

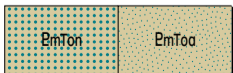
Tickalara Metamorphics



EmTh Quartz-K-feldspar-plagioclase-biotite-cordierite-andalusite-(muscovite) hornfels and hornfelsic schollen (raft) migmatite



EmTgl **EASTERN LEUCOCRATIC MONZOGRANITE:** foliated and metamorphosed leucocratic biotite-muscovite-(garnet-magnetite) monzogranite
 EmTfn Quartz-K-feldspar-plagioclase-biotite-sillimanite-muscovite-(andalusite-cordierite) felsic gneiss
 EmTod Orthopyroxene-(clinopyroxene)-hornblende-plagioclase-biotite-quartz dioritic to gabbroic granulite
 EmTog Amphibolite and dioritic to gabbroic granulite; cut by abundant veins of metatonalite and metatrandhjemite



EmTon Clinopyroxene-orthopyroxene-plagioclase-quartz-(hornblende-biotite) mafic granulite; local relict gabbroic textures
 EmToa Amphibolite; includes garnet or clinopyroxene; relict gabbroic textures

c. 1865 Ma



EmTan Amphibolite; locally amygdaloidal; with local garnet or clinopyroxene; interlayered with minor pelite, psammite, calc-silicate rock, and marble
 EmTpn Biotite-plagioclase-quartz-(K-feldspar-sillimanite-garnet-cordierite-spinel) migmatitic pelitic gneiss; numerous layers, pods, and angular to rounded schollen (rafts) of mafic granulite, psammite gneiss, and calc-silicate rock; intruded by discontinuous synmetamorphic mafic to intermediate dykes
 EmTpc Calc-silicate rock and marble; with minor banded iron-formation, quartzite, and amphibolite

KIMBERLEY BASIN

SPEEWAH BASIN

Bow River batholith

Western zone

Lumboo Complex

Central zone

All units may be extensively veined by granitoid rock

PROTEROZOIC