

Geoconservation – rules in Plain English for PWS Reserve Significance Reporting:

Treatment of Geoconservation data:

After downloading the Geoconservation database from the NVA, collective parent (umbrella) sites should be removed.

Geoconservation sites that are listed more than once, with different values of Class, Significance etc, are to be given a separate polygon for each unique classification. (Resulting in up to five polygons for some sites). This will enable all Class, Type and Significance information to be considered and shown for each site.

Each geoconservation site (or part) is considered within each PWS reserve.

Restricted sites are to be analysed and shown in output tables, but not in maps.

Significance Rule:

Geoconservation Sites within a reserve have been identified as **significant** if it is rated at least one star using the system below.

Sliver Rule:

Slivers of Geoconservation sites are to be excluded from significance reports. They are identified as slivers if they meet the rule:

area \leq 1 ha AND percent of the site \leq 1% AND percent of the site's extent in the reserve system (within that reserve) \leq 2%

Star Rating System:

For remaining geoconservation sites in reserves, a star rating system has been applied:

Given $A = (\text{area of site in reserve} / \text{area of site})$

Significance	$A \geq 0.85$ (85%)	$0.85 > A \geq 0.1$ (< 85%)	$0.1 > A \geq 0.01$ (< 10%)	$0.01 > A \geq 0.001$ (< 1%)	$0.001 \geq A$ (< 0.1%)
Global	*****	****	***	**	*
National	****	***	**	*	*
State	***	**	*	*	*
District	**	*			

Further Rules:

- If the reason for the reserve's establishment is for the geoconservation site, then the star rating should remain at the full rating for that level of significance (deduct no stars). This information is to be obtained from a defined list of reserves (lookup table below).
- The geocon features that have not been assigned a star-rating in the above table, are not to be considered as significant for the reserve reports.

Lookup table – Reserves that were created to protect geoconservation features, and the relevant features.

(Where a feature has multiple types, only the sub-types (classes) listed in this table should be considered for this rule. NB: the Sub-ID for sites of multi types may vary depending on the import of geoconservation sites data.)

Reserve Name	Geocon_id	Site Name	Site Class	Site Theme	Site Type	Site Significance
Alum Cliffs SR	2507	Gog Range Residual Strike Ridge/Cuesta	Surficial	Polythematic Landscape	Resistant Form	District
Bay of Fires CA	2440	Bay of Fires Holocene Dunes	Surficial	Coastal and Estuarine	Complex Coastal Landscape	District
Clifton Beach CA	2754	Cape Deslacs - Clifton Beach Dunefields	Surficial	Coastal and Estuarine	Complex Coastal Landscape	State
Coal Point CA	2181_2	Adventure Bay Fluvial Sedimentary Structures	Biogenic Forms and Palaeobiota	Fossil	Floral	District
Colliers Swamp CA	2612	Colliers Swamp - Seal Bay	Surficial	Polythematic Landscape	Polythematic Landscape	District
Double Sandy Point CA	2873	Northeast Tasmania Pleistocene Aeolian System	Surficial	Aeolian	Aeolian complex	State
Egg Beach CA	2293	Egg Beach Boulder Beach	Surficial	Coastal and Estuarine	Littoral or Peritidal	District
Egg Islands CA	2200	Egg Islands Tidal Delta	Surficial	Coastal and Estuarine	Estuarine and Deltaic	State
Eugenana SR	2421_2	Eugenana Devonian Cave Deposits	Biogenic Forms and Palaeobiota	Fossil	Floral	District
Eugenana SR	2421_1	Eugenana Devonian Cave Deposits	Tectonic	Structure	Relation	National
Eugenana SR	2421_3	Eugenana Devonian Cave Deposits	Surficial	Karst	Karst, Normal Meteoric Water	National
Fossil Bluff CA	2577_3	Fossil Bluff Miocene Fossil Site	Biogenic Forms and Palaeobiota	Fossil	Mixed Fossils	State
Gunns Plains Cave SR	2432	Gunns Plains Karst	Surficial	Karst	Karst, Normal Meteoric Water	State
Hastings Caves SR	2543	Hastings - Upper Creekton Rivulet Karst	Surficial	Karst	Karst, Normal Meteoric Water	State
Hastings Caves SR	2547_1	North Lune and Lune Plains Karst	Surficial	Karst	Karst, Normal Meteoric Water	State
Hastings Caves SR	2547_2	North Lune and Lune Plains Karst	Surficial	Karst	Karst, Other Water	State
Henty Glacial Erratics SR	2849	Henty Moraine Glacial Deposits	Surficial	Glacial and Cryogenic	Glacial Deposition	District
Junee Cave SR	3081	Junee - Florentine Karst Systems	Surficial	Karst	Karst, Normal Meteoric Water	National
Kimberley Springs SR	2433	Kimberley Thermal Spring	Surficial	Karst	Karst, Normal Meteoric Water	State
Lavinia SR	2622	Lavinia Point - Cowper Point Dunes	Surficial	Coastal and Estuarine	Complex Coastal Landscape	State
Liffey Falls SR	2501_3	Liffey Falls and Surrounds	Surficial	Fluvial, Alluvial and Lacustrine	Fluvial, Confined	District
Marriotts Falls SR	3036_2	National Park Escarpments and Falls	Surficial	Fluvial, Alluvial and Lacustrine	Fluvial, Confined	District
Mersey Hill Karst NR	2685	Mole Creek Karst	Surficial	Karst	Karst, Normal Meteoric Water	National
Mole Creek Karst NP	2685	Mole Creek Karst	Surficial	Karst	Karst, Normal Meteoric Water	National
Mount Barrow SR	3139	Mt Barrow Dolerite Horst Mountain	Surficial	Polythematic Landscape	Inherited Form or Landscape	State
Palana Beach NRA	2273_2	Palana Sand Blow and Subfossil Site	Surficial	Aeolian	Sandy aeolian, coastal and lakeshore	District
Peggs Beach CA	2157	Perkins Bay Coastal Depositional Landforms	Surficial	Coastal and Estuarine	Complex Coastal Landscape	State
River Derwent Marine CA	2241	Lower Derwent River Estuarine Delta and Flood Plains	Surficial	Coastal and Estuarine	Estuarine and Deltaic	District
Scamander CA	2441_1	Falmouth Lacustrine System	Surficial	Polythematic Landscape	Polythematic Landscape	District

Reserve Name	Geocon_id	Site Name	Site Class	Site Theme	Site Type	Site Significance
Scamander CA	2441_2	Falmouth Lacustrine System	Surficial	Coastal and Estuarine	Complex Coastal Landscape	District
South Bruny NP	2184	Cloudy Bay Mid-bay Spit	Surficial	Coastal and Estuarine	Complex Coastal Landscape	District
Stanley CA	2157	Perkins Bay Coastal Depositional Landforms	Surficial	Coastal and Estuarine	Complex Coastal Landscape	State
Strzelecki NP	2257_2	Fotheringate Bay Coastal Karst	Surficial	Karst	Karst, Saline Water	State
Tessellated Pavement SR	2988_1	Tessellated Pavement	Tectonic	Structure	Brittle	State
Tessellated Pavement SR	2988_2	Tessellated Pavement	Surficial	Coastal and Estuarine	Littoral or Peritidal	Global
The Nut SR	2158	The Nut Volcanic Neck	Surficial	Volcanic	Polygenetic or Mixed Volcanic	State
Three Sisters-Goat Island NR	2422_2	Goat Island Conglomerate	Tectonic	Structure	Relation	District
Three Sisters-Goat Island NR	2422_3	Goat Island Conglomerate	Tectonic	Structure	Ductile	District
Three Sisters-Goat Island NR	2422_1	Goat Island Conglomerate	Tectonic	Stateal Metamorphism	Low Pressure Facies	National
Trowutta Caves SR	2117	Trowutta - Sumac Karst Systems	Surficial	Karst	Karst, Normal Meteoric Water	National
Trowutta Caves SR	2116	Trowutta Arch	Surficial	Karst	Karst, Normal Meteoric Water	State
Unnamed CA Gunns Plains	2432	Gunns Plains Karst	Surficial	Karst	Karst, Normal Meteoric Water	State
Unnamed CA Mayberry	2685	Mole Creek Karst	Surficial	Karst	Karst, Normal Meteoric Water	National
Unnamed CA Sandspit River	2770_1	Rheban Beach - Earlham Lagoon	Surficial	Coastal and Estuarine	Complex Coastal Landscape	National