1. INTRODUCTION

The Sunbury Growth Area contains important biodiversity areas and habitat corridor connections within the areas proposed for development. All areas of EPBC-listed ecosystems and endangered ecosystems as defined by DSE within the new UGB must not be cleared. The areas that are listed to be cleared are not unavoidable as suggested on p.122 of the Strategic Impact Assessment. To suggest this is simply nonsense. Our own ground-truthing suggests that the only reason for their destruction is to make it slightly more convenient and more cost-effective for developers.

In many cases it seems that these areas of significant ecosystems are not listed as "significantly constrained land" because they are in a prime position (i.e. they would make more money for developers). Under the EPBC Act there are listed "Threatening Processes", meaning there are processes that are seen as important processes causing the further decline of endangered and critically endangered species and ecosystems. "Land Clearing" is listed as one of these threatening processes. The areas listed in this submission cannot be cleared. To do so would mean this Commonwealth Law is effectively worthless.

These endangered and critically endangered ecosystems have developed over many thousands of years and they are almost gone. Once these last remnants have gone, they will be gone forever. Since the SMEC report is at best significantly lacking (detailed below – e.g. many significant errors and incorrect modeling) and the ecosystems that are proposed to be cleared are so significant, it is recommended that the Sunbury areas be fully re-assessed and/or more time is given for a full and proper assessment of the UGB proposal. While this is inconvenient, not to do so would be reckless and irresponsible.

1.1 Sunbury's Most Important EPBC-listed Natural Values Should be Preserved for Future Generations

Sunbury has been identified as a 'satellite town' and the surrounding areas still have many natural values, including significant grasslands, grassy wetlands, grassy woodlands and creeks. Many local groups and local government have worked hard to delineate habitat links and areas containing important natural values to be preserved. More intensive development, without preserving areas for habitat and habitat linking is not acceptable. If intensive development is allowed without preserving and managing for natural values, we will lose important local areas of habitat and links that are irreplaceable. Preserving the areas recommended in this submission will have virtually no impact on the overall goal of the proposed UGB expansion. Also, many landholders with no significant vegetation remaining and bordering the proposed new UGB, but on the outside of the new UGB, would be happy to have their land included inside the UGB.

The adoption of the recommendations in this submission will go some way to alleviating the disastrous ecological consequences of the proposed new UGB. The State Government must ensure the protection of the areas of high biodiversity value mentioned in this submission and recognize their importance for connectivity. These areas should be clearly indicated within the Final Report to the Federal Government.

2. KEY BIODIVERSITY ISSUES FOR THE SUNBURY INVESTIGATION AREA

There are significant factual errors in the mapping and these give rise to the specific recommendations in this submission (section 3).

2.1 Mapping Errors

There are two maps that have been relied on to determine the remnant vegetation values of the revised urban growth boundaries. Examples of these are presented in figures 1 and 2 …

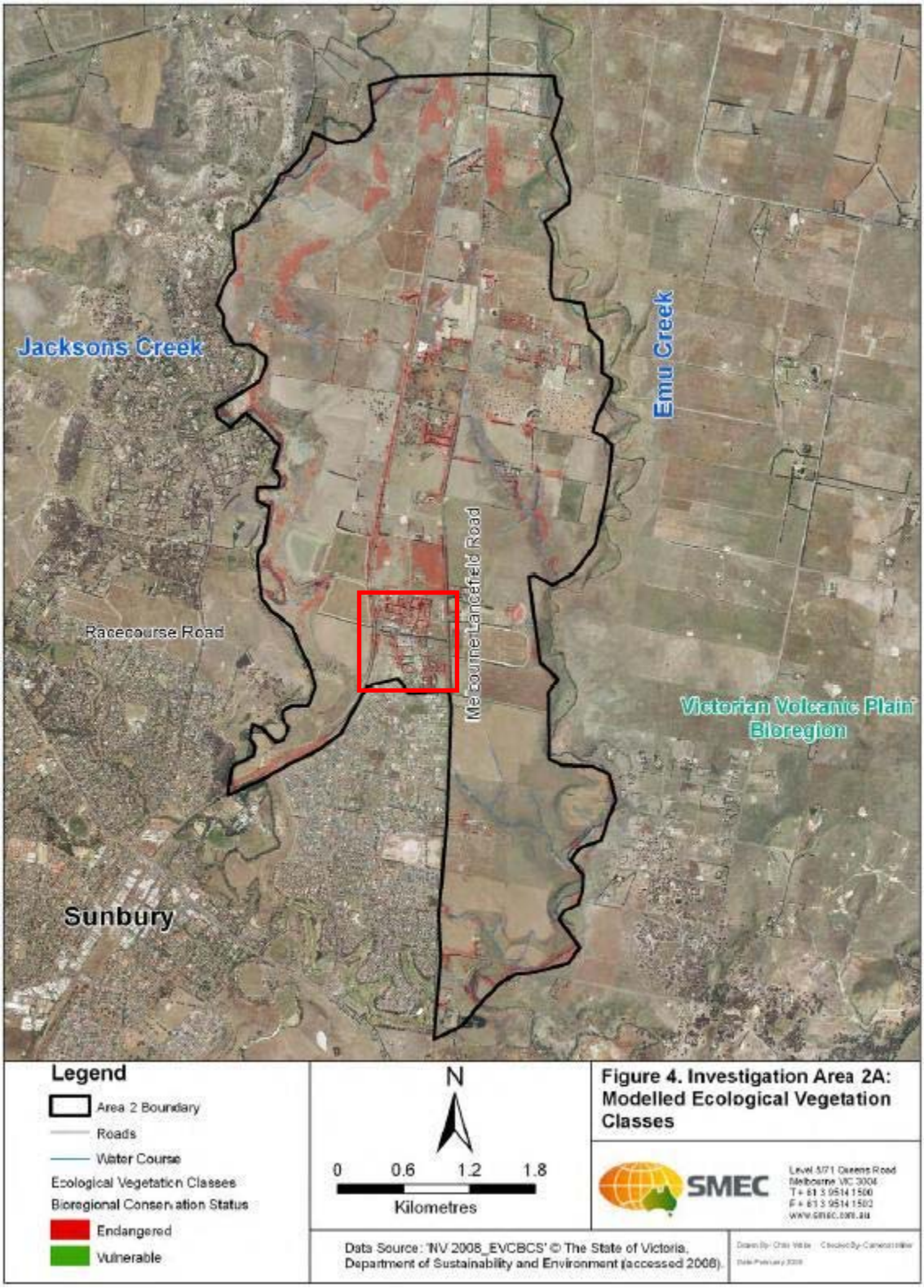

Figure 1: SMEC's figure 4 as presented in the UGB report
(box shows red/endangered EVC areas but misses Raes Road Conservation Area).

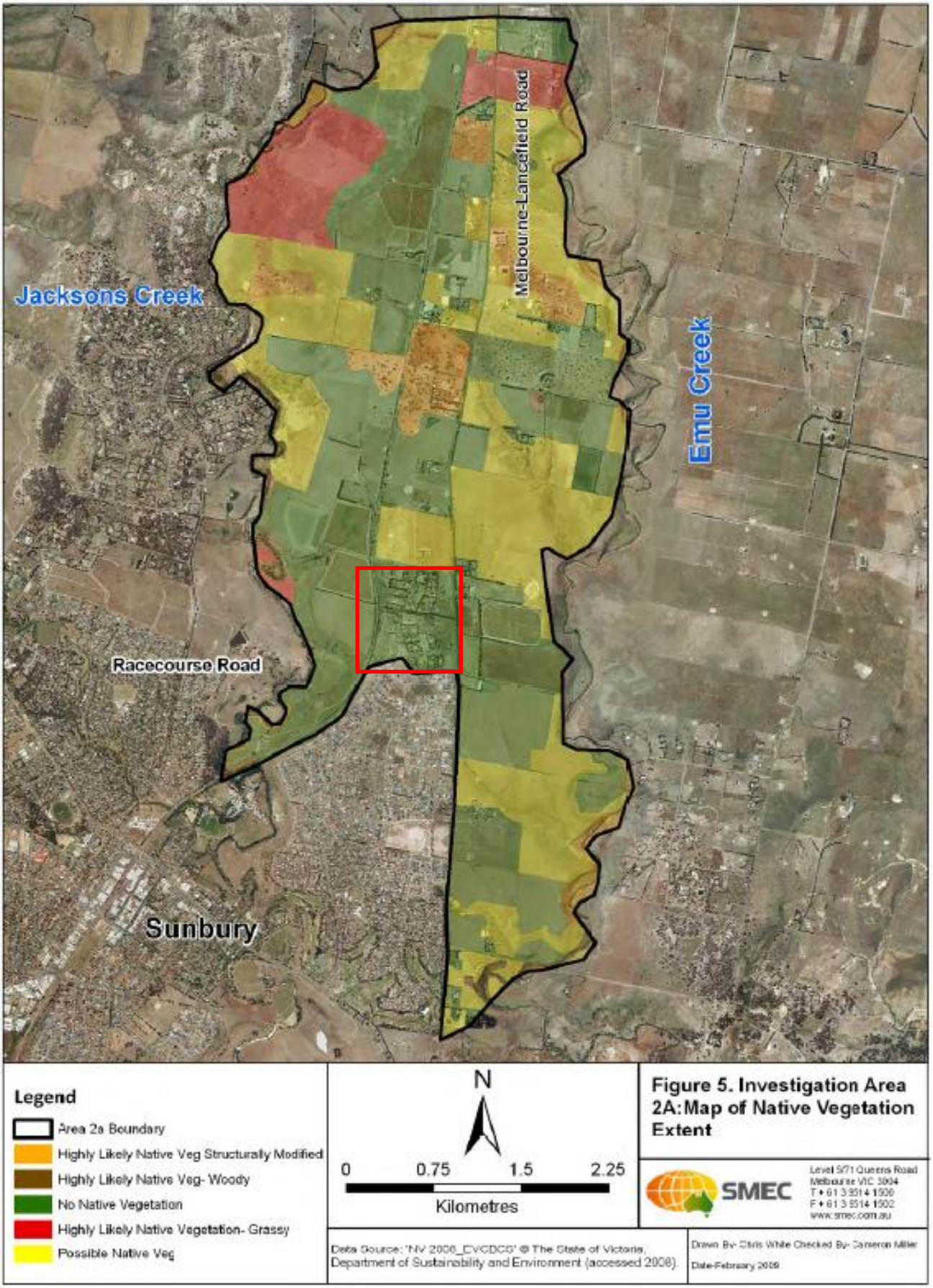

Figure 2: SMEC's figure 5 as presented in the UGB report (box shows red/endangered EVC areas from figure 1 are incorrectly designated 'No Native Vegetation' by SMEC – this occurs in many areas).

The consultants who undertook the work, state the information base is inadequate. Indeed, the maps are a major weakness of the report as they contradict each other, omit key information and contain major falsehoods. Figure 1 is an example of data sourced from DSE which has then been altered when translated by SMEC as presented in figure 2 resulting in a very different picture of the native vegetation. Many areas of what DSE designated "Endangered" EVC in figure 1 are translated by SMEC into "No Native Vegetation" in figure 2. This not only includes near the Raes Road Conservation Area but also includes the many roped-off DSE Biosites in the vicinity of the Raes Road and southwards along the train line. There are many other examples of this unacceptable and seemingly nominal categorisation by SMEC. The Table below demonstrates how the original DSE data shows existing native vegetation in two main conditions. SMEC's seemingly 'made up' categories provides no category that acknowledges native vegetation exists suggesting little or no ground-truthing has been done. This false interpretation of the DSE data by SMEC, the inadequacy of the original DSE data and the ridiculous categorisation and lack of ground-truthing by SMEC means that three levels of errors occur, making the final product in the report almost meaningless.

Table 1: Ecological categories used by DSE and SMEC (see figures 1 and 2).

DSE	SMEC
Endangered	Highly likely native veg structurally modified
Vulnerable	Highly likely native veg - woody
	No native vegetation
	Highly likely native vegetation – grassy
	Possible native veg

Inadequate ecological information base. The information base on which decisions are being made is acknowledged as inadequate by the report's consultants, SMEC. SMEC state that extensive ground-truthing for native vegetation and targeted flora and fauna surveys are needed over much of the area covered. Some of SMEC's early maps and flora/fauna data seem to be an accurate reflection of the information available. The problem is that the information available is inadequate and in some cases plain wrong. Some ground-truthing of the DSE EVC data conducted by our groups show many areas have been mapped wrongly making the data and the report at best unreliable, at worst wrong.

2.2 Omissions

2.2.1 EPBC-listed Grasslands

Many grassland areas have been missed. For example, possibly the best area of Themeda-dominated Grassland in the Sunbury Investigation Area is completely missed in SMEC's 'survey'. This mistake is of significance because this area of Grassland is fenced off and designated a "Conservation Area" by Hume City Council with obvious signage (see figure 3). On a visit to the area on June 28, 2009, members of our group only walked along one side (not inside) and photographed Themeda, Dianella, Hedge Wattle, Black Wattle, Spear Grass, Asperula (woodruff), Lomandra, Atriplex and Einadia species (all things expected to be seen at this time of year in a grassland in the Sunbury area). This area is almost completely weed free.

Figure 3: Themeda-dominated grassland missed in UGB report. Photo taken June 28, 2009.

2.2.1 EPBC-listed wetlands

The only area of Plains Grassy Wetland in the investigation area (figure 4) is also curiously omitted from the report. Areas adjoining these wetlands that slope down to the wetlands are designated as 'Proposed Non-urban Area (Development Avoided)' because of their 'Biodiversity'. These areas slope down to the wetlands which are not themselves designated 'Biodiversity' and they are in the development area. They must not be developed.

Plains Grassy Wetlands are now extremely rare and endangered (currently being assessed for EPC-listing) and all efforts should be made to rehabilitate this area in a way that has been achieved elsewhere in Victoria (see figure 5). The wetlands in figure 4 are still in reasonable condition and used by wetland birds. In a ten minute visit to the site, we saw and photographed a number of wetland bird species, including ducks and cormorants, indicating that this area is still an important wetland for local wildlife. An excellent example of well managed and integrated remnant grassland, local indigenous plantings, wetlands & high density housing can be seen at Jacksons Hill in Sunbury. Figure 5 is an excellent example of a Plains Grassy Wetland that must be the goal for the Clark Court Wetlands in the proposed UGB. It is obviously the most important site in the area for biodiversity. Why is not designated as such in the report?

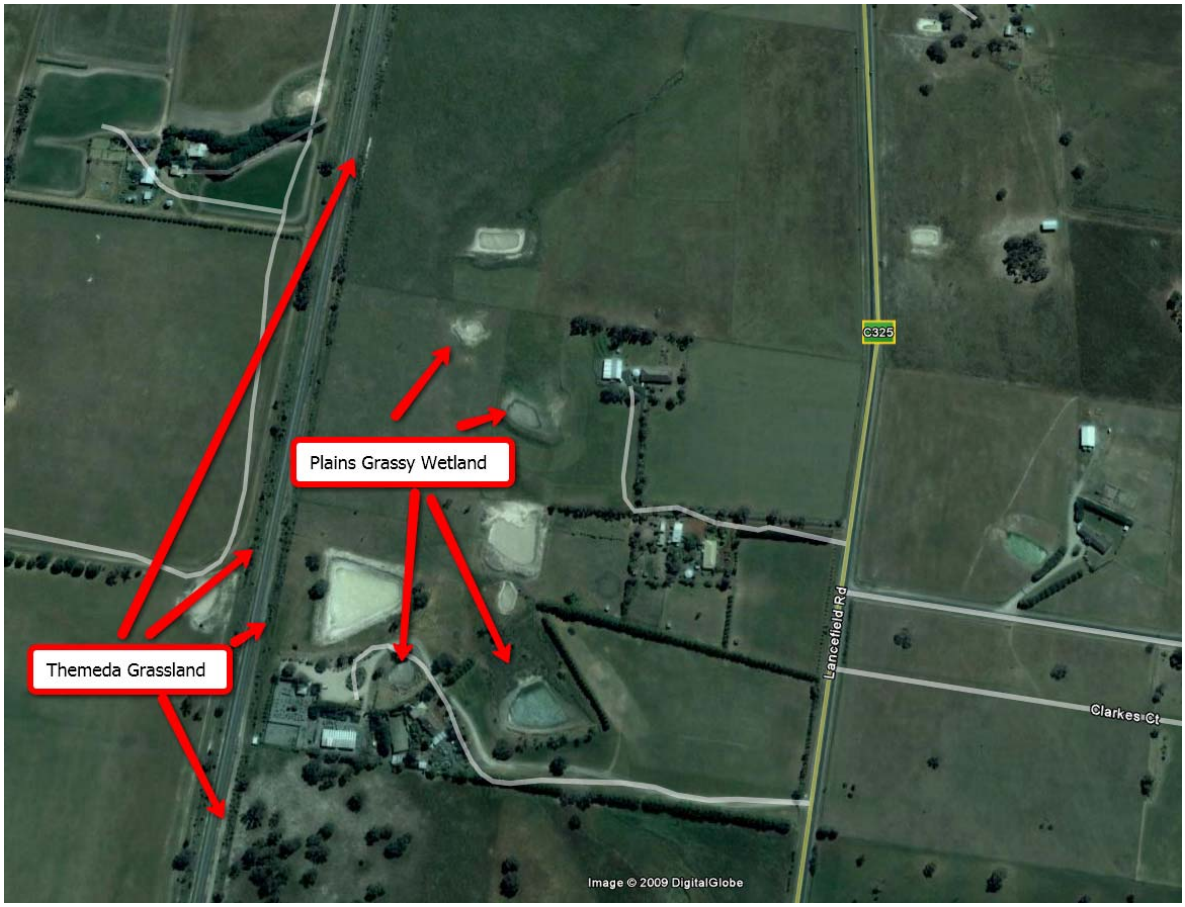

Figure 4: Satellite view of 'Clarkes Court Wetlands'.

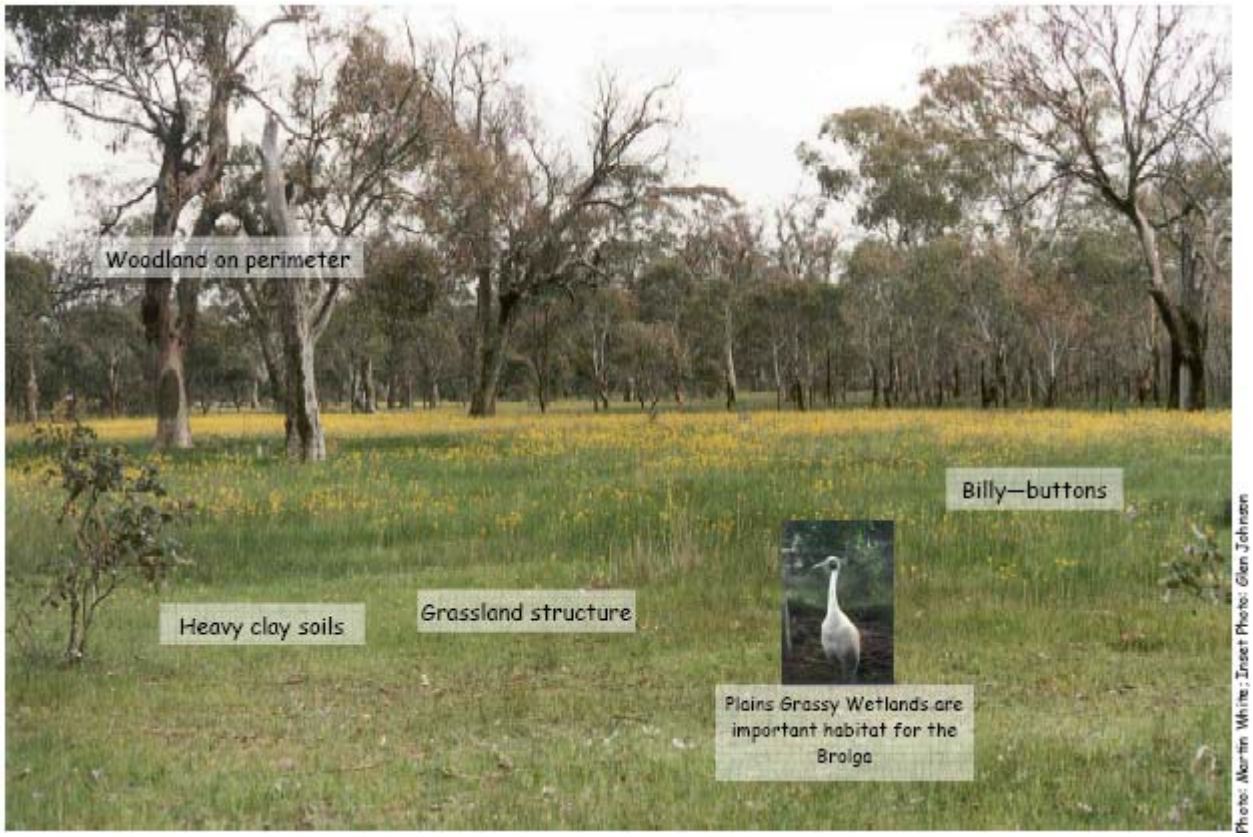

Figure 5: An example of a Plains Grassy Wetland with Billy Buttons.

2.3 Consequences of Mapping Errors

The mapping errors mean many important remnant vegetation areas have been omitted. It is clear that probably up to 20% of the grassland areas ranging from low-high quality areas (as defined by Biosis in their report for the proposed new reserves) have been missed by the SMEC report – including areas missed that are Council Conservation Areas and DSE Biosites of equal or probably higher remnant vegetation quality than any of the areas to be bought up in the proposed new reserves.

The consequences of the abovementioned mistakes and the inadequacy of the UGB report are many: 1) significant areas of endangered and critically endangered ecosystems have been completely missed by the consultants as presented in the UGB report; 2) these areas are designated to be cleared within the Sunbury Investigation Area with no ‘offset’; 3) it is at best disturbing that SMEC have not consulted adequately with the relevant local government and other organisations in compiling the work that the UGB Report relies upon.

Figure 2 shows SMEC have no idea what is really there (their three categories are areas of 1. Highly Likely Native Veg., 2. Possibly Native Veg., 3. No Native Vegetation - there are no categories of Known Native Veg.!) which suggests their report contains no ground-truthing and they are not confident of knowing the current whereabouts and quality of any native vegetation. What is worse, their baseless 'made-up' categories contradict DSE data - eg. areas of green on figure 2 (No Native Veg.) coincide with areas highlighted on figure 1 that are designated as Endangered EVCs. This is a very dangerous and unacceptable set of falsehoods. On SMEC’s Figure 2 all of the following are designated “No Native Vegetation”, a) many areas in the Sunbury Investigation Areas roped off as Biosites by DSE, b) areas designated as Conservation Areas by Hume City Council, c) significant remnant vegetation areas adjoining the Jacksons Creek escarpments (especially areas along Shepherds Lane and near Redstone Hill (pictures of that vegetation are below), d) all of the very significant areas of very high quality remnant themeda-dominated grassland along the many kilometres of rail reserves; e) many other areas that are completely missed by both figure 1 and figure 2 (eg. Raes Road Conservation Reserve and west of Lancefield Road opposite the Fire Trail as depicted on inset of recommendations map).

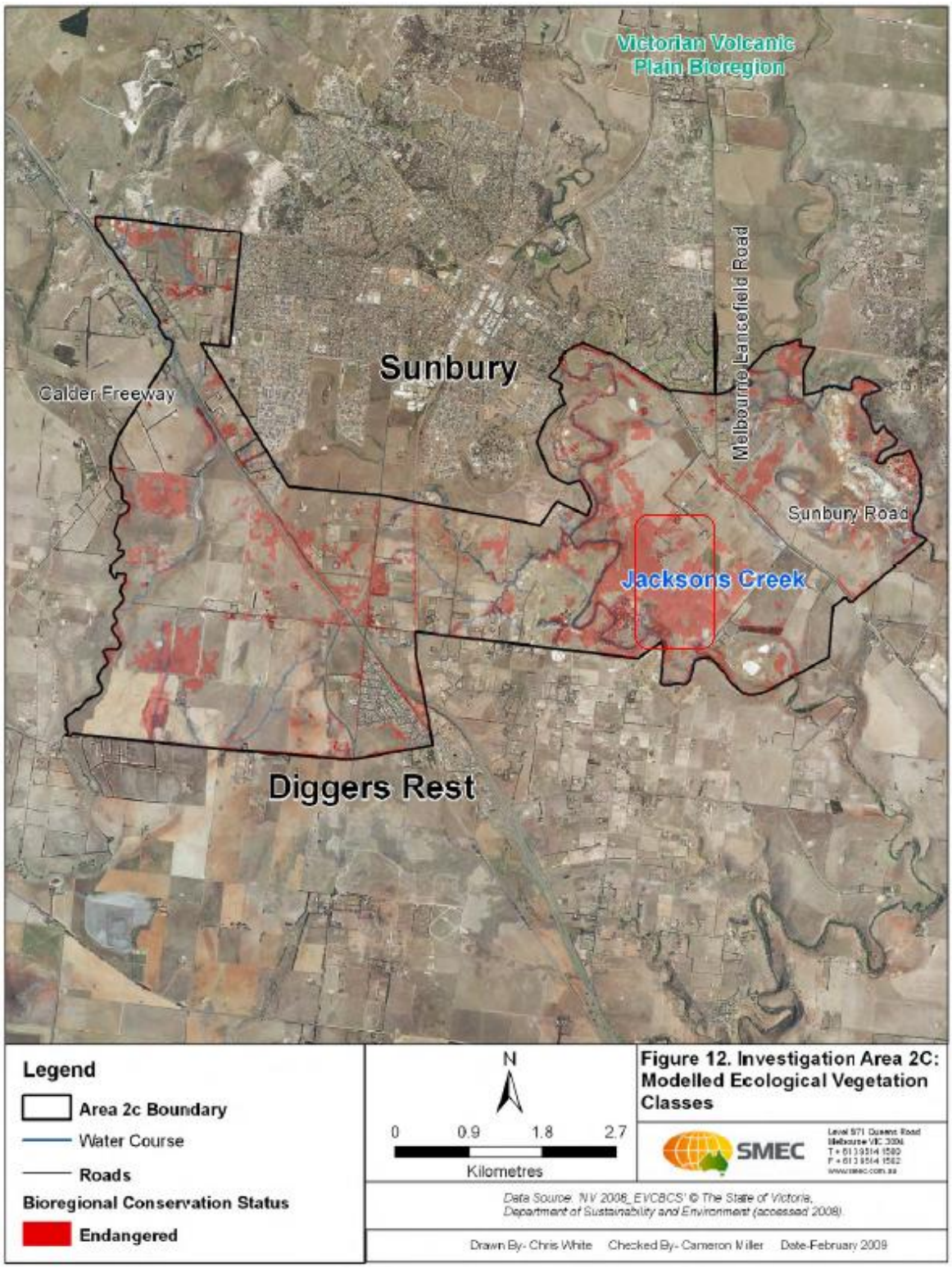

Figure 6: Area photographed in figure 7a correctly mapped by DSE as Endangered, EPBC-listed vegetation but wrongly mapped as 'No Native Vegetation' by SMEC (cf figure 8).

Above shows encircled area that is designated an endangered EVC by DSE. Below are pictures of that area. Far below is SMEC's 'made up' categories suggesting, wrongly, that these areas that adjoin Holden Reserve have 'No Native Vegetation'. This area is almost weed free native vegetation (wallaby grass and spear grass dominated).

Figure 7a: 128 ha of contiguous, weed-free, intact, EPBC-listed grassland (Shepherds Lane).

Figure 7a shows land above the Jacksons Creek escarpment, east of Holden Reserve (Shepherds Lane). It is designated 'No Native Vegetation' by the SMEC Report. It is correctly designated as an Endangered EVC by DSE (figure 7b). It is high quality, weed-free, native vegetation.

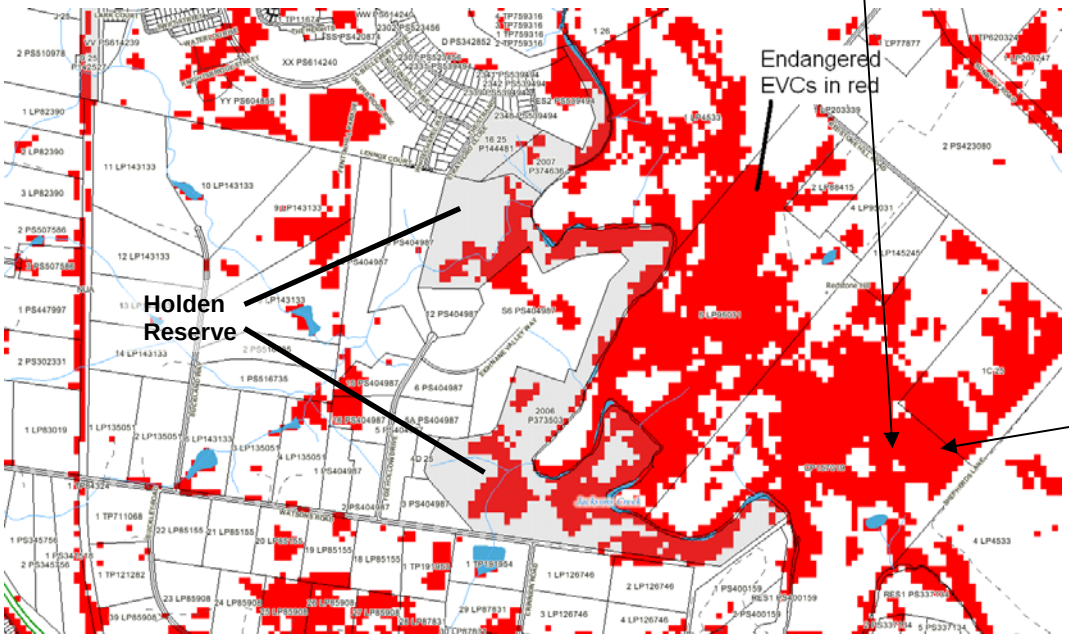

Figure 7b: Holden Reserve and Shepherds Lane area mapped using DSE data.

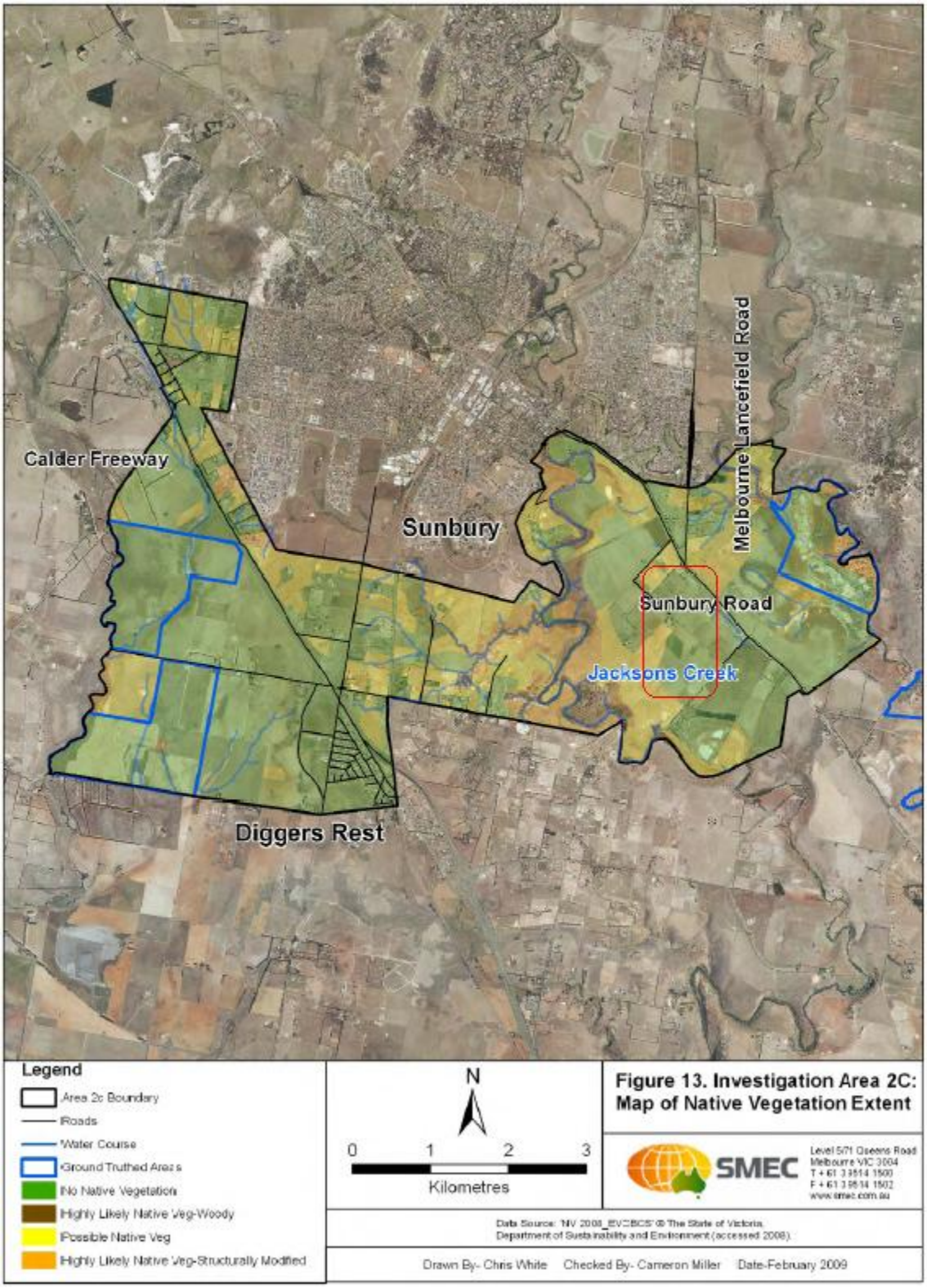

Figure 8: Area photographed in figure 7a wrongly mapped by SMEC as 'No Native Vegetation'.

Figure 9: Remnant Atriplex semibaccata (and other Chenopods) still dominate the Shepherds Lane/Redstone Hill area – in this case A.semibaccata is shown alongside a lovely area dominated by Wallaby Grass. This is extraordinary considering much of the similar areas west of Holden Reserve have been devastated by Carpetweed. No Carpetweed was seen at the above site (Shepherds Lane - date: June 28, 2009).

3. SPECIFIC RECOMMENDATIONS

Figure 10a: Site 13. Palmers Lane links and grasslands.

Figure 10: Priority areas for protection and habitat links.

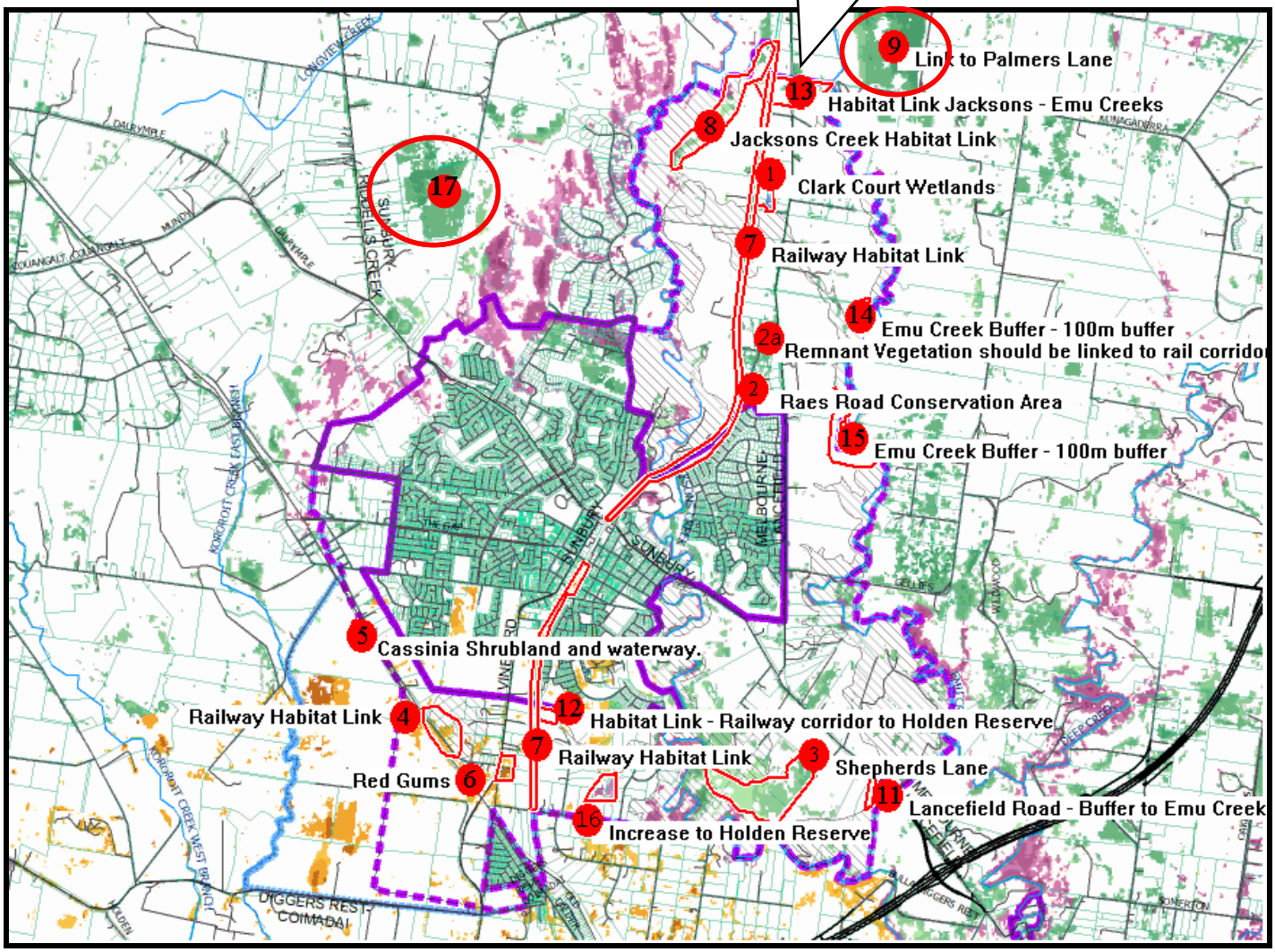

Table 2: Recommendations for areas not to be developed.

	Locations (see numbered items figure 2 below)	Comments
Sites that must be protected	1. Clark Court Wetlands (pictured above)	Plains Grassy Wetland – nominated for EPBC listing. Connected to themeda grassland along the rail reserve.
	2. Raes Road Conservation Area (pictured above)	Very high quality themeda grassland. Council managed, should not be available for development. Why is this not excluded? Missed by SMEC.
	2a. Remnant vegetation linked to rail corridor and Raes Road Conservation Area	Good quality remnant grassland exists in the housing estate south of Raes Road, on Raes Road roadside, south of Raes Road on Lancefield Road and north of Raes Road. All these areas should be connected and joined with the rail corridor (which in this area contains a number of DSE biosites).
	3. Shepherds Lane (pictured above)	This is a big block (128 ha) in very good condition and almost weed free. It connects with Holden Flora and Fauna Reserve across Jackson Ck.
	16. Increase to Holden Reserve	This area of endangered remnant vegetation sits alongside Holden Reserve and must not be cleared.
Sites among those that require urgent further assessment	4. Moores Road	This EPBC-listed grassland area requires further assessment.
	5. Cassinia Shrubland & Waterway	An unusual area that is recommended for rehabilitation (perhaps by Melbourne Water given the waterway located there.
	6. Red Gums	This area needs further assessment. The area includes a block of land containing significant Red Gums. The main area designated Grassland in this section now seems to be a winery.
Habitat links	7. Railway line easement	Biosites exist along this easement. Its entire length should be protected and a buffer of 50m either side included along its length as a wildlife corridor, irrespective of ground layer condition.
	8. Jacksons Creek Habitat link	Although included adjacent to a ‘constrained area’, these areas of native vegetation are not included in the constrained area and must be. It is an important part of the Jacksons Creek habitat link.
	9. Palmers Lane grassland.	This is a patch of very high quality grassland that is important to the Sunbury area. It is, as a minimum, important to ensure habitat links are retained to this area. At best it should be included as an offset and Reserved.

	12. Habitat Link – Railway line to Holden Reserve	Link between 'constrained area' adjoining the western border of Holden Reserve and the Railway line easement. The missing link here is very short and would result in a major habitat link.
	13. Jacksons Creek- Emu Creek. 	Link Jacksons Creek with Emu Creek. This is a complicated area (see inset map) with important remnants and habitat links. The 'Fire Trail' and adjoining areas are part of a Bushcare project (Natural Heritage Trust) and the habitat link to the large area of intact, high quality grassland on Palmers Lane is critically important. Creek Buffers are required. Emu Creek and Jacksons Creek both provide important links through the landscape. There needs to be an unambiguous minimum 50m conservation reserve from the top of each side of the creek escarpment along their entire length, irrespective of the current biodiversity values within this buffer.
	14 & 15 (& 11). Emu Creek	Requires buffers of 50m from the top of the escarpment (50m each side). Area 11 also seems to require a buffer to Emu Creek but could not be accessed.
	Melbourne – Lancefield Road	The entire length of this road within the proposed expanded UGB requires a 50m buffer.
Offsets or Landswaps	9 &17	Some local offsets and landswaps are required for the considerable amount of EPBC-listed ecological communities in the Sunbury Investigation Area. These two areas are of significant ecological value to the Sunbury area.

4. GENERAL RECOMMENDATIONS

- Destruction of Australia in the manner proposed by this report, especially including the destruction of critically endangered EVCs, is not acceptable. The statement in the Strategic Impact Assessment part of the report (p.122) "where unavoidable impacts will occur … it is not considered practical or desirable to retain and manage an asset" is nonsense. All of the grassland removal in the UGB investigation areas is easily avoidable. The report states it will not destroy areas if it "unavoidable". Therefore, no areas should be destroyed in this process.
- The whole of the Sunbury Investigation needs to be re-assessed, with a substantial element of ground-truthing. One person spent maybe 20 hours doing the ground-truthing in this submission. It is easily achievable, and almost embarrassing that it hasn't been done for the UGB report. The SMEC report is wholly inadequate and full of errors of fact and interpretation because the lack of basic ground-truthing. Ground-truthing could be done cost effectively, and it would be reckless and irresponsible not to do so given the gross errors highlighted in this submission. SMEC themselves say their report is a "broad overview", "not suitable for site

specific planning", the flora and fauna analysis "has significant limitations" especially for areas that are "extensively private land" (this is the vast majority of the area studied in the report - and our ground-truthing on private land proves this point), their assessment "does not have the precision to pick up remnant scattered trees which are likely to occur across the investigation area" (this is what grassland is, scattered trees - basically saying the assessment they have done cannot pick up key aspects of the life-giving aspects of the vegetation communities they are trying to assess). Even with these admissions, SMEC have seriously underplayed the inadequacies of their report.

- Anyone submitting an assessment of this report is significantly disadvantaged in having to conduct ground-truthing in June and July when grassland areas cannot be assessed properly (eg. many important plant species such as orchids, lilies and herbs that dominate the floral grassland display in late spring are underground and not assessable in June and July). More time is required is to assess the report properly, at least until the end of January, 2010.
- A 100m buffer either side of all railway lines, creeks and other important linking elements of the landscapes (e.g. major power line easements) is essential to the preservation of the natural heritage values of Sunbury. Such buffer zones are realised in today's world as imperative for the continued survival of ecosystems around the world. A 200m buffer would be a much better ecological outcome to give adequate buffers for the EPBC-listed and endangered species enclosed in the area (eg. Grassland Earless Dragon around Holden Reserve) and a strong justification for not doing this would be required.
- All 'Priority Areas Targeted for Supplementary Assessments' (items 1-4) in the report need to be assessed as per the SMEC recommendation, preferably not by SMEC but by Practical Ecology or Biosis.
- SMEC's habitat links have gaps that need to be filled. In addition, all important remnant vegetation patches adjoining these habitat links must be included within the habitat links and not cleared or developed.
- The principles applied in this assessment apply equally to the other investigation areas in the report; eg. buffering major easements as important habitat links, not clearing and reserving all of the most important remnant vegetation sites in the entire new proposed UGB, better ground-truthing in all areas. There are many very important remnant areas in all areas that contain, in some cases, many EPBC-listed species and ecological communities. No endangered or critically endangered species and communities can be lost in this process.

5. INVALID ASSUMPTIONS, PROCESSES AND RECOMMENDATIONS IN THE REPORT

5.1 The Importance of Protecting Smaller Grasslands and Grassy Woodland Areas

Groups such as the Hume Council have demonstrated that sustainable management and enhancement of small grassland reserves is feasible; these areas provide important biodiversity value and opportunities for community education and involvement. Smaller remnants can and should be retained and managed for conservation. The scientific literature is quite clear in its conclusions. In relation to small patches of grasslands it has shown that remnant area and isolation has little effect on the probability of local extinction. DSE acknowledge that the sustainability of small grassland patches is not in debate by using such remnants as areas suitable for use in recovery plans for the relocation of plant species thought to be extinct in the wild. This is happening now within the current Sunbury UGB. The strategic impact assessment report states that areas of grassland within the UGB will only be retained if they are contiguous with other grassland areas

"typically of at least 150 ha." (Strategic Impact Assessment Report p.126). A 150 ha minimum size is simply baseless. As it happens, most of the recommendations in this submission comply with the 150 ha minimum by including realistic and easily incorporated habitat links. Nevertheless, it is important to recognize that the many well established Council 'reserves' within the old and new UGB proposal are viable and valuable. The importance of a remnant area can be defined by any one of:

- species richness,
- intactness/condition,
- landscape context and connectivity, e.g. as part of a habitat corridor,
- extent of occurrence of key species, e.g. Nationally and State significant species; and
- irreplaceability

Local government is actively managing grasslands in this region. Many local groups take a strong interest in the conservation of their local grasslands and grassy woodland areas. Some of these grassland areas have at the moment been missed from the 'significantly constrained' areas.

5.2 Very Little On-ground Biodiversity Information Has Fed Into the Strategic Impact Assessment

Local ecologists have identified many errors including locations of very high quality themeda-dominated grassland that have not been mapped as grassland in the report. Further ground-truthing is required prior to the development of the Final Report. It should not be left to the precinct planning process.

5.3 Over-emphasis on Precinct Structure Planning Process

There is an over-emphasis on using the Precinct Structure Planning Process to work out biodiversity details. This appears to override the 'avoid' part of Victoria's Native Vegetation Management Framework, in favour of offsets, particularly for grasslands. Smaller grasslands within the new UGB are likely to be cleared and 'offsets' for this clearance located in the two new western grassland reserves. Offsets for destruction of native grassland near Sunbury are proposed to be located around 20 km away in the new western parks, rather than in the Sunbury Growth Area itself. This is not acceptable as the grasslands within the Sunbury area provide important local habitat, in many cases for threatened species and are not transferable. Should any offsets be required for development within the expanded UGB, they should occur within and immediately surrounding the boundary of the expansion area to enhance the important habitat connectivity that this area is vital for.

5.4 New Proposed Reserves

While the concepts behind the proposed new reserve has some merit for fauna reintroductions, the proposal is rushed, ill-conceived, and doesn't go nearly far enough. Indeed, the basis for choosing the areas proposed to be reserved is highly questionable. The areas proposed in the report to be reserved contain very little high quality grasslands and the remnant flora value of the proposed reserve is small. Ground-truthing conducted in the past few weeks has shown that many areas within the reserve are of very poor quality or contain no native vegetation. Some of the largest blocks of land (eg. the block between Kirksbridge Road and Bulban Road) are falsely designated as high quality in the UGB report and have obviously been significantly degraded by large-scale poisoning regimes in recent years.

Areas to be ‘offset’ need to be doubled so that a 1:4 ratio of destroyed:preserved remnants is achieved. The new reserves/offsets must include all of the best areas contained within and surrounding the new proposed UGB. New assessments are required that include 25,000 hectares of offsets in reserves that include 10-40+ well managed new reserves in areas that are located to maximize the amount of the highest quality examples of the endangered ecosystems that are being destroyed and maximize the number of populations of endangered flora and fauna species that can be protected. This has not been achieved in the proposed new reserves in the UGB report.

If the State Government is serious about any new reserves to be set aside as offset for the areas destroyed in the expanded UGB, it must put in place a series of actions that ensure the areas to be reserved are protected from day 1. It is not acceptable to allow any proposed reserve area to be managed in a way that reduces the vegetative quality and biodiversity of the area. We have looked at two of the sites designated ‘high quality’ by Biosis (dark red areas in figure 11 below). Both of these areas are undergoing major disturbance as we speak (one by boom spraying, south of Kirksbridge Road - see figure 12; the other by excavation works, at the end of Greens Road) and will not be high quality in one year’s time, let alone 10 years time (the time when the new reserves are to be set up according to the UGB report). This is unacceptable by any standards as there may be nothing left worthy of reserving in 10 years time.

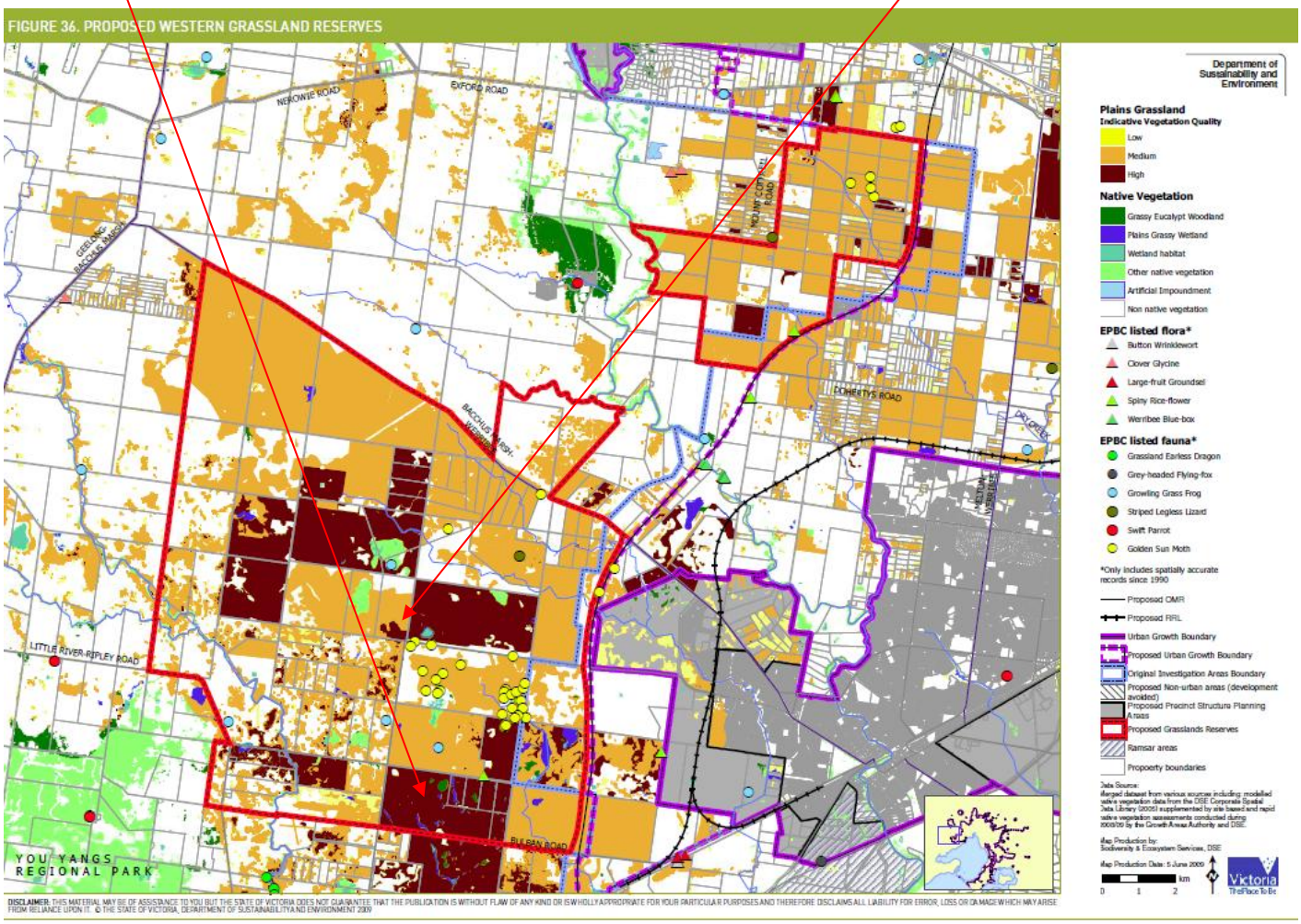

Figure 11: Proposed new reserves.

Figure 12: Supposed 'high quality' site south of Kirksbridge Road is now dominated by Serrated Tussock following boom spraying of the whole area. Photo taken July 2009.

6. CONCLUSION

The State Government Report is not 'Sustainable'. The State Government should remove the word 'sustainable' from its report, unless it can seize the opportunity to truly *'deliver Melbourne's newest sustainable communities*' as proposed in this submission. As it stands, the State Government's proposal cannot be called sustainable when it proposes to clear the vast majority of the remaining 6000 hectares of endangered ecosystems that desperately need to be protected, much of which is critically endangered as defined by the Commonwealth's EPBC Act. The use of the word 'sustainable' by the State Government in this report devalues the excellent work being undertaken in the community under the banner of true sustainability.

This submission has been completed without adequate time to fully assess some areas of the Sunbury Investigation Area and it is strongly requested that more time is provided for further and better assessments than those that have been conducted by SMEC. In this limited time we have accessed all of the information SMEC used to underpin their mapping and we have conducted more detailed ground-truthing. As a result, many significant errors and contradictions have been found that makes SMEC's report largely unusable. In terms of estimating the extent of and quality of what is almost entirely EPBC-listed ecological communities in the Sunbury Investigation Area, the report is wholly inadequate. To continue with the UGB proposal based on the report provided would be at best reckless and irresponsible.

Our groups have more detailed knowledge of the Sunbury Investigation Area and have conducted more ground-truthing than that conducted in the UGB report. We urge that any further analysis of the Sunbury Investigation Area is conducted in collaboration with local groups, including local councils.

Please contact us if you require more information about the content of this submission.