

From: [Newman, Luke \(DoJ\)](#)
To: [TPC Enquiry \(DoJ\)](#)
Subject: FW: Submission to TPC including Cullens independant Vegetation Report to TEA
Date: Friday, 5 July 2019 3:27:27 PM
Attachments: [TEA to TPC Ramsay MVC DRAFT LPS Further Submssion pursuant to Hearing Direction 5-7-2019.pdf](#)
[Reedy Marsh Report-final.pdf](#)
[272 ricketts fieldmap1.pdf](#)
[272 ricketts veg map labels 3 090106.jpg](#)
[TEA to P Cullen Brief Final 18-6-2019.pdf](#)

Submission from TEA for Meander Valley LPS

-----Original Message-----

From: TEA Inc <Tea@antmail.com.au>
Sent: Friday, 5 July 2019 2:56 PM
To: Newman, Luke (DoJ) <Luke.Newman@planning.tas.gov.au>
Cc: Phil Cullen <philip.cullen@optusnet.com.au>
Subject: Submission to TPC including Cullens independant Vegetation Report to TEA

Dear Luke

Please find our Representation Response to the TPC's 13th June 2019 Direction from the Hearing into MVC's LPS.

Please Note TEA is seeking: TEA seeks that this matter be regarded as a Confidential Submission to the TPC at the time of and Enclosing Mr Cullen's Vegetation Report which Identifies Native Vegetation and Provides His Assessment of Mapped Vegetation Accuracy in Select Areas of Reedy Marsh in Tasmania.

This TEA Submission is to be considered with the independent report from Mr Philip Cullen, dated 4/7/2019 and which is enclosed as Appendix B.

This report is attached to this email. Please note Mr Cullen's address is included within his report. Please Note: We have not discussed him attending a hearing or providing any other input.

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Sincerely
Andrew Ricketts
The Environment Association (TEA) Inc.
PO Box 261
Deloraine 7304

The Environment Association (TEA) Inc

Caring for Home

Established 1990

PO Box 261 Deloraine Tasmania 7304

Email: Tea@antmail.com.au.

5th July 2019

John Ramsay, Delegate
Roger Howlet, Delegate and
Claire Hines, Delegate
Tasmanian Planning Commission
GPO Box 1691
Hobart
TAS 7001

By email care of: Newman, Luke (DoJ) Luke.Newman@planning.tas.gov.au

**The Tasmanian Planning Scheme's Draft Meander Valley Local Provisions
Schedule**

Response to the 13th June 2019 Direction from the Hearing

TEA Representation on the TPC's Direction

Dear Mr Ramsay, Mr Howlett and Ms Hines,

The Environment Association (TEA) has long been making representations and submissions to RMPS processes including through the RPDC, the RMPAT, and more recently the TPC and have had involvement in local government planning and forestry issues for many years. We are not represented by any other organisation. We have no political affiliations.

We have participated extensively in the planning processes that Meander Valley Council has run since 2001, which aimed to develop a new planning scheme. Currently some 17 to 18 years later there remains a Meander Valley Interim Planning Scheme 2013. No finalised Scheme! We consider this situation to be characteristic of a lack of understanding over fair and orderly planning.

This is the first public comment exposure of a statutory Draft Local Provision Schedule within the Tasmanian Planning Scheme (TPS). Only with the finalisation of a Local Provision Schedule (LPS) is the Tasmanian Planning Scheme enlivened. It seems this precedent is set to occur using the Meander Valley's LPS. It should not be rushed. There is a great many deficiencies.

In this submission, I write particularly to address vegetation mapping issues which arose at the TPC Hearing and which were the subject of a Direction dated the 13th June 2019.

Please Note TEA is seeking:

This matter be regarded as a Confidential Submission to the TPC at the time of and Enclosing Mr Cullen's Vegetation Report which Identifies Native Vegetation and Provides His Assessment of Mapped Vegetation Accuracy in Select Areas of Reedy Marsh in Tasmania.

This Submission to be considered with the Report from Mr Philip Cullen, dated 4/7/2019 and which is enclosed as Appendix B

This further submission responding to the Tasmanian Planning Commission's direction to TEA, dated 13th June 2019 from Chair, Mr Ramsay, as a part of the hearing into Meander Valley Council's Local Provisions Schedule.

Please note this submission includes Mr Cullen's independent vegetation report and his vegetation surveying work.

On 18th June, The Environment Association (TEA) contacted practising botanist, Phillip Cullen, whom we are aware is expert in the identification and mapping of vegetation communities in Tasmania.

TEA, a representor to Meander Valley Council's Local Provisions Schedule, requested a report on the accuracy of the mapping of native vegetation currently growing in Reedy Marsh, a locality north of the town of Deloraine, within the Meander Valley municipal area, in response to a Direction from the Tasmanian Planning Commission dated 13th June 2019.

The TPC Direction and brief provided by TEA, to Mr Cullen included a very short time frame. TEA advised Mr Cullen that the Tasmanian Planning Commission required a report by 28th June 2019. A short extension of time was sought and granted till the 5th July. The constraints of this timeframe are discussed below in the report.

During the TPC hearing into the Meander Valley Local Provisions Schedule (MV LPS), TEA raised with both the Meander Valley Council and the Tasmanian Planning Commission (TPC), anomalies and inaccuracies and omissions over vegetation mapping included in the MV LPS as Priority Vegetation in the Natural Assets Code.

TEA has criticised both the accuracy, completeness and adequacy of the Council's vegetation mapping from a time ever since the Priority Habitat overlay was incorporated at the time of the regionalised planning schemes, now known pertaining to this municipal area in a completed form as the Meander Valley Interim Planning Scheme 2013.

Indeed the writer has been raising concerns over inadequate vegetation mapping in Tasmania since the time of the Comprehensive Regional Assessment around 1996 which led to the Regional Forest Agreement of 1997.

Thus the independent consultant, Phil Cullen's report has been requested by TEA under the Direction of the Tasmanian Planning Commission (TPC), as a result of TEA raising the issue of vegetation mapping inaccuracies, anomalies and omissions by the State of Tasmania, including over Listed vegetation communities under the Schedule 3A of the Nature Conservation Act, which are present on the ground but not so mapped.

TEA identified some of these omissions, especially for Listed vegetation, for a number of sites, which it has local knowledge about in Reedy Marsh, in its evidence and submissions to the TPC during the MV LPS Hearing.

TEA has never suggested that its claims over vegetation mapping inaccuracies, anomalies and omissions by the State of Tasmania under its TASVEG III system are confined to the local area of Reedy Marsh. However, despite the examples which have been given all coming from this area, TEA maintains it has always raised such issues as examples of likely failings in the broader context and in the underlying system, especially of the state vegetation mapping, which must be used in one form or another.

In creating its Priority Vegetation layer under the Natural Assets Code of the Meander Valley Local Provisions Schedule of the Tasmanian Planning Scheme, it would seem as if Meander Valley Council has engaged and relied upon a GIS mapping system provided by Mr Rod Knight.

TEA has had contact with Mr Knight in the past and has engaged him. He is not a member of our Association and we have had little contact for several years.

We do have concerns about the results of the mapping Mr Knight has provided Meander Valley Council and we consider that in the main this is due to the problems and shortcomings of the State managed, TASVEG III, vegetation mapping. This could and should be much better. The writer knows about such problems from personal experience.

Mr Knight, as we understand it, developed a system which analysed State data, including the State, TASVEG III mapping of Tasmanian native, cleared and exotic vegetation, and in some cases provides

an improved set of mapping outcomes for land managers. However, TEA asserts that in some cases it simply fails entirely. The examples we raised before the TPC were those where in all cases it failed entirely.

It may be that for almost all Councils in Tasmania, in regards to their individual Priority Vegetation layer, within their Natural Assets Code, under their Local Provisions Schedule of the Tasmanian Planning Scheme, that Mr Knight's system, enhancing somewhat the State vegetation mapping of TASVEG III, will be almost exclusively used. So, the implications of any claim of such shortcomings, especially over the Listed vegetation communities are significant, particularly where they are mapped as cleared land (termed FAG in the TASVEG system).

We are writing this covering letter as a part of our further submission to the TPC not knowing the final content of Mr Cullen's work in response to our brief to him, which included the Direction from the Tasmanian Planning Commission.

TEA considers there are significant problems with the Direction the TPC provided, in that it actually represented something beyond which we agreed to attempt to provide.

It is especially concerning that the TPC expected TEA to obtain landowner permissions to enter private land, thus highlighting the failing of mapping and the vulnerability of Council's Scheme directly to the landowner. Let me be clear: TEA has not done this and will not be doing so.

TEA notes that the SPPs at LP 1.7 mandate the use of TASVEG III. It is noteworthy that the State Planning Provisions state regarding LP1.7 Code Overlay Maps:-

"LP1.7.5 Natural Assets Code

(c) The priority vegetation area must:

(i) include threatened native vegetation communities as identified on TASVEG Version 3 mapping, as published on the Department of Primary Industries, Parks, Water and the Environment's website and available on the Land Information System Tasmania;

(ii) be derived from threatened flora data from the Natural Values Atlas, as published on the Department of Primary Industries, Parks, Water and the Environment's website and available on the Land Information System Tasmania; and

(iii) be derived from threatened fauna data from the Natural Values Atlas, as published on the Department of Primary Industries, Parks, Water and the Environment's website for the identification of significant habitat for threatened fauna species; and

(d) the planning authority may modify the priority vegetation area derived under clause LP1.7.5(c) based on field verification, analysis or mapping undertaken by, the planning authority or a suitably qualified person on behalf of the planning authority, at a local or regional level, which:

(i) addresses any anomalies or inaccuracies in the mapping and data in sub-clause LP1.7.5(c);

(ii) provides more recent or detailed local assessment of the mapping and data in sub-clause LP1.7.5(c); or

(iii) identifies native vegetation of local importance, including habitat for native fauna of local importance."

It is quite clear that the mapped Priority Vegetation area in the MV LPS does not include all existing occurrences of threatened native vegetation communities. Far from it, we assert.

TEA questions whether MVC has the capacity to amend the Priority Vegetation layer. Yet without that capacity there is a major problem.

It is noted that it is expected that MVC would attend to any field investigations. Yet it declined to do so in the TPC Hearing. TEA is very concerned about this approach and MVC's position, which is unacceptable to TEA. "Working Together" - so much rubbish!

TEA does not have that capacity in regards to the operation of Mr Knight's proprietary mapping system, the Regional Ecosystem Model and nor should it be expected to do so.

Mr Knight's digital GIS mapping system is based, in vegetation community identification terms, on the State vegetation mapping: The digital mapping, TASVEG III, which is maintained by the Natural Values Atlas section of DPIPWE. This Tasmanian government department is also charged with administering Listed vegetation communities and Threatened species.

TASVEG III, in turn relies upon the descriptors from the book: 'From Forest to Fjaeldmark: Descriptions of Tasmania's Vegetation, Edition 2, with Text © Government of Tasmania 2013, Editors: A. Kitchener and S. Harris with Editorial assistance provided by: Jayne Balmer and Felicity Hargraves.

DPIPWE describe TASVEG III thus:

"TASVEG is a comprehensive digital map of Tasmania's vegetation, including sub-Antarctic Macquarie Island. The map depicts the extent of more than 150 vegetation communities, including coastal heathlands, eucalypt forest and alpine communities. To assist with using the map these communities are fully described in the accompanying technical manual - From Forest to Fjaeldmark: Descriptions of Tasmania's Vegetation (Edition 2).

TASVEG is a resource that underpins legislated native vegetation conservation provisions, policy, vegetation management agreements and monitoring at both State and Commonwealth levels. TASVEG is a vital tool for biodiversity research and monitoring, land use planning and sustainable management of Tasmania's unique natural resources."

And

"The Land Information System Tasmania (LIST) provides a web mapping service that can be used to access LISTmap data over the web. These services are suitable for users who wish to view DPIPWE data in their own mapping applications. The LISTmap ArcGIS REST endpoint provides a variety of formats suitable for consumption in a range of client applications. The URL for the ArcGIS REST endpoint is <http://services.thelist.tas.gov.au/arcgis/rest/services>. Clients using ESRI software can use this URL to create a ArcGIS Server connection and from there browse all the available layers."

Lowland forested environments across the central north of Tasmania include a significant amount of Eucalyptus ovata forested vegetation, which more often than not occupies private land and which often is in small discreet areas, usually of a riparian or poorly drained valley floor nature. Eucalyptus ovata forested vegetation is a Listed vegetation under Schedule 3A of the Nature Conservation Act.

In late June 2019, the Federal Environment Minister, Ms Sussan Ley approved as being Critically Endangered under the Commonwealth EPBC Act the Listing of Tasmanian Forests and Woodlands Dominated by Black Gum or Brookers Gum (Eucalyptus ovata / E. brookeriana) Ecological Community.

TEA considers that both the sites in Reedy Marsh, which the TPC directed TEA to investigate contain the Listed vegetation, E ovata forest but in any case we hope Mr Cullen will confirm this in his report.

In the event that Mr Cullen confirms our strong suspicions, TEA maintains that both sites would thus contain Critically Endangered forest, which without some intervention by the Tasmanian Planning Scheme and possibly Meander Valley Council, potentially cannot be saved under the Tasmanian Planning Scheme because the forest which exists in reality is mapped as already cleared land, in both examples.

The problem for TEA is that in identifying such anomalies and omissions, TEA ends up in the hands of MVC, whose Councillors may well trot off and behind closed doors inform the landowner/s concerned. This sort of thing has happened to TEA before of course, hence we raise it now and thus seek our submission be treated as an 'in camera' representation.

Before the TPS MV LPS Hearing, TEA did not know about this issue for one of the sites, we simply knew that recently some E ovata forest had been destroyed near the end of Wadleys Road for a powerline to a new dwelling. We became aware that it was not mapped under TASVEG III as E ovata but rather as cleared land during the TPC's hearing in fact.

During the MV LPS Section 35F (hearing) and section 35G (conference) processes, TEA raised with the Tasmanian Planning Commission the fact that multiple inadequacies of the mapping of the Priority Vegetation component of the Natural Assets Code, a number of times. Our incorporated community group also provided evidence of specific shortcomings in the State vegetation (TASVEG III) mapping. We also demonstrated that even when ground truthing had been done, that it has not been incorporated into the TASVEG III system.

TEA had provided to the Tasmanian Planning Commission, in its MV LPS Hearing, documents including two maps of the writers personal property, Echidna Creek, CT 204936/1 and CT 134752/1 in Reedy Marsh, which included a map of the State Vegetation layer titled: 'Forest Conservation Fund Field Map 1 Property: 272 A Ricketts Bioregion: Northern Slopes' and a second map dated 6th January 2009, titled 'Forest Conservation Fund Vegetation of Proposed Covenant', which was made under the Forest Conservation Fund and which identified the vegetation discovered on the subject land by another vegetation expert, Dr Richard Barnes, who at the time was performing property ground truthing assessments for the Forest Conservation Fund. I provided Mr Cullen with those two maps recently as another example of the extent of problems and shortcomings with TASVEG III. The provision of those maps to the TPC and subsequent discussion in the TPC Hearing overlooked a salient issue with the mapping, which only surfaced over the Wadleys Rd properties where FAG land (cleared land in TASVEG) actually carries forest. In terms of the writer's land there is a section of the property CT 134752/1, which shows FAG but where the aerial overlay shows forest. This particular forest dates back to 1973 and is now about 20 metres tall. It is regenerating native forest mainly of E obliqua species.

Overall, in regards to the writer's property, there is a massive variation between the state vegetation mapping of 2008 and the mapping done by Dr Barnes in 2009 for the same property, which was accepted as accurate by the Commonwealth of Australia in 2010, for the property Echidna Creek, CT 204936/1 and CT 134752/1, in Reedy Marsh, yet the vegetation remained unchanged over that short period. TEA wishes to note that from a perusal of the above two maps, the current TASVEG III mapped GIS layer does not, to this day, reflect the ground truth mapping performed by Dr Barnes under a Commonwealth funded RFA program for the two titles, CT 204936/1 and CT 134752/1, as provided to the TPC, by the landowner Mr Ricketts, through TEA to the TPC at the MV LPS Hearing.

TEA wishes to discuss and express concerns regarding the Tasmanian Planning Commission's direction to TEA, dated 13th June 2019 from Mr Ramsay.

"That TEA is to provide to the Commission, by close of business, on or before 21 June 2019, a further submission on:

(b) threatened native vegetation communities, listed under schedule 3A of the Nature Conservation Act 2002, not included in the priority vegetation area overlay in areas referred to at the hearing in the Rural Living Zone at Reedy Marsh. Any submission provided, must include a report prepared by a suitably qualified person and include the mapped boundary of any identified threatened vegetation communities and any proposed addition to the area to be covered by the priority vegetation overlay."

A Listed, threatened native vegetation community means a community of native vegetation specified in Schedule 3A; of the Nature Conservation Act 2002 (No. 63 of 2002).

Whilst TEA provided Mr Cullen with the text of the TPC Direction in the request for his services, TEA is unable to ask and has not asked Mr Cullen, nor do we expect him to attempt to provide mapping under Mr Rod Knight's proprietary system, which enhances the TASVEG III layer. TEA does expect

that Mr Cullen will provide some indication regarding the presence and possibly, extent of Listed Vegetation communities.

TEA respectfully considers that for the TPC to characterise the vegetation referred to in the hearing and the subject of the Direction as all within the Rural Living Zone to be incorrect.

TEA can state that Mr Cullen has visited the two sites, which were raised in the TPC hearing into MV LPS, in regards to an obvious omission of mapped native vegetation and claims of omissions of mapped E ovata forest (DOV), which is Listed under Schedule 3A of the Nature Conservation Act (2002) and where the writer provided on ground direction to assist Mr Cullen in finding and viewing the subject areas from a public land vantage point.

The first site (referred by TPC) towards the end of a Wadley's Road was inspected as a part of a methodology of confirming the accuracy of Reedy Marsh mapped vegetation from public Council maintained roads. It would seem there is a very substantial area of forest in this vicinity not mapped under TASVEG III. That certainly includes PID 6273990, 1583164, 1475358 for example and several others.

Regarding the second site, (referred by TPC), a 40 ha title, PID 3467976, at the confluence of Bryant's Creek and Brushy Rivulet, known now as Lot 1 Kellys Road Reedy Marsh, was inspected again under the guidance of the writer, Mr Ricketts of TEA, from the surrounding public land, which included from public Crown land and the Brushy Rivulet Conservation Area and the Reedy Marsh Conservation Area.

TEA advises that the writer also provided to Mr Cullen some photographic evidence, authored by Mr Ricketts, taken on the subject land (that is PID 3467976) at the time he was inspecting the land in the presence of the then owner, Mr Neil Kelly, then resident in Deloraine, in June 2013.

TEA is expecting that Mr Cullen's investigatory botanical work will clarify for the TPC and for MVC the actual vegetation on the land. It is immensely obvious from aerial photographic imaging that the whole of the land is vegetated.

It is TEA's non-professional opinion that should a planning scheme under the Tasmanian Planning Scheme's Local Provisions Schedule attempt to rely entirely on any sort of the mapped Priority Vegetation, which is based on the TASVEG III mapping (including Mr Knight's system, then there would be instances where Listed Vegetation would be missed, that is, would not form a relevant consideration in development decisions in some instances, including, obviously in Reedy Marsh.

TEA means no disrespect to the Tasmanian Planning Commission and its Directions request, but if such deficiencies are to be rectified then scientific evaluations and the rectification of errors or deficiencies in the State vegetation mapping system must be understood and solved, both in a wider planning system context, as well as in a Statewide context. In TEA's opinion a more systematic and scientific approach is required than that which was reflected in the TPC's Direction, which regrettably only related to two specific parts of Reedy Marsh. In TEA's view, not only is the State of Tasmania the body who should be providing the resources to do this work, rather than some unfunded, impecunious regional community group but TEA cannot see how, unless the TPC takes meaningful action over this matter, that further unforeseen and undocumented losses and inadequacies will occur and will cause the Critically Endangered to become more so or worse.

TEA considers the Section 35G conference, caused as a result of MVC's S35G report, where the writer, as an invitee to the conference, raised the accuracy of the TASVEG III mapping with Mr Knight, who was also in attendance, at the request of The Commission.

The writer asked Mr Knight whether he had, some years ago advised TEA Inc. whether TASVEG III was only about 60 to 65% accurate. Mr Knight responded, that the accuracy of TASVEG III ranges from 10% to 90%. In any case the conference was recorded and a transcript would be accessible to the Commission.

Regarding the request of the TPC and the methodology, which Mr Cullen appears to have adopted in responding to TEA's request, seeking expert assessment and advice, with the aim of bringing sufficient scientific rigour to a request, which considered the restricted time frame for completion, TEA considers that Mr Cullen is correct in not simply considering the problem of two examples but in adopting a more

systematic approach. Mr Cullen had to convince TEA of this approach. We now understand the benefits.

Mr Ricketts (the writer) of TEA requested this mapping from Mr Cullen with a very short time frame. Importantly, I advised Mr Cullen that I had not sought landowner permissions, to enter the private land in Reedy Marsh and this was only one of a number of reasons for identifying vegetation from public land.

TEA reiterates that the examples of vegetation misidentification (and omission) we had provided the TPC over TASVEG III and the Priority Vegetation layer of the MV LPS were just that, examples, nothing more.

We wish to emphasise that we certainly did not intend to merely target specific parcels of land but rather to identify specific systemic shortcomings, which will inevitably beleaguer the adequate conservation of Listed Schedule 3A vegetation communities in Tasmania, some now listed under the EPBC legislation.

The writer, Mr Ricketts has explained to Mr Cullen and now does so to the TPC that for TEA to contact private landowners, with such a request to enter and conduct a survey, as per the TPC's Direction statement, may result in a fear driven destruction of the natural values, which TEA has claimed to be misidentified and in some cases as being 'already cleared land' (FAG) and which are highly important for conservation. Indeed some of the vegetation, we assert, is obviously of the very highest conservation value.

TEA considers that such obligations to rectify obvious and proven systematic errors and omissions to by necessity fall on various levels of Government.

TEA wishes to emphasise that its representative, Mr Ricketts, has explained to the Tasmanian Planning Commission this is not the first time in a TPC process that TEA has identified such problems and it is not the first time in a TPC process, and further that Meander Valley Council has also through such processes in the past, been advised of such deficiencies. Why were such matters not rectified previously?

In the above context, TEA is massively reconciled and adamant that our genuine concerns, our factual information, our past evidence, would appear simply ignored. In that situation, we are pleased that now the TPC has listened to at least some of our concerns over vegetation mapping.

TEA understands from a discussion with Meander Valley Council that the new TPS planning scheme is entirely (that is 100%) dependent on the accuracy and completeness of the vegetation mapping and of the Council's Priority Vegetation overlay, which is a part of the Natural Assets Code under the Tasmanian Planning Scheme and which is constructed from Mr Knight's model which is based on TASVEG III vegetation mapping. TEA has not verified this claim.

TEA considers it a significant risk related to any deliberation made over developments, which may depend on the accuracy of the vegetation mapping itself, which we understand to be faulty.

TEA has also explained to the TPC in the MV LPS hearing that the Meander Valley Council's Priority Vegetation overlay, which is a part of the Natural Assets Code under the Tasmanian Planning Scheme, is not being applied to the Agriculture Zone, despite there being a large area of Priority Vegetation within that Zone. It seems that Meander Valley, who was obviously involved in making decisions about the extent of the Agricultural Zone, chose to ignore large tracts of priority vegetation in setting the zone boundaries. TEA covered this subject in our representation to MVC.

The sources of the various components of data that now comprise TASVEG need to be carefully analysed to understand the full extent of the erroneous aspects of the state vegetation mapping.

This submission includes files which may be sent separately but for your reference are:

Appendix A: The request by TEA for Mr Cullen's expert botanical surveying services is enclosed.

Appendix B: The report by Phill Cullen dated the 4th July 2019.

Appendix C: The FCF mapping for Mr Ricketts' property, provided by the owner through TEA during the MV LPS is enclosed – two maps.

Appendix D: Contains the list of Listed, threatened native vegetation community in Tasmania which means a community of native vegetation specified in Schedule 3A; of the Nature Conservation Act 2002 (No. 63 of 2002)

Conclusion

Mr Cullen's report not only supports our concerns and issues which we raised in good faith but has raised additional ones of concern, not only for the chosen blocks and not only for the chosen Zone but more broadly for the Natural Assets Code and the TASVEG III system which is enshrined in the SPP in LP1.7.5 Natural Assets Code.

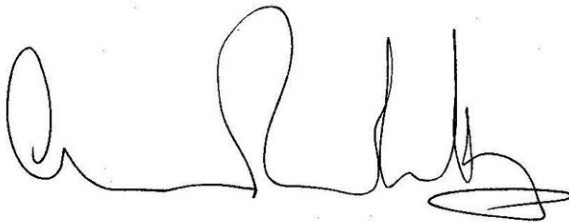
In summary, we remain of the view that the omissions, errors and inadequacies of the Draft MVC LPS including the Priority Vegetation component of the Natural Assets Code in Tasmania are unacceptable. TEA cannot alone rectify those and cannot operate Mr Knight's GIS model. TEA seeks the TPC direct that such rectification occur.

Further TEA considers that we have shown sufficient anomalies that the systemic problems especially regarding the Listed 3A communities, cannot be ignored more broadly across the State of Tasmania.

Because this is the first formal occasion to comment on a Statutory Draft of the first Local Provisions Schedule under the new Tasmanian Planning Scheme, there is an important opportunity to deal with some of the bigger picture issues, as well as the spatial, local, Zone and Code type issues, which usually do get some attention from residents in a draft LPS hearing process. In that context we remain concerned about the process. We can see the legislation is inadequate. We consider that this Priority Vegetation Issue is one such issue which will arise over and over as the TPC proceeds with LPS Hearings for other Municipalities.

It remains our opinion that The Tasmanian Planning Scheme, including these Draft MV LPS provisions are a poorly designed, inadequate and grossly unfair, complex arrangement, which has damaged the integrity of land use planning in Tasmania.

Yours sincerely



Andrew Ricketts
Convenor

Appendix A

TEA to P Cullen Brief Final 18-6-2019.pdf

Appendix B

Reedy Marsh Report-final.pdf

Appendix C

272_ricketts_veg_map_labels_3_090106.jpg

272_ricketts_fieldmap1.pdf

Appendix D

The Schedule 3A list of the Nature Conservation Act includes:

1. Alkaline pans
2. Allocasuarina littoralis forest
3. Athrotaxis cupressoides/Nothofagus gunnii short rainforest
4. Athrotaxis cupressoides open woodland
5. Athrotaxis cupressoides rainforest
6. Athrotaxis selaginoides/Nothofagus gunni short rainforest
7. Athrotaxis selaginoides rainforest
8. Athrotaxis selaginoides subalpine scrub
9. Banksia marginata wet scrub
10. Banksia serrata woodland
11. Callitris rhomboidea forest
12.
13. Cushion moorland
14. Eucalyptus amygdalina forest and woodland on sandstone
- 15. Eucalyptus amygdalina inland forest and woodland on cainozoic deposits**
16. Eucalyptus brookeriana wet forest
17. Eucalyptus globulus dry forest and woodland
18. Eucalyptus globulus King Island forest
19. Eucalyptus morrisbyi forest and woodland
- 20. Eucalyptus ovata forest and woodland**
21. Eucalyptus risdonii forest and woodland
22. Eucalyptus tenuiramis forest and woodland on sediments
23. Eucalyptus viminalis - Eucalyptus globulus coastal forest and woodland
24. Eucalyptus viminalis Furneaux forest and woodland
- 25. Eucalyptus viminalis wet forest**
26. Heathland on calcareous substrates
27. Heathland scrub complex at Wingaroo
28. Highland grassy sedgeland
29. Highland Poa grassland
30. Melaleuca ericifolia swamp forest
31. Melaleuca pustulata scrub
32. Notelaea - Pomaderris - Beyeria forest
33. Rainforest fernland
34. Riparian scrub
35. Seabird rookery complex
36. Sphagnum peatland
- 36A. Spray zone coastal complex
37. Subalpine Diplarrena latifolia rushland
38. Subalpine Leptospermum nitidum woodland
39. Wetland

18th June 2019

Phil Cullen

Botanist

Bruny Island

By email to: philip.cullen@optusnet.com.au

Dear Mr Cullen

I am writing seeking for you to identify vegetation communities that were classified under Tasmania's TAS VEG III system by officers of DPIPW, for the specific locality of Reedy Marsh.

This request has arisen because our Association criticised the accuracy of the mapping overlay of the Meander Valley local provisions schedule, for the Natural Assets Code, Priority Vegetation layer.

As you may be aware, the Natural Assets Code, Priority Vegetation layer was developed by a Mr Rod Knight, who has based his mapping on an enhanced version of Tasmania's TAS VEG III system. It is our opinion that Mr Knight's work has somewhat improved what was a very deficient set of maps.

Nonetheless, we provided a range of information to the Tasmanian Planning Commission, which identified considerable deficiencies that remain with Meander Valley Council's Natural Assets Code, Priority Vegetation layer. That can be provided

The Tasmanian Planning Commission has requested us to provide further information about the range of deficiencies. They especially appear to be primarily concerned about the fact that certain Listed native vegetation communities have not been mapped as native vegetation at all but are shown as cleared land and other vegetation. This was one of but by no means the whole of our concern.

We tendered into evidence mapping that showed that Tasmania's TAS VEG III system was grossly deficient. When we attended a section 35G TPS hearing recently, which was attended by Mr Rod Knight, when I raised that he had said previously that on average it was about 60 to 65% erroneous, he agreed that the TAS VEG III mapping was between 10% and 90% in error.

The Tasmanian Planning Commission has issued a direction to TEA:

"(b) threatened native vegetation communities, listed under schedule 3A of the Nature Conservation Act 2002, not included in the priority vegetation area overlay in areas referred to at the hearing in the Rural Living Zone at Reedy Marsh. Any submission provided, must include a report prepared by a suitably qualified person and include the mapped boundary of any identified threatened vegetation communities and any proposed addition to the area to be covered by the priority vegetation overlay."

We are aware from a conversation with you, that you share some of TEA's concerns and indeed that your concerns may extend beyond our understanding.

You have proposed verbally a methodology you consider would be scientifically sound. We're not in a position to question your methodology and can entirely understand your concerns regarding the limitations of the directions the Tasmanian Planning Commission has provided TEA.

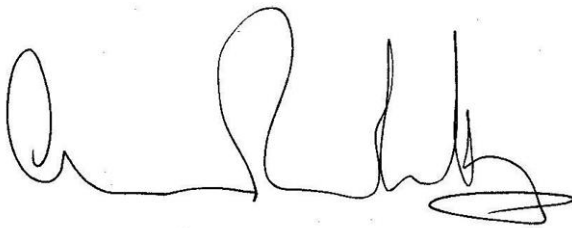
In that regard we share your concerns and consider that the public interest aspects of the matter are not resolved by providing our ad hoc rectification of the TAS VEG III mapping layer, which formed the basis of the Meander Valley Local Provisions Schedule Natural Assets Code Priority Vegetation overlay.

We consider we supported our view with sufficient evidence to call into question the veracity of the Council's Priority Vegetation overlay layer, because of the underlying faulty and inadequate TAS VEG III mapping. If one has an inadequate foundation, any work that is done to build a better system on the basis of that foundation, will also be inadequate and erroneous. TEA cannot see a ready solution to this problem but we wish to quantify the extent of the inadequacy in some systematic way and believe that this may be all that we could possibly do in the circumstances, in a circumstance where the State of Tasmania should have done the work to rectify the manifest deficiencies of its vegetation mapping, long, long ago but has repeatedly failed to do so.

TEA has, based on your suggestion, produced some data entry tables for the field-work, which we anticipate you will conduct, investigating the existing vegetation, which prevails across Reedy Marsh in June 2019. We supply those separately for the field days.

I look forward to working with you on this project by providing some local guidance to any field work, if you require.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Andrew Ricketts', with a stylized, cursive script.

Andrew Ricketts
Convenor

Phone: (03) 6368 1343

The results of a brief reconnaissance to assess the accuracy of TASVEG 3 vegetation mapping in the Reedy marsh region of north central Tasmania.

Philip Cullen¹

4/07/2019

Summary

The accuracy of TASVEG 3 mapping in the Reedy Marsh region was assessed using a road based survey and an inspection of 2 substantial patches of forest, currently mapped as agricultural land in TASVEG 3, that are known to support the Commonwealth listed critically endangered vegetation community Tasmanian Forests and Woodlands Dominated by Black Gum or Brookers Gum (*Eucalyptus ovata* / *E. brookeriana*) Ecological Community.

Overall the accuracy of TASVEG 3 mapping was assessed as being only 52% correct. This level of accuracy drops to 31% if only native forest vegetation is considered. There are considerable areas of native forest that are mapped in TASVEG 3 as agricultural land. Some of these areas support the Commonwealth listed critically endangered vegetation community Tasmanian Forests and Woodlands Dominated by Black Gum or Brookers Gum (*Eucalyptus ovata* / *E. brookeriana*) Ecological Community.

These inaccuracies highlight the inadequacy of TASVEG 3 mapping as a tool/data source for land use and conservation planning.

Background

The Environment Association (TEA) Inc. requested a survey to establish the accuracy of TASVEG 3 vegetation mapping in the Reedy Marsh locality of central north Tasmania.

Concerns expressed by the TEA have been accepted by and now raised by the Tasmanian Planning Commission about the use of current TASVEG 3 mapping, as input data into the Regional Ecosystem Model (REM). The REM has been adopted for land use planning and development proposal decisions by the Meander Valley Council.

The following report is in response to the Tasmanian Planning Commission's direction to TEA, dated 13th June 2019 from Mr Ramsay.

"That TEA is to provide to the Commission, by close of business, on or before 21 June 2019, a further submission on:

(b) threatened native vegetation communities, listed under schedule 3A of the Nature Conservation Act 2002, not included in the priority vegetation area overlay in areas referred to at the hearing in the Rural Living Zone at Reedy Marsh. Any submission provided, must include a report prepared by a suitably qualified person and include the mapped boundary of any identified threatened vegetation communities and any proposed addition to the area to be covered by the priority vegetation overlay."

¹ 11 Salvator Rd., West Hobart, Tas., 7000. Email: Philip.cullen@optusnet.com.au mob: 0428108434

The concerns have been raised because it has become apparent that considerable areas on the TASVEG 3 mapping are mapped incorrectly. These inaccuracies not only apply to errors in identification of the TASVEG 3 community present on the ground but also to the fact that considerable blocks of forest vegetation have been mapped as cleared land.

It was initially proposed that the vegetation communities present on these blocks of forest be mapped in detail through on ground survey (see above) but time constraints and the fact that much of the forest in question was located on private land dictated a different approach.

TEA indicated that there are at least 2 large patches of unmapped *Eucalyptus ovata* forest in the region. *Eucalyptus ovata* forest and woodland (TASVEG 3 code DOV), is Listed under Schedule 3A of the Nature Conservation Act (2002). These blocks are on Wadley's Road and at Brushy Rivulet. There are some 8 titles under separate ownership encompassing the area on Wadley's Rd and a further owner for the Brushy Rivulet title. TEA requested this mapping with a very short time frame. Importantly, TEA advised that it had not previously sought landowner's permission, to enter the various private blocks. It was not possible to arrange access to these blocks in the time available.

After discussions with TEA it was agreed that the survey should take 2 approaches: 1. Prepare vegetation maps of the areas in question from aerial imagery, topographic and geological mapping, assessments conducted from roadsides on the boundaries of the blocks, and any other additional information available; 2. test the accuracy of the TASVEG 3 mapping for the area by conducting a road based survey which compared the actual vegetation present with the vegetation map in an objective manner. This second approach would not only assess the accuracy of TASVEG 3 mapping but also potentially identify more areas of vegetation that are a priority for conservation. The following report details the findings of this survey.

The road based survey was conducted along 5 roads in the Reedy Marsh area. The five roads chosen for vegetation community surveying were Wadley's Road, John's Road, Silver Wattle Drive, Farrell's Road, and Larcombe's Road.

Qualification to provide expert advice

Philip Cullen is a geomorphologist, botanist, and landscape ecologist. His qualifications include a BSc. in Forestry and a MSc. in ecology. He has worked for universities, local and State government, and the private sector. He has been working as a consultant, in Tasmania and elsewhere in Australia, for 27 years.

He has gained extensive experience in vegetation mapping in Tasmania, Queensland, the Northern Territory, and Western Australia.

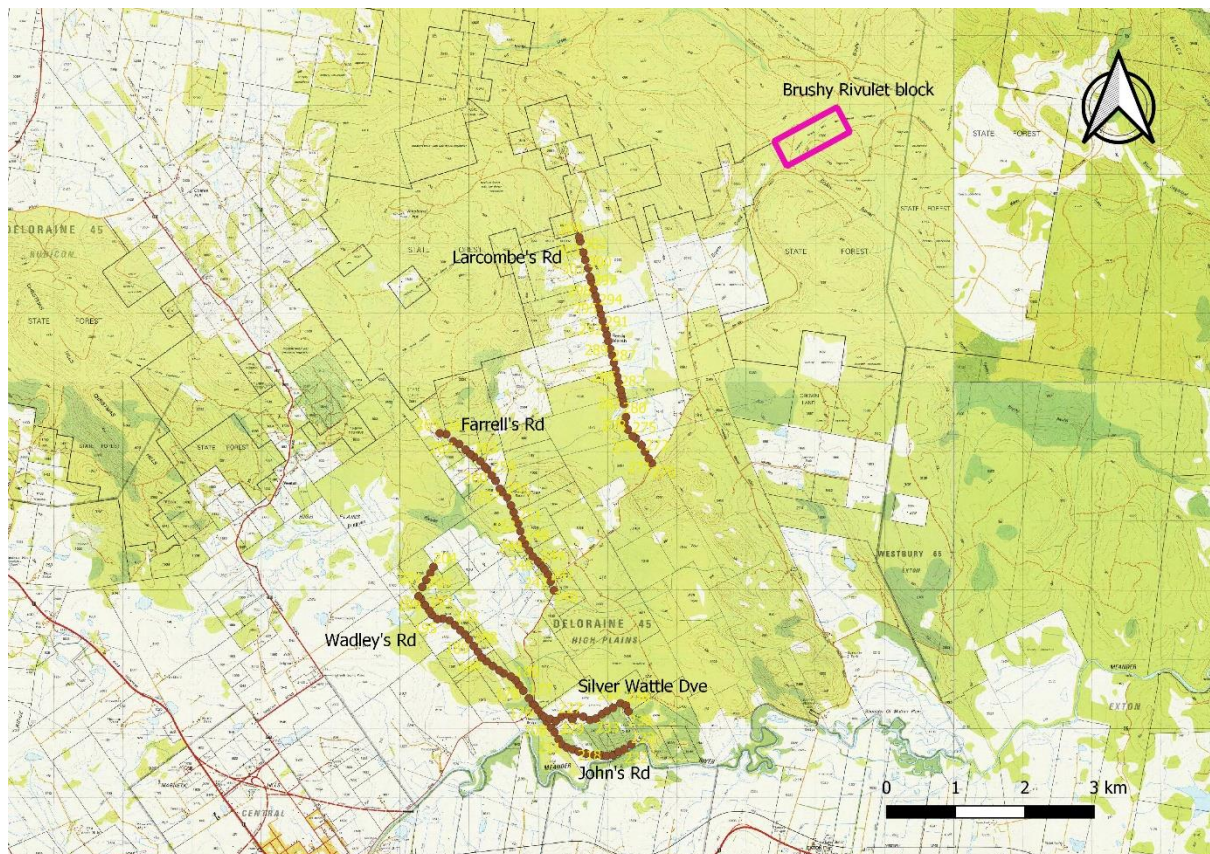
In Tasmania he has conducted vegetation mapping and ground truthing of vegetation maps for the Regional Forest Agreement, the Forest Conservation Fund, the development of Mr Rod Knight's Regional Ecosystem Model (which has been adopted by some local governments in Tasmania to assist with land use and development planning), and on a wide range of Natural Values Assessments throughout the State.

Philip Cullen's qualifications and experience provide him with the expertise in respect to the current mapping project of TASVEG 3 vegetation communities.

Study area

The study area includes sections of Wadley's Road, John's Road, Silver Wattle Drive, Farrell's Road, and Larcombe's Road plus a forested block on Brushy Rivulet in the locality of Reedy Marsh (See figure 1)

Figure 1. Study sites location



Methodology

Road side survey

The road side vegetation surveys were conducted in a manner so as to avoid the subjective location of the sample points and eliminate the possibility of sampling with bias towards areas with known errors. The first sample point was located at the start of each road. A hand held GPS was used to locate each sample point. At the point, the TASVEG 3 community was noted for the vegetation occupying an area of approximately 50 m diameter on the right and left side of the road. Thus 2 samples were made at each point. The next and subsequent points were located at 100 m intervals along the road. This distance was determined with the vehicle odometer.

The data from the sample points was entered into a GIS data base and overlaid on to TASVEG 3 vegetation mapping. TASVEG 3 mapping was assessed as being correct or incorrect for each sample point on the right hand and left hand sides of the road. Summary statistics were prepared for the survey.

Detailed vegetation mapping

Vegetation maps of two areas known to contain *Eucalyptus ovata* forest that are incorrectly mapped in TASVEG 3 were drawn using TASVEG 3 vegetation codes.

The Brushy Rivulet block is located on private land. The block was reconnoitred by viewing with binoculars where possible, inspecting google earth imagery and accessing data available on the LIST such as geology, drainage and cadastral overlays. Some photos of the block taken by Mr Andrew Ricketts, on an earlier occasion during a visit with the previous owner, where viewed also.

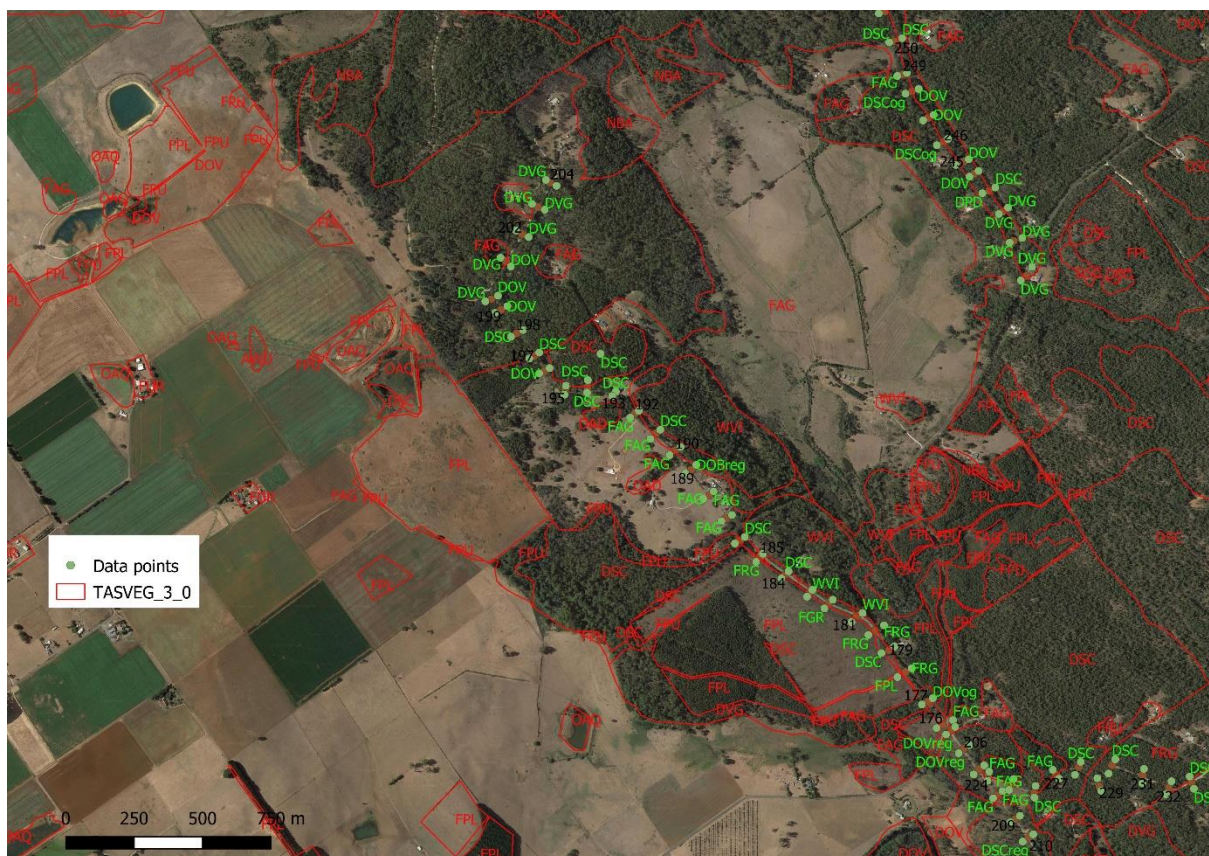
The patch of *Eucalyptus ovata* forest on Wadley's Road was mapped in a similar fashion as it too was located on private land. In this case, road side views afforded a much better view of the patch.

Results and Discussion.

Road side survey

The location of sample points used in the road side survey, the vegetation recorded at each point and the TASVEG 3 mapping is shown in figures 2 to 5. The TASVEG 3 codes (for example DOV, *Eucalyptus ovata* forest and woodland) used on these maps are listed in Appendix 1.

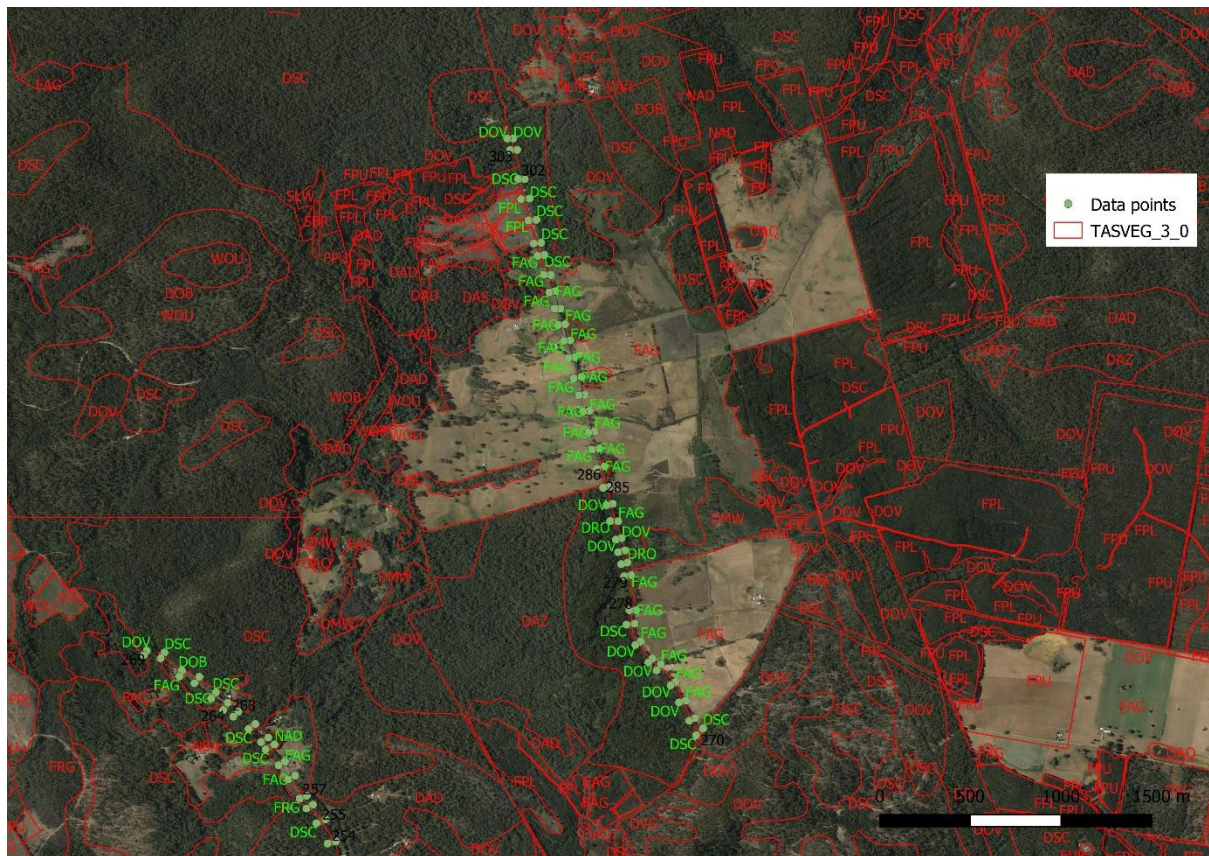
Figure 2 Wadley's Road samples.



[illegible]

A detailed map of the study area, showing a mosaic of different vegetation types. The map is overlaid with a red line network representing the TASVEG_3_0 classification. Numerous data points are plotted on the map, each labeled with a code (e.g., DSC, DOV, FAG, DVG) and a number (e.g., 204, 205, 202, 198, 196, 193, 195). A legend in the bottom right corner indicates that green dots represent 'Data points' and red lines represent 'TASVEG_3_0'. A scale bar in the bottom left corner shows distances from 0 to 750 meters.

Figure 5. Larcombe's Road samples



Overall accuracy of TASVEG.

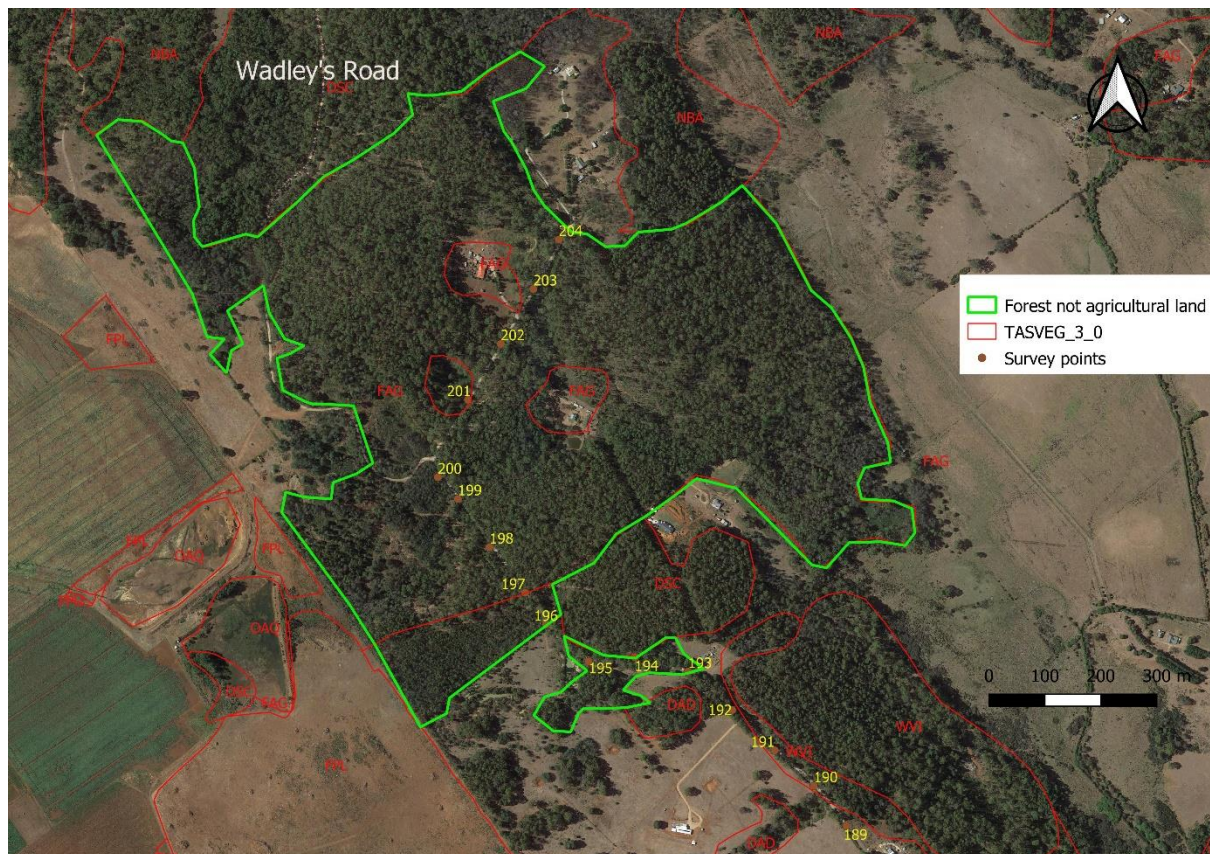
Of the 258 sample points along the 5 roads surveyed in Reedy Marsh, TASVEG 3 mapping agreed with the survey results at only 135 points. Based on these figures, TASVEG mapping has an accuracy level of 52%.

If the sampled points where the recorded vegetation is agricultural land (TASVEG code FAG), forest plantation (TASVEG codes FPL and FPU), and regenerating agricultural land (TASVEG code FRG), and this record confirms the TASVEG mapping at the point, are excluded, it is possible to estimate the accuracy of the TASVEG 3 mapping of the forested. The rationale for this approach is that it is relatively easy to determine these (FAG, FPL, FPU and FRG) vegetation types from aerial imagery and that one would expect that the identification of these types to be correct. There are 180 GPS sample points that fall within forested land. Only 56 of the 180 points sampled show a match between the survey data and the TASVEG 3 mapping. The accuracy of TASVEG 3 mapping on forested land drops to 31%.

More alarmingly, at 40 of these sample points (22%), TASVEG 3 mapping records agricultural land (FAG) where the current survey recorded some form of forest community (not including FRG, regenerating cleared land, or FPL and FPU, plantation). Many of these sample points occur in a large patch of forest vegetation which is incorrectly tagged in TASVEG 3 at the north western end of Wadley's Road (Figure 6). There are other examples scattered throughout the survey area. It is difficult to comprehend how such a large area of forested land can be erroneously mapped as agricultural land. It should be noted that the 1:25,000 Deloraine mapsheet 4640 of 1982 shows

most of this land Wadley's Road to be forested. The 1:25,000 Deloraine map sheet 4640 Edition 2 of 1988 also shows the area to be forested. Aerial imagery available on the List shows forest in this area. There appears to be some serious deficiencies in the accuracy of the TASVEG 3 mapping.

Figure 6. Forest vegetation that is incorrectly tagged as agricultural land on Wadley's Rd.

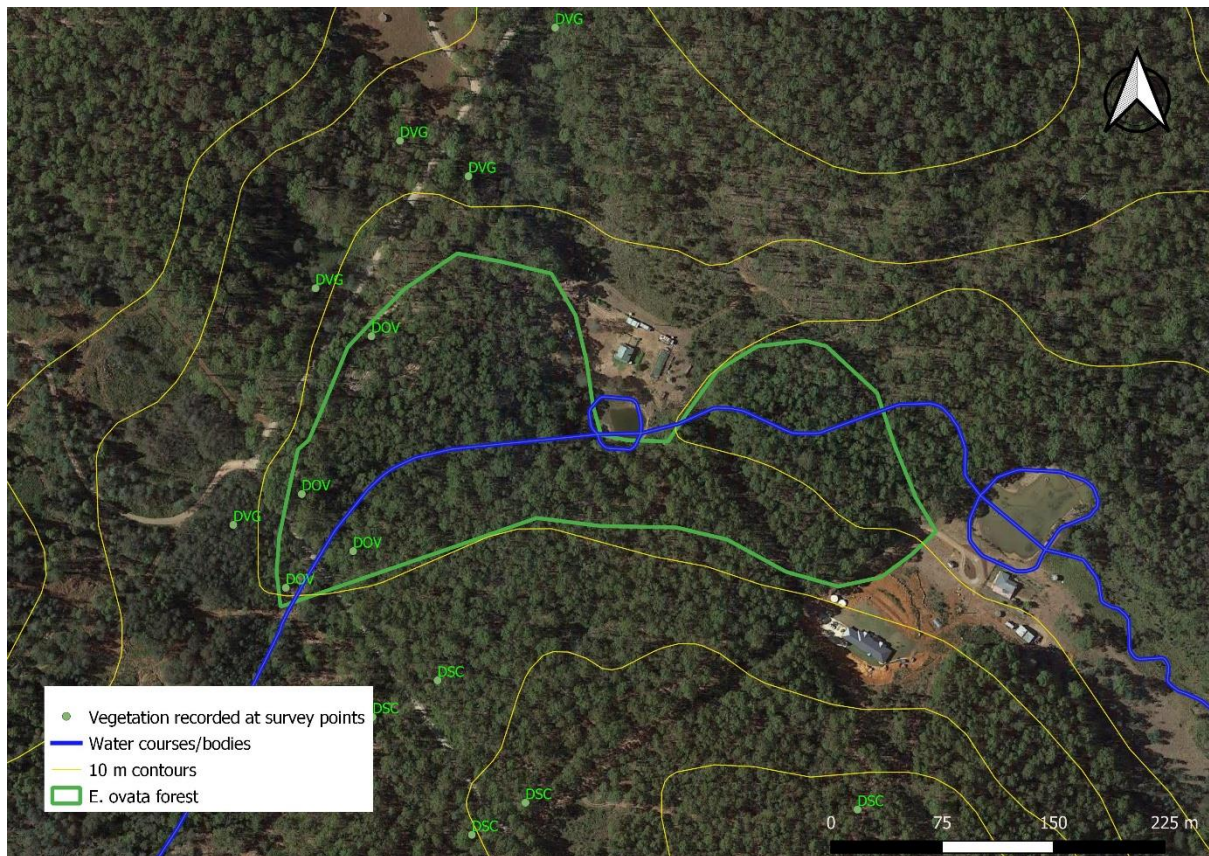


Detailed vegetation mapping

The Wadley's Road blocks

Figure 7 shows the estimated extent of *E. ovata* forest (DOV) at the end of Wadley's Road. A comparison with Figure 6 shows that most of this patch of forest has been mapped in TASVEG 3 as agricultural land (FAG). The area of the estimated patch of *E. ovata* forest is 5.7 ha. The total area of the patch of forest incorrectly mapped as agricultural land (see Figure 6) is about 78 ha.

Figure 7. *E. ovata* forest (DOV) on Wadley's Road



The Brushy Rivulet Block

The second site, (referred to by TPC), a 40 ha title, PID 3467976, at the confluence of Bryant's Creek and Brushy Rivulet, known now as Lot 1 Kellys Road Reedy Marsh, was inspected from the surrounding public land, including public Crown land and the Brushy Rivulet Conservation Area and the Reedy Marsh Conservation Area, under the guidance of Mr Ricketts which.

From these vantage points the forest vegetation on much of the block appeared to be *Eucalyptus ovata* forest (DOV) (Plate 1). Google imagery shows that all of the block is vegetated with forest. There does not appear to be any agricultural land (FAG) as is suggested in TASVEG3 mapping (Figure 8). Figure 9 shows the estimated extent of *Eucalyptus ovata* forest on the block. The patch was mapped using aerial imagery, contour mapping and geology mapping. In essence *E. ovata* forest can be expected to occupy areas of low lying, poorly drained, alluvial sediments. This patch estimated to *E. ovata* forest has an area of approximately 22 ha. Elsewhere the forest vegetation is probably Damp Sclerophyll Forest (DSC) and Mr Ricketts has indicated that there is some *Eucalyptus pauciflora* forest on dolerite (DPU) present also. He suggested that at least some of the forest on the block was in old growth condition.

Figure 10 showing the south eastern boundary of the block, the most open area, is certainly not cleared land. This area may have been selectively logged in the past or it may be an open rocky ridge in pristine condition. Geology here is dolerite and ridge lines in such situations often support forests of open structure and reduced stature. There is no evidence that the block has ever been cleared. Two editions of the 1:25,000 mapsheet show the block to be mapped as forest.

Figure 8. Aerial image of the Brushy Rivulet Block showing current TASVEG 3 communities.

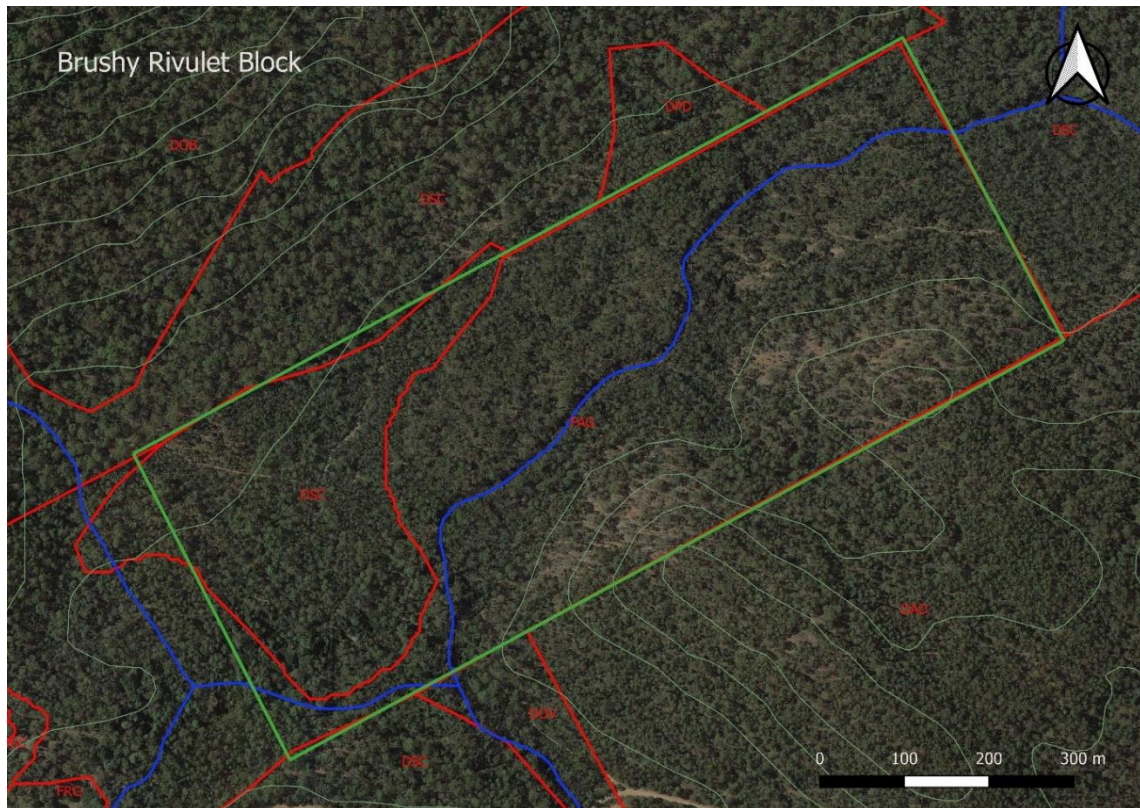


Figure 9. Estimated extent of *E. ovata* forest (DOV) on the Brushy Creek block

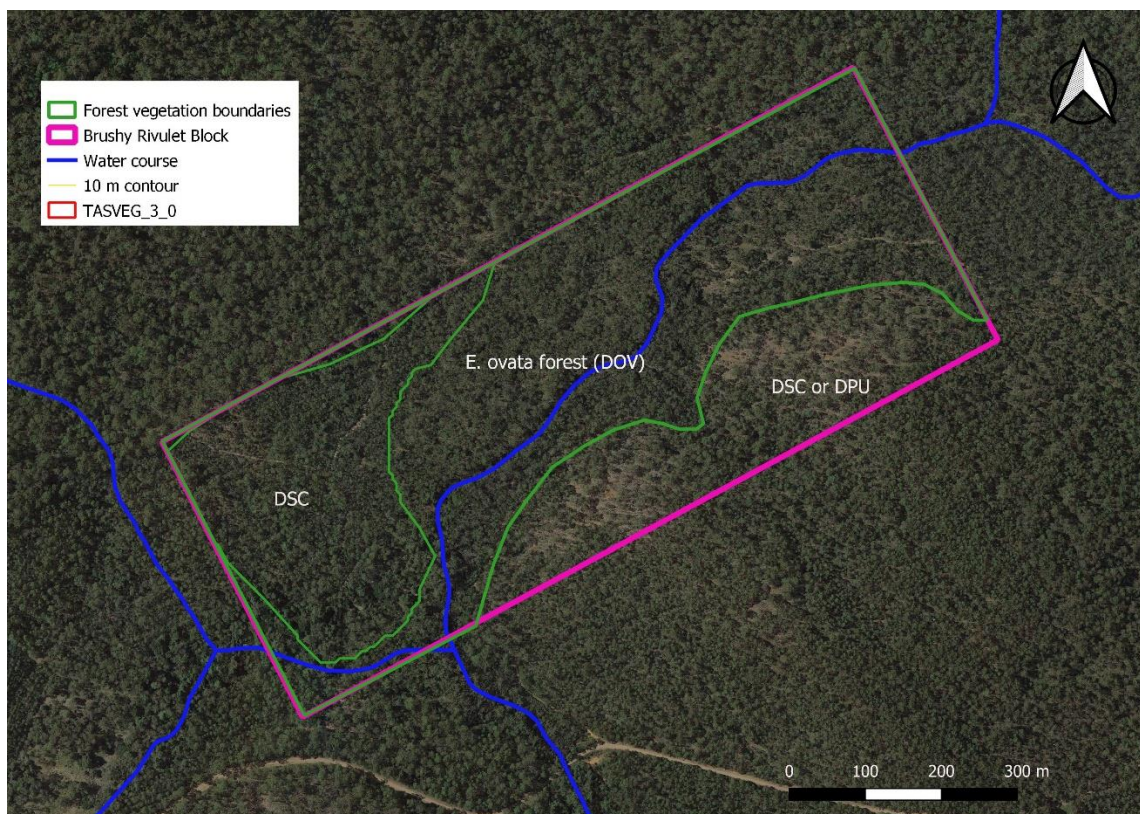


Figure 10. Detail on the south eastern boundary.

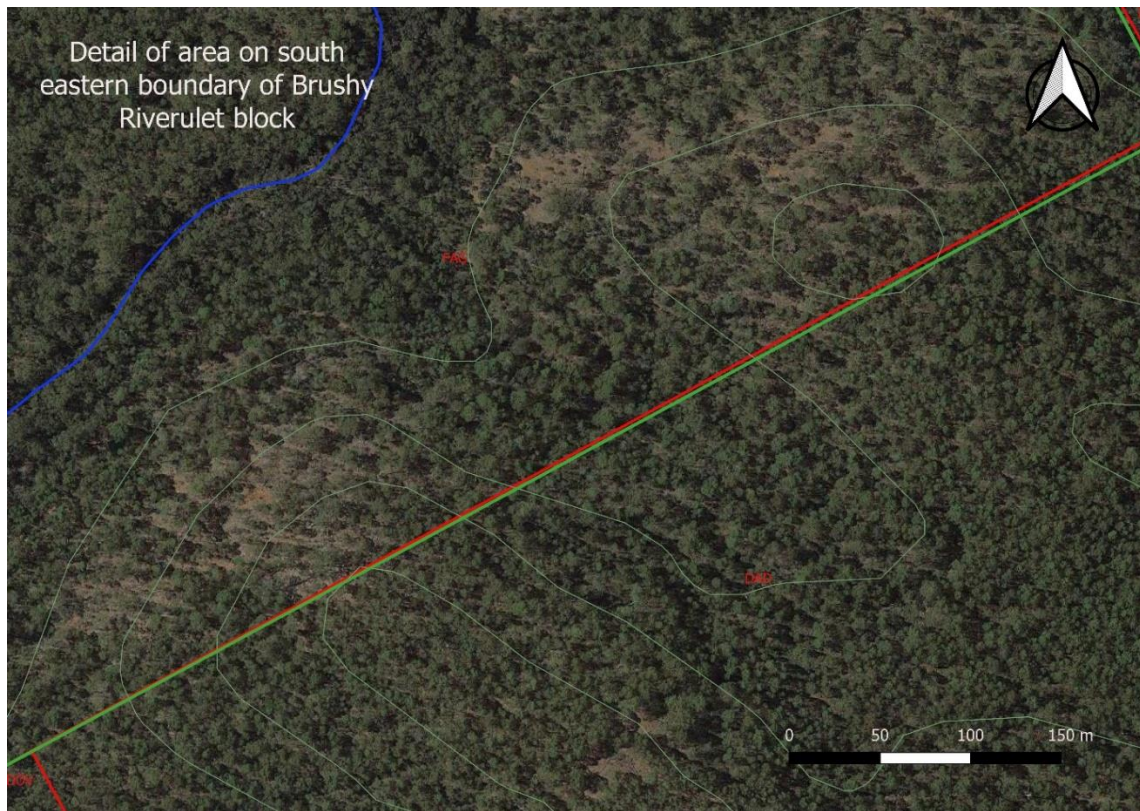


Plate 1. *Eucalyptus ovata* forest near Brushy Rivulet as of June 2013: courtesy of A Ricketts.



Conclusion.

This report identifies the specific Listed vegetation community, *Eucalyptus ovata* forest as requested by the Tasmanian Planning Commission, near the end of Wadley's Road and the same Listed vegetation community that is mapped as cleared land on the 40 Ha block at Brushy Rivulet, as a part of a systematic approach to test the accuracy of TASVEG 3 mapping in the region.

The results of this study indicate that TASVEG 3 mapping in the Reedy Marsh area contains many errors. Based on this study, the overall accuracy of TASVEG 3 mapping appears to be about 52%. When considering forested land only the accuracy level drops to about 31%. In the author's experience, elsewhere in Tasmania, and especially outside of the World Heritage Area and some National Parks, an accuracy level of 51% is typical for TASVEG 3 mapping at large.

More alarmingly, some significant patches of Priority forest have been mapped as agricultural land. There is no evidence that these patches have ever been cleared. It is hard to imagine how such errors came about in the original aerial photograph interpretation used for TASVEG mapping and the errors point to the employment of inexperienced aerial photograph interpreters/vegetation mappers and very poor supervision of the project.

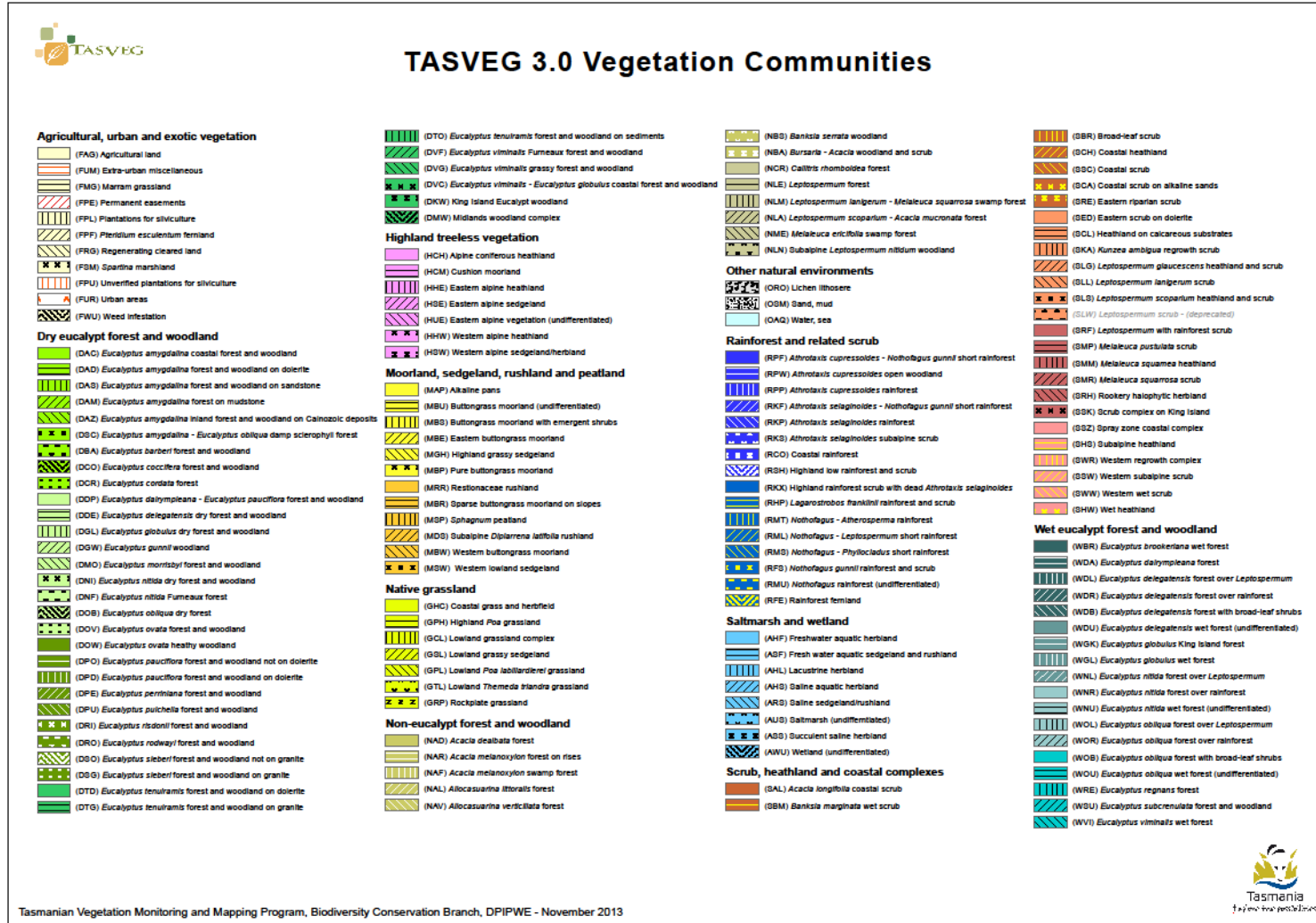
It is clear that TASVEG 3 mapping, as it currently stands, is inadequate for land use planning and development proposal decisions or for the development of a reserve system for listed Priority forest communities. Relying on TASVEG 3 will likely lead to incorrect decision making and further loss of critical habitat in the future.

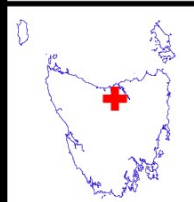
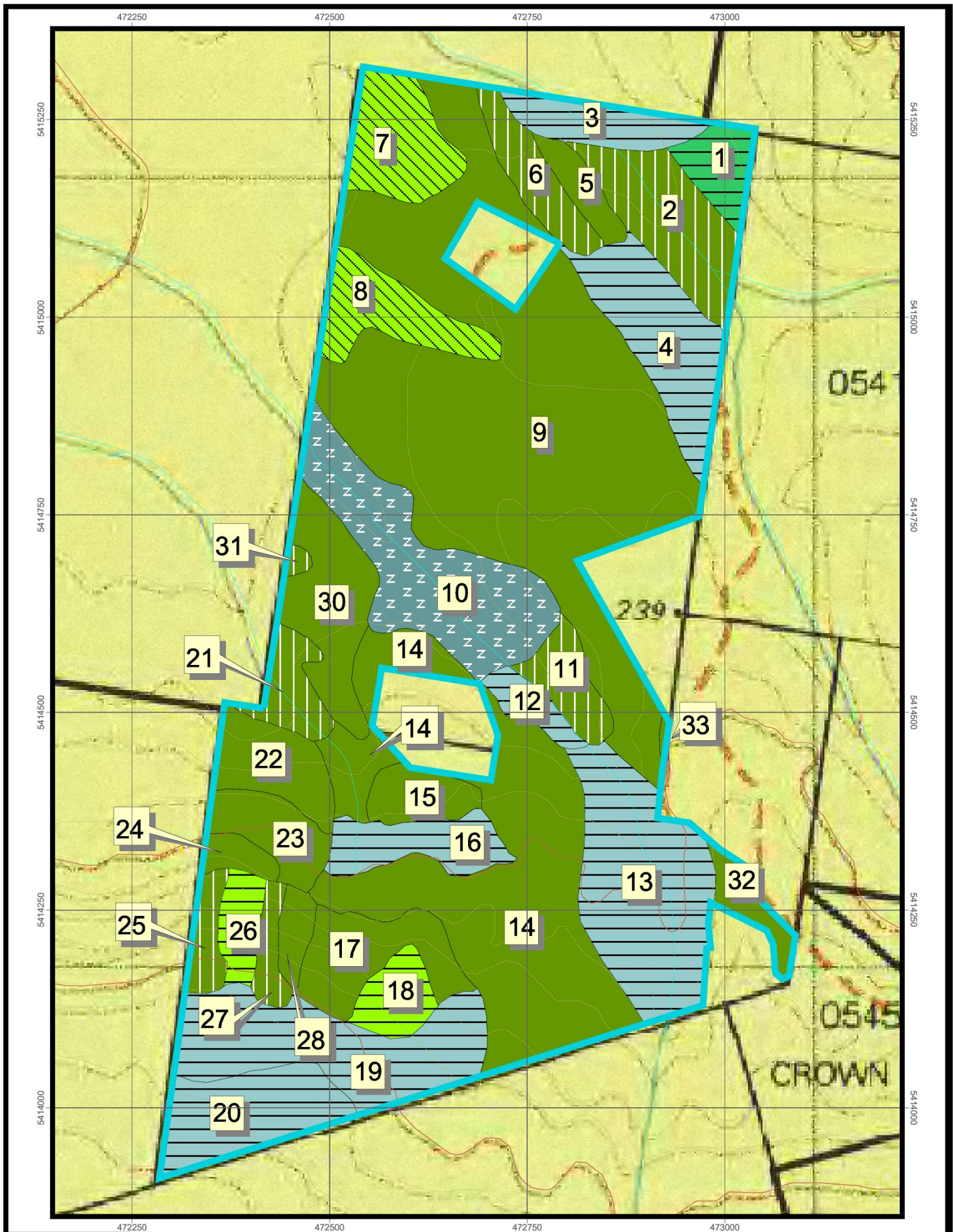
Likewise the use of TASVEG 3 as input data for computer based conservation planning models such as the Regional Ecosystem Model (REM), as is currently used by a number of municipalities in Tasmania, will certainly lead to further inaccuracies in the planning process.

Significantly, during the writing of this report on the 28th June 2019 the Federal Minister of the Environment, Ms Susan Ley approved the Listing of Tasmanian Forests and Woodlands Dominated by Black Gum or Brookers Gum (*Eucalyptus ovata* / *E. brookeriana*) Ecological Community, which was originally submitted to the Commonwealth as *Eucalyptus ovata* Forest and Woodland in Tasmania, as Critically Endangered.

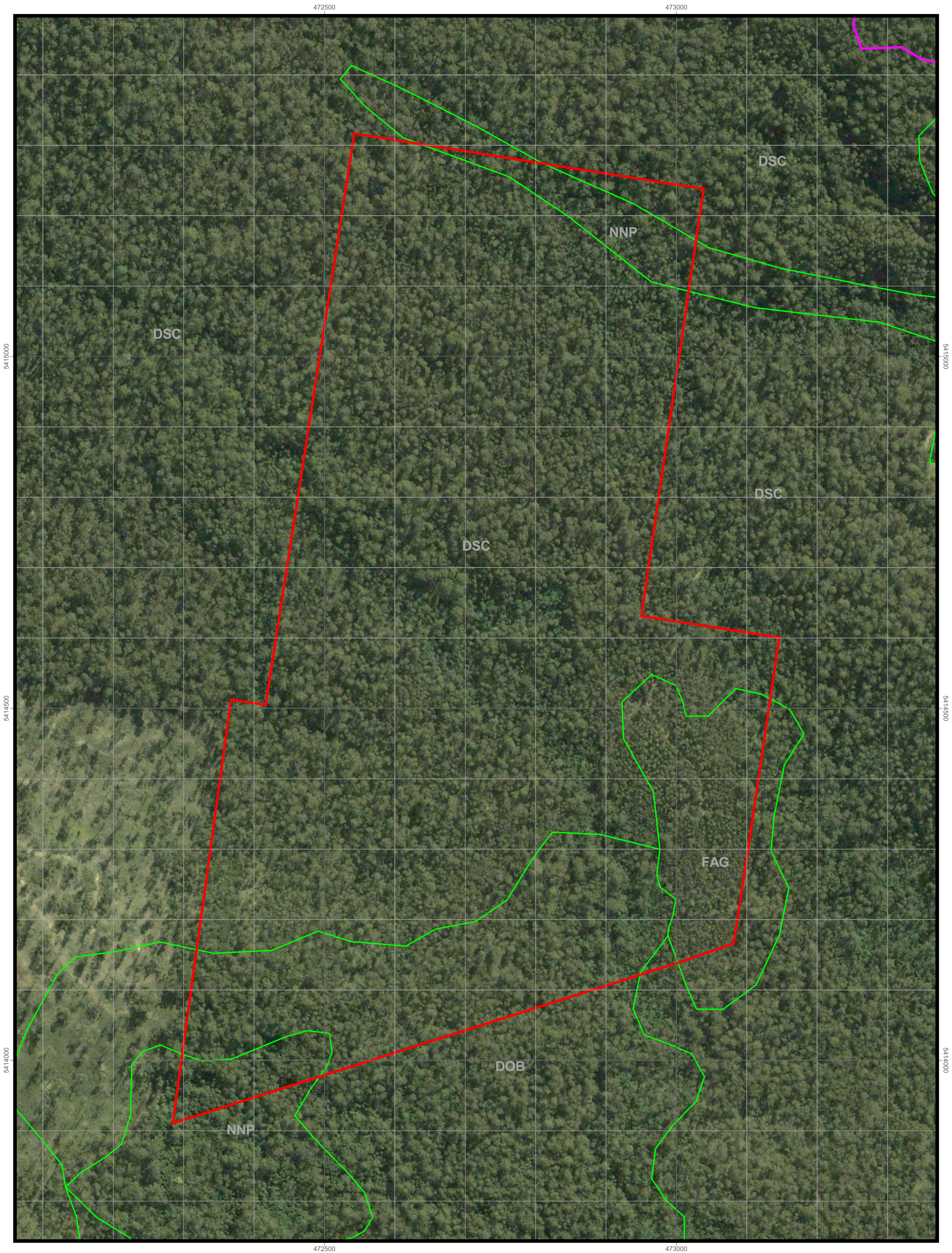
The current survey shows that both sites which the TPC directed TEA to investigate contain the Listed vegetation: *E ovata* forest-Critically Endangered as do some other sites visited in this study. Reliance on TASVEG 3 as a basis for planning decisions/approvals is likely to result in losses of this critically endangered community both in Reedy Marsh and elsewhere throughout the range of the community.

Appendix. TASVEG 3 vegetation communities and codes.






Forest Conservation Fund Field Map 1
Property: 272 A Ricketts Bioregion: Northern Slopes



-  Proposal boundary
-  Mapped Tasveg boundaries
-  Mapped old growth
-  Water bodies
-  Streams


Mapsheet: 4641 Parkham
Datum: GDA 94
Scale 1:5,000

100 0 100 Meters

Conservation Advisor:

Field assessment date:

*Base data from theList,
Copyright State of Tasmania.*

*Map produced by:
nrco geospatial systems October 2008*