

## Rocky Outcrops are Landscape Features, Not Threatened Species

### The Eden Threatened Species Licence, Cliffs and Rocky Outcrops

The terms of licence under the threatened species conservation act (1995) for Eden states:

#### Condition 5.11 Rocky Outcrops and Cliffs

- a) Specified forestry activities are prohibited within areas of rocky outcrops and cliffs.
- b) In addition, exclusion zones of at least 20 metres wide must be implemented around all rocky outcrops more than 0.1 hectares (approx. 30m x 30), and all cliffs.
- c) Exclusion zones of at least 40metres wide must be implemented around rocky outcrops more than 0.5 hectare.

(NOTE: *It is not intended to exclude SFNSW from all areas that have scattered or stony or rocky ground cover.* Only those areas where rocks and exposed boulders cover greater than 70% of at least a 0.1 hectare area. Those areas that fall within the definition of Rocky Outcrops and Cliffs are considered to contain likely habitat for threatened flora and fauna)

The definitions of the TSL states;

"Outcropping rock cover" means escarpments, scree slopes (ie. slopes covered with small loose stones), and rocky outcrops (ie. areas where rocks or exposed boulders cover more than 70% in any 0.1 hectare area).

"Rocky outcrop" means an area where rocks exposed boulders cover more than 70% of any 0.1 hectare area;

OR areas with skeletal soils (areas with shallow soils where rocks are exposed), supporting heath or scrub (sometime with occasional emergent trees);

OR a combination of both.

These sites may occur where the geology varies from the surrounding area (eg rhyolite). Rocky outcrops include, but not limited to, all areas of Forest Type "rock" (FT234)

"Heath and Scrub"\* means areas dominated by woody shrubs and graminoids (grasses) generally less than two metres tall at maturity. Heath and shrub include all areas of Forest type "heath" (FT223) and Forest type "scrub" (FT224).

"Cliff" means a rocky slope greater than 70 degrees steep and greater than 3 metres in height.

### Intent of Condition

Conditions in the TSL are for the purpose of the protecting threatened species or the habitat of threatened species. Rocky outcrops in the TSL (1995) was aimed at protecting rare and endangered flora associated with rocky rhyolite out crops, and it was deemed necessary to exclude low intensity burns from these sites. Buffers were established to exclude fallen tree heads from these sites as they could possibly add fuel to these locations during hazard reduction burning operations.

### Background

The geology of Nullica S.F. is of Upper Devonian Boyd Volcanic complex. This complex consists of silicic rhyolite plugs and dykes separated by interstratified sediment rhyolite and basalt. Massive rhyolite outcrops are frequent and sometimes form spectacular cliffs. Substrates developed from the rhyolite are often strongly skeletal and on steeper slopes form developed scree. (Binns, 1990)



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(Albrecht, 1986) surveyed Nullica State forest and private property and drew attention to the biological significance of these rhyolite outcrops in the area for the presence rare and endangered flora species.

(Binns, 1990) also surveyed Nullica SF and found 4 species; *Leionema ralstonii* (previously named *Phebalium ralstonii*), *Westringia davidii*, *Prasphyllum* sp. aff. *morrissii* & *Hibbertia* sp. aff. *bermanniifolia*. to be locally endemic and regionally significant.

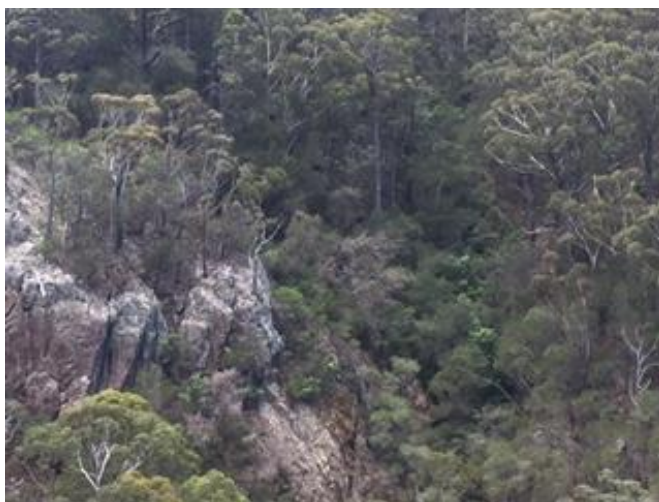
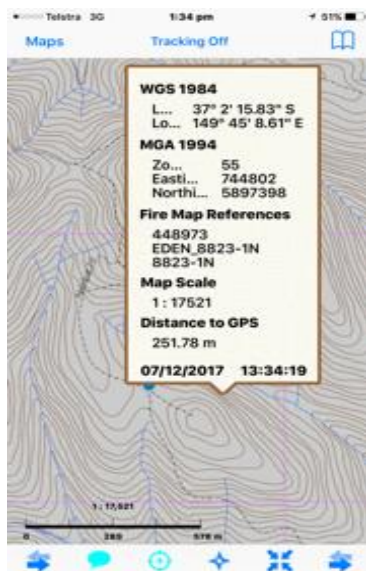
*Acacia constablii*, *Acacia georgensis*, *Genoplesium rhyolicitim*, *Leionema ralstonii*, *Westringia davidii*.

The report states;

*Westringia davidii* is a narrow endemic species confined to rhyolite outcrops above 250m in elevation to coastal ranges to the west of Eden and Pambula in the catchments of Yowaka and Pambula rivers. It is largely restricted to shallow organic loam soils that fringe rhyolite outcrops. This narrow niche approximates the ecotone between open forest dominated by Silvertop Ash.

*Leionema ralstonii*, like *Westringia davidii* appears to be restricted to upland rocky outcrops and dry ridges above 250m. The plant species typically associated with *Leionema ralstonii* include those which characterise the habitat of *Westringia davidii*.

**The following photos are of outcropping rock cover and rocky outcrops in Yowaka NP, formerly Nullica SF, the location was identified by (Binns, 1990).**





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(NPWS, 2002) developed a draft recovery plan for the following species;



Rhyolite Midge Orchid (*Genoplesium rhyolicitum*) is restricted in distribution to the south coast of NSW and is known to occur on six sites spanning an area of 7 by 10km on Nullica SF and Yowaka National Park. All documented locations are in very shallow soils overlying Rhyolite rock on a range of aspects.

This draft plan states that the occurrence of these rare and endangered species is limited in distribution and is associated with rhyolite outcrops. The plan discusses threatening processes and mentions the possibility of hazard reduction burns entering the edge of these plant communities. It recognises that hazard reduction burning may decrease the frequency of unplanned wildfires suggested by Binns (1999) *pers.comm.* the implications of which needs to be assessed.

## **Conclusion**

The intent of the condition was to protect Flora species that were locally endemic and regionally significant by reducing the possibility of hazard reduction burns entering the populations, although the impact of fire is still to be assessed.

These flora species are located in a small part of the Eden Management Area, “confined to rhyolite outcrops above 250m in elevation on coastal ranges west of Eden and Pambula in the catchments of Yowaka and Pambula rivers.”

The environmental group South East Forest Rescue believe that the rocky outcrop condition should apply to rocky outcrops of predominately Devonian Granite origin (Daines, 2013). There is no correlation between this geology and the locations of the flora which are of concern, quite the opposite.

The Environmental Protection Agency may have misinterpreted the poorly written condition 5.11 of the TSL and should be read in conjunction with the definitions of the TSL for “rocky outcrop” and “Heath and Scrub”.

There is no scientific reason for the basis of protecting rocky outcrops, other than those of Rhyolite origin, by doing so the EPA are just protecting rocks. These rocks should not require protection under the TSL unless they provide habitat for Threatened species not because they are considered a “landscape feature”. Landscape features are not threatened species and would



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not be subject to the TSL, therefore the rocky outcrop condition should only be applied when there is a presence of threatened species, ie on Rhyolite or in other geology, where threatened species are identified in rocky outcrops.

While "those areas that fall within the definition of Rocky Outcrops and Cliffs are considered to contain likely habitat for threatened flora and fauna," only a fraction of the Devonian Granite rocky outcrops protected in Tantawangalo and Glenbog State Forests in the past decade may contain threatened species. This explains why, in a recent judgement resulting from legal action taken against FCNSW by the EPA, in Glenbog State Forest, the judgement in part, stated:

43 *The EPA submits that although there is no evidence of harm or likely harm to the environment, pursuant to Bentley v BGP Properties Pty Limited [2006] NSWLEC 34; (2006) 145 LGERA 234, it is open to the Court to take into account the possibility of harm if the conduct is repeated. The EPA relies on the comments of Preston CJ of LEC at [175], where his Honour stated:*

*Harmfulness needs to be considered not only in terms of actual harm but also harm that is likely to occur in the future as a result of the commission of the offence. The seriousness lies not only in the actual death or damage to the plants of the threatened species and their habitats at the time of commission of the offence but also in the potential for harm which the acts constituting the picking of the plants might entail: see Axer Pty Ltd v Environment Protection Authority (1993) 113 LGERA 357 at 366.*

*"impacts were relatively minor and comparable to similar impacts which occur naturally through treefall, wildfire and the effects on rocks as trees grow from saplings to mature trees."*

There was no comment on the fact that many of the now protected rocky outcrop buffers had been thinned less than twenty years ago, without apparent harm to the environment or ecological values.

The EPA dogged pursuit of prosecutions and fines results in funds, that could be used to survey specific rocky outcrops for threatened flora and fauna and grow the knowledge base, being used to fund lawyers. State Forests subject to harvesting are intensely scrutinised, while biodiversity recovery of 60 percent of the Kosciusko National Park, burnt in 2002/03 wildfires and other fire ravaged reserves, goes largely unmonitored.

## **Works Cited**

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Chief Environmental Regulator of the Environment Protection Authority v The Forestry Corporation of New South Wales. [2017] NSWLEC 132

