



8 November 2013

Director Assessment Policy, Systems and Stakeholder Engagement
Department of Planning and Infrastructure
GPO Box 39
Sydney NSW 2001

Dear Sir/Madam

Re: Biophysical Strategic Agricultural Land Mapping - Exhibition

Overview

The NSW Department of Planning and Infrastructure (DP&I) is seeking feedback on draft biophysical strategic agricultural land (BSAL) maps which have been released as part of the Strategic Regional Land Use Policy (SRLUP). These maps show the application of coal seam gas (CSG) exclusion zones to additional residential land across NSW; location of additional strategic agricultural land (SAL) across the State; and revised maps for critical industry clusters in the Upper Hunter region.

It is understood that the draft BSAL maps have been based on regional datasets. Centennial Coal (Centennial) has reviewed the available regional datasets and concludes that there is insufficient evidence at a regional scale to support the draft BSAL mapping within 'Strategic Agricultural Land Map - Sheet STA_048' (**Figure 1**).

The review and findings are presented in this letter.

Baseline Data

BSAL is defined as land containing "a rare combination of natural resources and is considered highly suitable for agriculture" (DP&I, 2012). The available information used to assess if characteristics of potential BSAL are present for the land mapped as BSAL on Strategic Agricultural Land Map - Sheet STA_048' include:

- Soil Landscapes of Gosford – Lake Macquarie (King, 1993); published scale of 1:100,000
- Rural Land Capability Mapping (DLWC, 1998); published scale of 1:100,000
- Draft inherent fertility maps (Office of Environment and Heritage [OEH], 2012)

Review

The draft BSAL mapping on Strategic Agricultural Land Map - Sheet STA_048 correlates with the mapping of the Yarramalong Soil Landscape Unit (**Figure 2**). The landscape limitations of the Yarramalong soil landscape unit are described by King as: flooding hazard, high run-on, permanent and seasonal water logging and localised stream bank and foundation erosion. The soil limitations are described for the topsoil as low fertility, low available water holding capacity, high permeability, very strongly acid, high erodibility, high potential for aluminium toxicity and sodicity. The subsoil limitations are described as being low fertility, low available water holding capacity, sodic to strongly sodic, strongly acid and highly erodibility,

Applying the 12 step criteria of the *Interim Protocol for Site Verification and Mapping of Biophysical Strategic Agricultural Land* (OEH and DPI-OASFS, 2013), hereafter referred to as the Interim

Protocol, the Yarramalong Soil Landscape Unit would fail criteria 7 (fertility) and criteria 12 (chemical limitation to effective rooting depth). The Yarramalong Soil Landscape Unit would likely fail criteria 9 (drainage) and criteria 10 (soil pH). To be BSAL all criteria need to met, which indicates that this regional dataset does not support the mapping of the Yarramalong Soil Landscape Unit as potential BSAL.

The Rural Land Capability mapping undertaken by the Department of Lands and Water show the land mapped as BSAL on Strategic Agricultural Land Map - Sheet STA_048 as Rural Land Capability Class IV (**Figure 3**). This class of land is suitable for grazing with limited cultivation and in accordance with the SRLUPs, this class of land is not considered to be potential BSAL.

The draft inherent fertility mapping, released by OEH in 2012, shows the mapped area as low fertility (**Figure 4**). In accordance with the released SRLUPs, this fertility class is not considered to be BSAL.

Lastly, a combination of site inspection and aerial imagery shows that there is limited evidence of cropping activities, which would suggest the occurrence of BSAL. This not definitive by itself; however, in contrast, evidence of fallow land, crops, irrigation equipment etc. would be strong indicators of the land's cropping capability. These indicators are not present.

Conclusion

Centennial is of the opinion, that the regional datasets do not suggest that the draft BSAL as mapped on Strategic Agricultural Land Map - Sheet STA_048 is potential BSAL. Centennial consequently submits that the mapping should be amended to remove reference to BSAL on Strategic Agricultural Land Map - Sheet STA_048 as it applies to the Yarramalong Soil Landscape Unit.

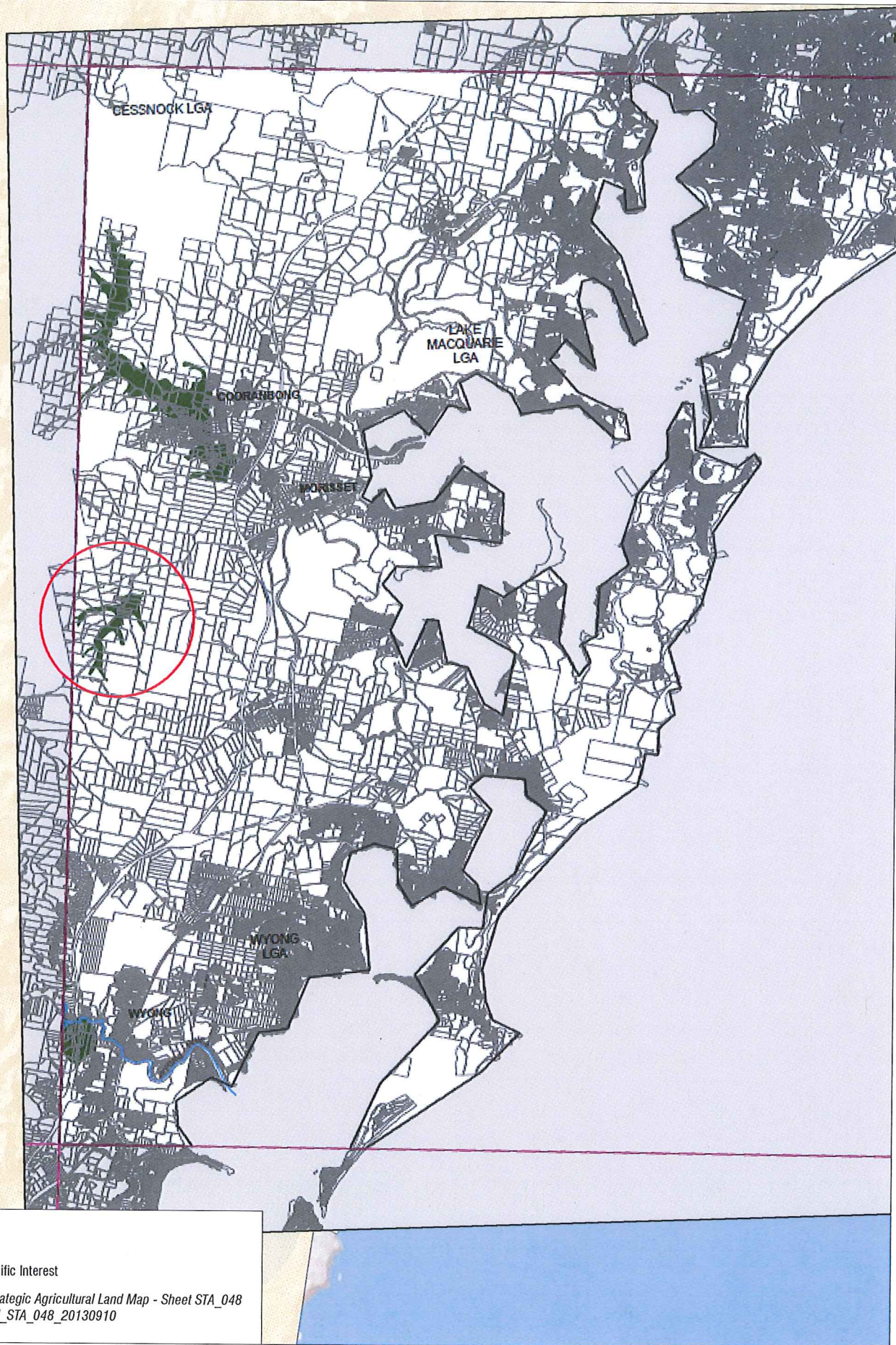
Yours sincerely
Centennial Mandalong Pty Ltd



Peter Cook
Project Manager

Attached:

- Figure 1 - Strategic Agricultural Land - Land Map STA_048
- Figure 2 - Soil Landscape
- Figure 3 - Rural Land Capability
- Figure 4 - Inherent Soil Fertility



LEGEND

Area of Specific Interest

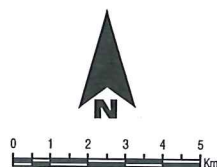
**Source: Strategic Agricultural Land Map - Sheet STA_048
(SEPP_MPEI_STA_048_20130910)*



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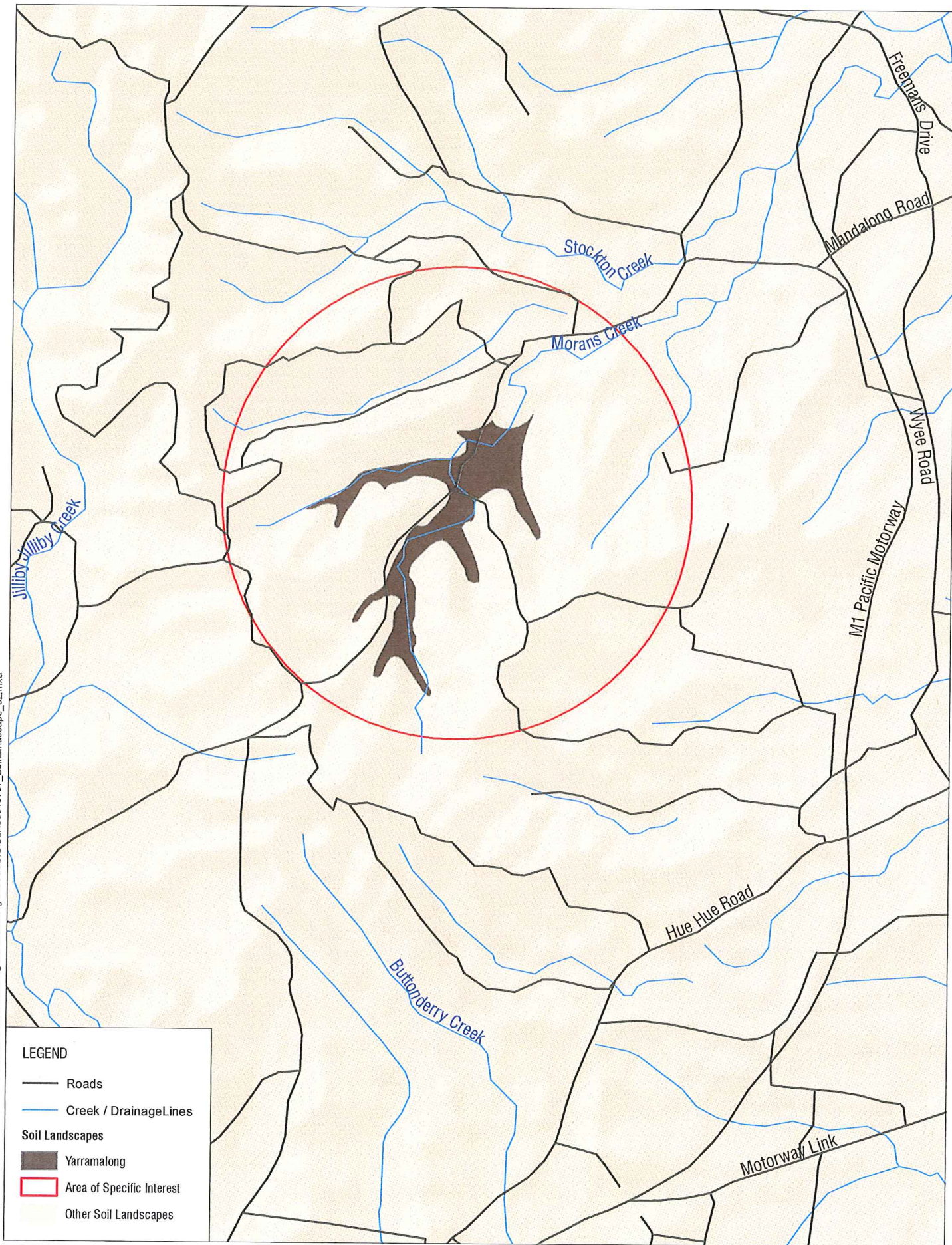
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Date:	07/11/2013
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Projection:	GDA 1994 MGA Zone 56



Mandalong BSAL Assessment

Strategic Agricultural Land

FIGURE 1



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- Roads
- Creek / DrainageLines
- Soil Landscapes**
 - Yarramalong
 - Area of Specific Interest
 - Other Soil Landscapes



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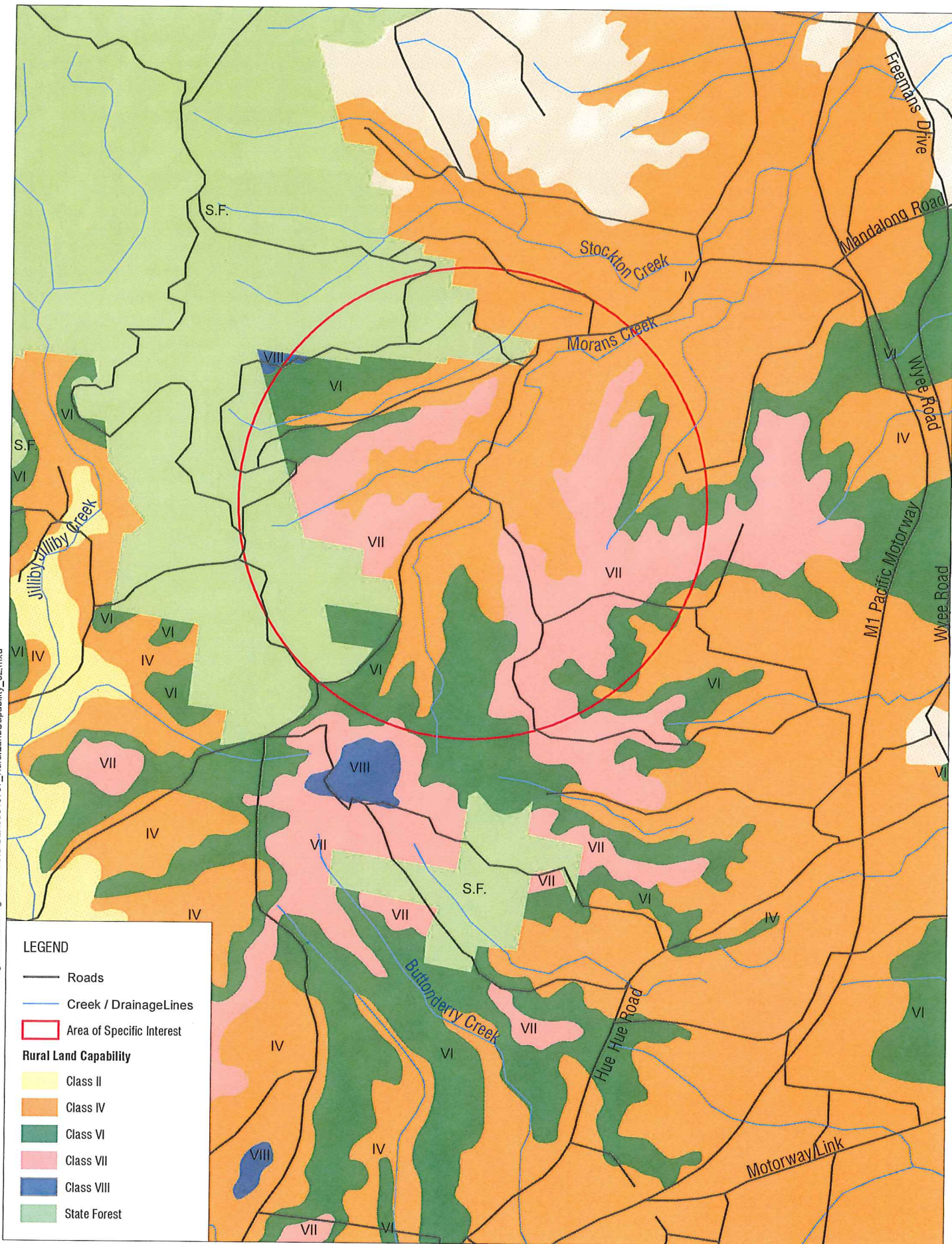
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Mandalong BSAL Assessment

Soil Landscape

FIGURE 2



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- Roads
- Creek / Drainage Lines
- Area of Specific Interest

Rural Land Capability

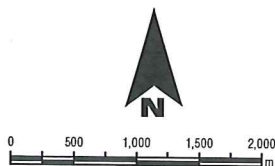
- Class II
- Class IV
- Class VI
- Class VII
- Class VIII
- State Forest



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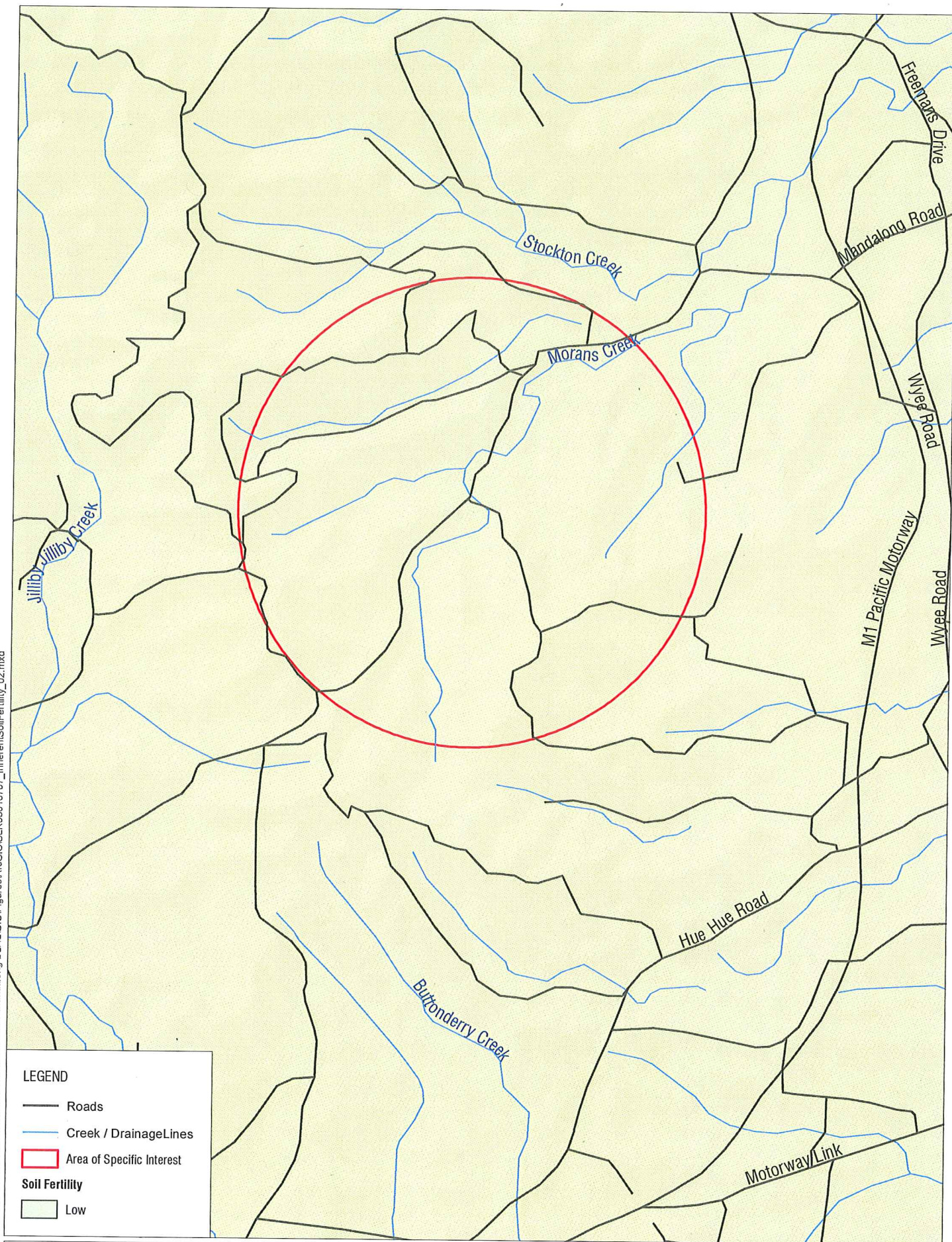
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Mandalong BSAL Assessment

Rural Land Capability

FIGURE 3



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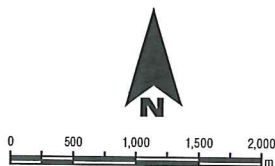
- Roads
- Creek / DrainageLines
- Area of Specific Interest
- Soil Fertility**
- Low



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Mandalong BSAL Assessment

Inherent Soil Fertility

FIGURE 4