ENTERPRISE LAND REVIEW – STAGE 2

Phase 2 Report

Bega Valley Shire Council



sustainable thinking

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Attachment A - AHIMS extensive search results



Document Details & History

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1. INTRODUCTION

1.1 The project

Stage 1 of Bega Valley Shire Council's *Enterprise Land Review* was completed in July 2016. The purpose of Stage 1 was to identify actions that may be taken and policy that may be developed by Council to secure sustainable industrial growth and job creation.

The Stage 1 report contained a series of recommendations that relate to further investigation of existing industrial zoned land and sites potentially suited to development of an eco-industry park, and incentives to facilitate industrial development. Council has now engaged Zenith Town Planning Pty Ltd to progress Stage 2 of the project by further exploration of these recommendations.

It is expected that the final stage, Stage 3, will comprise preparation of a planning proposal to ensure that new land for industrial development is secured through zoning and development standards. The planning proposal may also rezone existing industrial land that is considered unsuitable for industrial development.

1.2 Stage 2 process

Stage 2 of the Enterprise Land Review is being carried out over three phases. The first phase deals with identifying a suitable and feasible location for a new enterprise park on land located on the Princes Highway between Bega and Wolumla. The Phase 1 report provides an assessment and records findings concerning the suitability of certain parcels of land between Bega and Wolumla. It is recommended that the owners of land found to be suitable be approached regarding the potential rezoning of their land for industrial use and potential acquisition by Council.

The second phase considers the suitability of existing industrial areas, with a particular focus on land at South Pambula, having regard to land owners' intentions and the capacity to service existing industrial land with reticulated water and sewerage. Industrial zones that are affected by biodiversity or heritage constraints are also examined and potential indicative lot yields have been revised where necessary. Sources of funding infrastructure are also identified. This report records the findings of the second phase.

The third phase addresses incentive mechanisms to stimulate industrial development of new and existing industrial land, and planning principles for a new Council-owned enterprise park. This may encompass the preparation of a masterplan for vacant industrial land at South Pambula that would include estimates of the costs associated with providing reticulated water and sewerage and access road upgrades.

1



1.3 Methodology

The Phase 2 study area addresses land that is zoned industrial in Bega Valley Shire and that is considered vacant or under-utilised. The purpose of this second phase is to determine the suitability of vacant or under-utilised land for industrial development having regard to land owners' intentions. In the case of vacant industrial land at South Pambula, environmental constraints and natural hazards, and the capacity to service this land with reticulated water and sewerage is also taken into account to determine suitability for development.

To initiate the exercise a survey questionnaire was prepared and mailed/emailed to the owners of vacant or under-utilised industrial land, the purpose being to gauge the intentions of land owners regarding the future development of existing industrial land, and to identify opportunities for and constraints to that development.

The questions were designed to elicit opinions regarding suitable uses of industrial land, perceived barriers to industrial development, and measures to overcome those barriers and stimulate new development. Vacant and/or under-utilised land was identified using aerial imagery and verified by Council planners.

As a follow-up exercise to the survey questionnaire, direct contact was made with the owners of vacant or under-utilised industrial land on the southern side of Mount Darragh Road at South Pambula that is not mapped as being affected by environmental constraints or hazards. This land has been selected for special attention as it is centrally located in Bega Valley Shire and appears to contain large areas of vacant land zoned for industrial development. This round of consultation was by email and/or telephone to discuss the owners' interest in developing their land for industrial use, including in conjunction with adjoining land holdings. The future development intentions of each land owner and any means of assistance by Council to achieve those intentions was discussed. The intentions or willingness of land owners to develop their land and collaborate with adjoining owners is a critical factor affecting the ability to collaborate to provide services and roads, and to take advantage of economies of scale. The results of the survey questionnaire and direct consultation with owners of land at South Pambula are provided in the next chapter of this report.

Surveys were followed by a desktop analysis of environmental constraints that affect land on the south side of Mount Darragh Road at South Pambula to ascertain suitable development areas and the potential lot yield of those areas. Land to the north of Mount Darragh Road has been generally excluded due to flood potential and the presence of an endangered ecological community. Assessments have also been carried out of industrial zones found to be constrained by biodiversity or heritage factors in the Stage 1 of the Enterprise Land Review project.

Preliminary desktop biodiversity assessments focus on the presence of recorded threatened species including koalas, populations and endangered ecological communities. These assessments are preliminary only and on-ground surveys of ecological factors and Aboriginal heritage should be carried out to verify the findings.



Biodiversity assessments have relied on the following sources of publicly-available data and information:

- SIX Maps aerial and cadastral imagery,
- Bega Valley LEP 2013 mapping of terrestrial biodiversity, watercourses and natural resources,
- Atlas of NSW Wildlife (BioNet database) for recorded sights of threatened species including koalas,
- The South Coast Illawarra Vegetation Integration (SCIVI) Project classification (Tozer et al. 2010) for vegetation communities,
- Biodiversity Values Mapping and Native Vegetation Regulatory Mapping produced by the NSW Office
 of Environment and Heritage,
- Schedules to the Biodiversity Conservation Act 2016, and
- Protected Matters Report of the Environment Protection and Biodiversity Act 1999.

Data and information for indigenous and non-indigenous heritage assessments has been sourced from *Schedule 5 Environmental Heritage* of *Bega Valley LEP 2013* and the Aboriginal Heritage Information Management System (AHIMS) maintained by the Department of Planning Environment.

Consultation with Council's engineers has been carried out to determine the capacity to augment reticulated water and sewer services and to provide these services to suitable industrial land at South Pambula. Any requirements to augment headworks and/or distribution/collection mains have been identified.

The results of these investigations would inform a masterplan that would include an indicative layout. Based on the findings of consultation it is recommended that the subdivision be designed with the flexibility to vary lot layout, the number of lots and the sizing of lots.

Options for funding infrastructure provision have also been explored. These options include cost attribution to developers by way of contributions levied under section 64 of the *Local Government Act 1993* in accordance with development servicing plans, subsidisation or absorption of costs by Council through discounting as a means of encouraging industrial development, or through grant funding. Sources of state and federal grant funding for infrastructure projects have also been identified.



2. CONSULTATION WITH LAND OWNERS

2.1 Survey questionnaire - July-August 2017

A total of six responses were received to the survey questionnaire mailed out to owners of under-utilised and vacant industrial land in Bega Valley Shire. The survey was mailed to 46 land owners on 29 July 2017. Responses were due on 31 August 2017. This represents a 13% response rate which is considered normal. Three responses were by mail using the questionnaire form and three were verbal telephone conversations. Responses are summarised below beneath each of the six questions followed by a general summary.

- 1. What factors do you believe influence industrial development in Bega Valley Shire? Which of these factors act as barriers to the expansion of industries or attracting new industries to Bega Valley Shire?
- Being a tourist area (Bermagui) alternative types of light industry suited to tourism should be considered
- Successful and diverse primary and manufacturing industries need to be happening to stimulate business for service providers
- Barriers include:
 - strict council guidelines
 - costs associated with preparing plans, fees and development contributions
 - servicing costs (roads, power, water and sewer)
 - transport costs due to distances to resources and markets
- 2. Which of these factors can be focused on by Council or other Government Agencies to stimulate future industrial development in Bega Valley Shire?
- Advertising campaigns promoting our brand
- Reducing costs associated with the provision of services
- Consider local government activities elsewhere across Australia, e.g Byron Bay
- Promoting light industries including arts and crafts which attract tourists
- 3. What industries are suitable for Bega Valley Shire, either generally or in specific locations, that could take advantage of changes or improvements to these factors?
 - Boutique industries for Bermagui due to proximity to town and lack of highway exposure (breweries, cafes, nurseries, art studios, pottery, crafts, market produce, etc) aimed at tourists.



- Capitalise on the point of difference and nurture existing character as well as providing for traditional light industries such as mechanics and engineering
- Heavy industry not suited to light industrial areas such as Bermagui which adjoin residences
- Industries which utilise local resources, such as seafood, timber and tourism
- Primary industries fishing, farming, aquaculture, forestry
- Adventure industries kayaking, bushwalking, camping, offshore fishing, diving, surfing
- Storage businesses, e.g. boats, caravans
- 4. Do you intend to develop or redevelop your industrial land at some stage in the future? If so, will you do this in the near term (within the next 10 years) or longer term (in more than 10 years)?
- No Access a factor preventing development
- No Intend to retain existing residences
- Not until it is profitable. Considered storage premises but market is now saturated
- Yes In stages so that income is received for subsequent development
- 5. What measures or incentives can local government implement to overcome these barriers and stimulate the growth and development of industry?
- Permit caretakers residences so that owners can develop land without having to relocate and to provide security – precedents exist
- Facilitate alternative access to industrial land where it is constrained by location
- provide financial incentives such as reduced rates and development costs
- co-ordinate council services to assist development
- Council could provide advice in terms of suitable uses, layout, earthworks, etc
- 6. Would you be interested in being part of a larger master planned development covering multiple landowners that may encompass road design, subdivision, servicing etc?

Yes: 2

No: 1

In summary, responses indicate that development opportunities can be found by capitalising on existing attributes – character and resources. Barriers to growth are the costs associated with development applications and servicing land for development. Some respondents believe that Council could play a more



proactive role by considering financial incentives and alternatives to the traditional industrial development model, such as encouraging a greater range of industry within industrial areas and caretakers residences in targeted areas. The low overall survey response gives no indication as to whether owners are interested in consolidating their land with others to develop. Of those that responded there is a low propensity to develop in the near future.

2.2 Direct correspondence - October 2017

A questionnaire survey was mailed to all industrial land owners in Bega Valley Shire on 29 July 2017. A follow-up letter or email was then sent to six owners of under-utilised and vacant industrial land at South Pambula in October 2017.

The letter/email requested details of future intentions regarding development of industrial land and an indication of whether the owner would be interested in participating in a masterplanning exercise for South Pambula that may enable Council to co-ordinate the provision of water and sewer infrastructure to facilitate subdivision and development.

Four responses were received as verbal telephone conversations. Details of the comments received are summarised below with a general summary.

Landowner 1

- Intend to release large lots at south-western corner first following boundary adjustments. Looking to lease these lots to gain income to cover debt
- Second release to be lots fronting Mount Darragh Road
- Will retain a couple of blocks and sell the rest. It is a long term project due to the high costs associated with providing water and sewer services
- Lots 8 and 9 have approval for a concrete batching plant
- Have owned adjoining land for 12 years and own the service station across the road to the north.
 The watercourse is an issue in terms of lost land to provide the 20 metre buffer
- There is large demand for industrial lots. Am receiving many requests and phone calls from trucking and machinery companies, for example, to do wash downs and cleaning before vehicle servicing.
 Am considering commercial truck wash using recycled water and town water
- Could potentially redesign the subdivision if a masterplan is prepared in a reasonable timeframe to minimise costs associated with servicing

Landowner 2

• The land is zoned IN2 and small industrial lots could have potential. Land is suitable for up to four lots and have had one enquiry about purchasing a lot



- Have built a substantial intersection to access land as a condition of consent for a home industry.
 Approval has also been issued for a gravel pit but have not enacted that consent
- Next plan is to lodge a DA for a building and construction business. May subdivide one 2,000sqm lot off depending on required road design. There is 80 metres between the road and the western boundary. Would not build to the east of the road as residence is there. May look at a loop road off the main road, say end of Lloyd Street, up to Summerhill Road and then form a circular access. The required 20 metre road width and a cul-de-sac with a 12.5 metre radius for truck turning is excessive for zone IN2. Looking at 4 battle axe lots and a 20 metre wide road excludes too much land. Small lots would only be accessed by small pantec trucks.
- In terms of servicing, have been looking to access the 100mm water line. Could place a sewer pump station on the bottom corner of land to pump to South Pambula which could also service the residence. Am not supportive of low pressure sewer systems. Alternatively, am considering a sewerage worm farm for new lots which would require about 100sqm per lot and consume less land than a septic system
- Am interested in masterplanning for the industrial land and co-ordination of provision of water and sewer services

Landowner 3

- Land may be subdivided in the future, however, not in a position at the present time due to financial constraints
- Will respond about willingness to participate in a masterplanning process. Am concerned that a
 masterplan may place restrictions on future subdivision or development, such as layout or services,
 that would be difficult to change

Landowner 4

- Have nearly 80 acres on the northern side of Mount Darragh Road which is nearly all constrained by flooding
- Have 5 acres close to residence which attempted to sell some years ago but was required to spend about \$150,000 on roadworks to subdivide
- Am not interested in subdividing the 20 acres on the south side of Mount Darragh Road as it needs substantial fill and costs associated with road works would be too high

Responses indicate that support for a masterplan is divided and that servicing costs, particularly those associated with access, are impeding subdivision of industrial land located south of Mount Darragh Road at South Pambula in the near term.

Despite limited land holder support to collaborate, it is considered that a masterplan would provide certainty to land owners in terms of the costs associated with servicing.



3. ASSESSMENT OF LAND SUITABILITY - SOUTH PAMBULA

3.1 Description

The South Pambula industrial area is zoned IN1 General Industrial under *Bega Valley LEP 2013* as shown in Figure 1. This land is largely under-utilised with many lots still vacant or occupied by industrial activities that occupy only a small proportion of the site. Around one-third of all lots are greater than 10,000m² in area and there is significant potential for industrial subdivision. It was estimated in Stage 1 of this project that there are 180 potential additional lots at a minimum lot size of 2,000m², allowing for 20% of the land to be used for services and easements, and having removed environmentally constrained land.

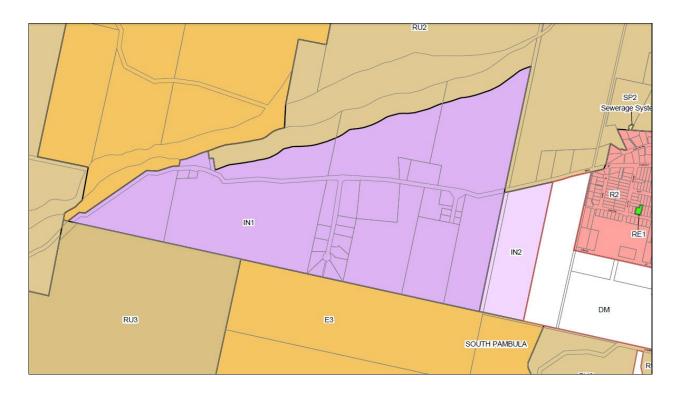


Figure 1: Industrial land at South Pambula. Source: Bega Valley LEP 2013 Land Zoning Map – Sheet LZN_012C

Some of the industrial zoned land to the south of Mount Darragh Road is mapped as being sensitive due to terrestrial biodiversity in *Bega Valley LEP 2013*. Land to the north of Mount Darragh Road is constrained by flood potential and is vegetated with Southeast Floodplain Wetland which is part of the River Flat endangered ecological community.

A heritage item of local significance – the Cottage and building (former Pambula Co-operative Creamery Dairy Co. Ltd) is located on a small parcel of land adjoining the Pambula River. This property is located at the western extremity of the industrial land on the northern side of Mount Darragh Road.



Stage 1 of the Enterprise Land Review found that the South Pambula industrial area is heavily constrained by biodiversity and flood potential. Although there are substantial areas of vacant or under-utilised land, the presence of mapped biodiversity poses a limitation to further subdivision for industrial lots in the small to medium sized range. It was recommended in Stage 1 that further investigation of the extent and significance of native vegetation communities and wetlands should be carried out to more accurately identify limitations to further development.

It is considered that further investigations should focus only on land south of Mount Darragh Road and a section of the allotment in the centre of the industrial area and north of Mount Darragh Road. These areas are free of flood affectation and corresponding River Flat endangered ecological community.

Mapped constraints are shown on extracts from *Bega Valley LEP 2013* maps below with the boundary of the industrial zone.

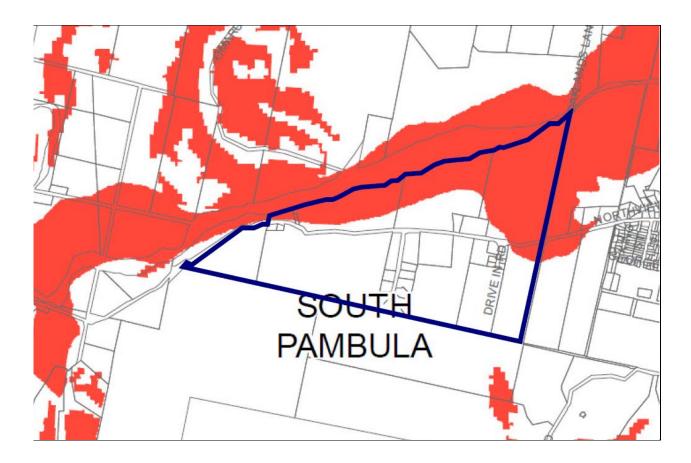


Figure 2: Extract from Bega Valley LEP 2013 Natural Resources Land Map Sheet NRL_012



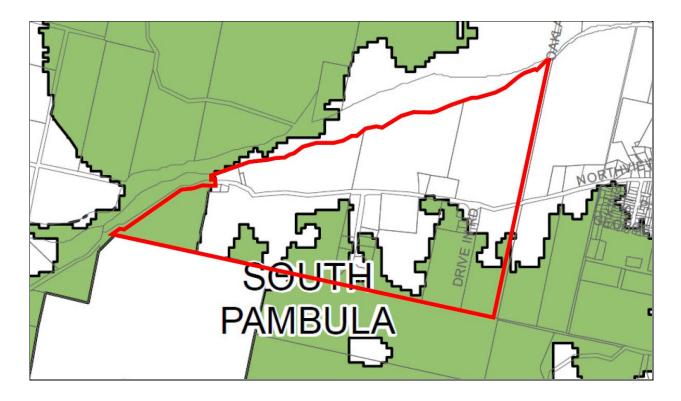


Figure 3: Extract from Bega Valley LEP 2013 Terrestrial Biodiversity Map Sheet BIO_012

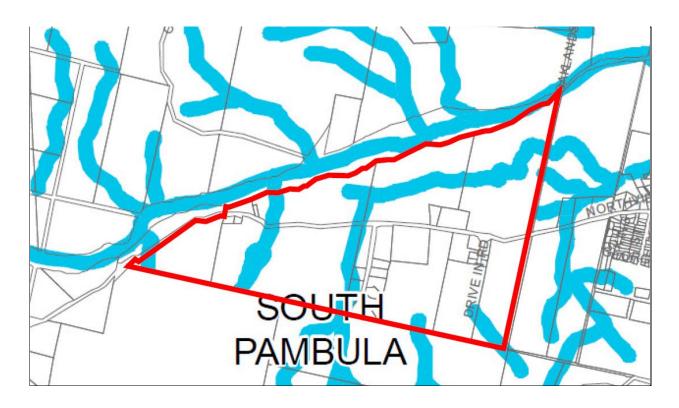


Figure 4: Extract from Bega Valley LEP 2013 Riparian Lands and Watercourses Map Sheet WCL_012



3.2 Biodiversity assessment

A desktop biodiversity assessment has been carried out to identify environmentally sensitive areas within the South Pambula industrial zone.

3.2.1 Significant flora

A search of the BioNet Atlas of NSW Wildlife has identified that there are 33 protected flora species listed within a 100 square kilometre area surrounding the South Pambula industrial area. Of these two are endangered and two are listed as vulnerable in the *Biodiversity Conservation Act 2016*. There are also ten endangered ecological communities within the search area. These are:

- Araluen Scarp Grassy Forest in the South East Corner Bioregion
- Bangalay Sand Forest of the Sydney Basin and South East Corner bioregions
- Brogo Wet Vine Forest in the South East Corner Bioregion
- Coastal Saltmarsh in the New South Wales North Coast, Sydney Basin and South East Corner Bioregions
- Dry Rainforest of the South East Forests in the South East Corner Bioregion
- Freshwater Wetlands on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions
- Lowland Grassy Woodland in the South East Corner Bioregion
- Montane Peatlands and Swamps of the New England Tableland, NSW North Coast, Sydney Basin, South
 East Corner, South Eastern Highlands and Australian Alps bioregions
- River-Flat Eucalypt Forest on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions
- Swamp Oak Floodplain Forest of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions
- Tablelands Snow Gum, Black Sallee, Candlebark and Ribbon Gum Grassy Woodland in the South Eastern Highlands, Sydney Basin, South East Corner and NSW South Western Slopes Bioregions
- Themeda grassland on seacliffs and coastal headlands in the NSW North Coast, Sydney Basin and South
 East Corner Bioregions

A search of datasets maintained by OEH was then carried out to produce a map of vegetation communities on the industrial land and surrounding area. These are shown in Figure 5 below. Fauna species sightings are also shown in Figure 5 and are discussed in section 3.2.2 below.

The communities found on or near the industrial land are:



- Floodplain wetlands of the coastal lowlands, southern South East Corner Bioregion (e60)
- Rough-barked Apple shrubby open forest on gully flats, southern South East Corner Bioregion (e37)
- Silvertop Ash Rough-barked Apple shrubby open forest on the hinterland hills, far southern South East Corner Bioregion (e47)
- Mountain Grey Gum ferny tall moist forest on coastal ranges, southern South East Corner Bioregion (e13)
- Silvertop Ash Blue-leaved Stringybark shrubby open forest on hinterland hills, far southern South East Corner Bioregion (e49)

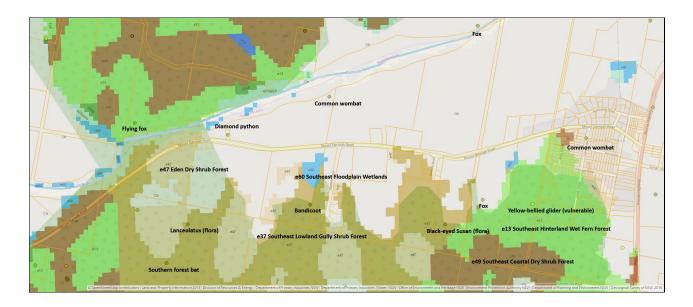


Figure 5: Species sightings and vegetation communities South Pambula. Source: SEED

The first of these vegetation communities is an EEC listed in the *Biodiversity Conservation Act 2016* as *Freshwater wetlands on coastal floodplains of the NSW North Coast, Sydney Basin and South East Corner bioregions*. It occupies a small area to the west of Redfern Close on Lot 341 DP 1222135.

This is shown circled in red in Figure 6. Ground-truthing is necessary to determine the extent and integrity of this community.





Figure 6: The endangered ecological community. Source: SIX Maps

Biodiversity Values Map

The Biodiversity Values Map is given in Figure 7 below. This map identifies land with high biodiversity value as defined by clause 7.3(3) of the *Biodiversity Conservation Regulation 2017*. The Biodiversity Offsets Scheme applies to all clearing of native vegetation and other biodiversity impacts prescribed by the regulation on land identified on the map. The Biodiversity Offsets Scheme is used to determine whether the Biodiversity Assessment Method is to be used to assess the impacts of a development proposal and applies to local development, such as subdivision for industrial uses.

The scheme is triggered based on threshold levels of clearing comprising the minimum lot sizes applying to the land to be cleared and whether the area is mapped on the Biodiversity Values Map. In this case the industrial land is not mapped as being of high biodiversity value and does not have a minimum lot size mapped in *Bega Valley LEP 2013*. In this case the threshold for clearing of native vegetation above which the Biodiversity Assessment Method applies is 0.25 hectares or more.





Figure 7: Biodiversity Values Map. Source: OEH, 2019

A test of significance under section 7.3 of the *Biodiversity Conservation Act 2016* is required to be carried out for local development proposals that do not exceed the Biodiversity Offsets Scheme threshold. This test determines whether the potential impacts of development are likely to significant affect threatened species, ecological communities, and their habitats.

Native Vegetation Regulatory Map

The Native Vegetation Regulatory Map categorises land where management of native vegetation can occur without approval or where management of native vegetation may be carried out in accordance with Part 5A Land Management (native vegetation) of the *Local Land Services Act 2013*. The categories are Category 1 (unrestricted management where clearing is exempt from the LLS Act 2013), Category 2 is regulated land where the LLS Act applies to clearing as either code based, vulnerable or sensitive, and Excluded Land which is not regulated by the LLS Act 2013.

The Native Vegetation Regulatory Map for South Pambula industrial area is given as Figure 8 below. This land is not mapped as *being excluded from the LLS Act* (shown in grey) other than land along the riparian corridor of the Pambula River which has not been categorised.





Figure 8: Native Vegetation Regulatory Map. Source: OEH, 2019

3.2.2 Significant fauna

A search of the BioNet Atlas of NSW Wildlife has identified that 189 protected fauna species have been recorded within a 100 square kilometre area surrounding the South Pambula industrial area.

Of these five species are listed as endangered and 19 species listed as vulnerable in the *Biodiversity Conservation Act 2016*. The endangered and vulnerable species are listed in Table 1 below.

Table 1: Endangered and vulnerable species recorded near South Pambula industrial area

Common name	Status
Green and golden bell frog	Endangered
Australasian bittern	Endangered
Pied oystercatcher	Endangered
Swift parrot	Endangered
Regent honeyeater	Endangered
Black winged petrel	Vulnerable
White-bellied sea eagle	Vulnerable
Square-tailed kite	Vulnerable
Gang gang cockatoo	Vulnerable
Glossy black cockatoo	Vulnerable
Little lorikeet	Vulnerable
Barking owl	Vulnerable



Common name	Status
Powerful owl	Vulnerable
Masked owl	Vulnerable
Sooty owl	Vulnerable
Dusky wood swallow	Vulnerable
Scarlet robin	Vulnerable
Spotted-tailed quoll	Vulnerable
Brush-tailed phascogale	Vulnerable
Koala	Vulnerable
Yellow-bellied glider	Vulnerable
Long-nosed potoroo	Vulnerable
Grey-headed flying fox	Vulnerable
Eastern freetail bat	Vulnerable

Figure 5 above shows recorded species sightings including sightings of koalas if any. There are six recorded species sightings in the South Pambula industrial area only one of which is vulnerable – the yellow-bellied glider which was sighted in bushland south of the urban area and outside of the boundaries of land zoned for industrial use. The other five recorded species are a diamond python, common wombat, bandicoot, a fox and a plant known as black eyed susan all of which are not listed as threatened species.

Field surveys would need to be carried out to verify the presence or likelihood of threatened species occurring within the industrial area.

3.2.3 Environment Protection & Biodiversity Conservation Act

The *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)* affords protection for seven matters of national environmental significance. These matters are world heritage properties, national heritage places, wetlands of national importance, listed threatened species and ecological communities, migratory species, commonwealth marine areas and nuclear actions including uranium mines. Actions that have, or are likely to have, a significant impact on a matter of national environmental significance require the approval of the Australian Government Minister for the Environment and Energy.

Actions include but are not limited to construction, expansion, alteration or demolition of buildings, structures, infrastructure or facilities; storage or transport of hazardous materials; waste disposal; earthworks; impoundment, extraction and diversion of water; research activities; vegetation clearance; military exercises and use of military equipment; and sale or lease of land.

It is the responsibility of the Minister to decide whether assessment and approval is required under the *EPBC Act*. Currently there is 1 listed threatened ecological community, 29 listed threatened species of flora and fauna, and 14 listed migratory species of flora and fauna protected under the *EPBC Act* within the area



surrounding the South Pambula industrial area. The vegetation community Lowland Grassy Woodland in the South East Corner Bioregion is deemed critically endangered, however, the search of the Bionet Atlas indicates that this EEC is not present on the industrial land. Similarly, the mapping of recorded species indicates that there are no recorded threatened or migratory species on the land.

3.3 Lot yield estimates

Having regard to the findings of the biodiversity assessment, land that is free of affectation by ecological factors on the southern side of Mount Darragh Road and a small area on the northern side of the road has been investigated to determine the potential for further subdivision and the expansion of existing or linked industrial activities. Options for industrial expansion have been identified by isolating suitable unconstrained areas for development and determining appropriate lot sizes based on existing subdivision layouts.

Land that has been identified as being vacant or under-utilised on the southern side of Mount Darragh Road is shown edged in red in Figures 9 and 10 below. An estimate of the land area that is unconstrained is also given. The total lot yield of the land shown edged in red in Figures 10 and 11 and given in Table 2 has been calculated by:

- 1. adding the approximate land areas for each allotment to give a total developable area,
- 2. deducting a proportion of 20% of land area from the total area to allow for the provision of services (water, sewer, stormwater, telecommunications and energy), easements to drain water or access, and internal accessways, and
- 3. dividing by a typical lot size to estimate the total number of lots that could be created.



Figure 9: Land on the southern side of Mount Darragh Road, South Pambula - western section





Figure 10: Land along Mount Darragh Road- eastern section

Table 2: Lot yield estimate for South Pambula industrial land

Allotment	Total	Net developable area	Lot yield at	Lot yield at
	unconstrained	(total area less 20%	2,000m ² lot	4,000m ² lot
	land area	for services,	size	size
	(hectares/m²)	easements & access)		
Lot 342 DP 1222135	11.7ha	96,600m ²	48.3	24.15
	117,000m ²			
Lot 341 DP 1222135	2.1ha	16,800m ²	8.4	4.2
	21,000m ²			
Lot 442 DP 1217149	1.7ha	13,600m ²	6.8	3.4
	17,000m ²			
Lot 1 DP 1012165	3.9ha	31,200m ²	15.6	7.8
	39,000m ²			
Lot 5 DP 609622	7.9ha	63,200m ²	31.6	15.8
	79,000m ²			
Lot 6 DP 624375	2.1ha	16,800m ²	8.4	4.2
	21,000m ²			
Lot 23 DP 812587	4.9ha	39,200m ²	19.6	9.8
	49,000m ²			
Lot 31 DP 749613	5.4ha	43,200m ²	21.6	10.8
	54,000m ²			
Total	39.7ha	31.76ha	158.8 lots	79.4 lots
	397,000m ²	317,600m ²		



If 50% of net developable area were to be subdivided to a lot size of 2,000m² and 50% to a lot size of 4,000m² total yield would be 119 lots.

At the time these calculations were made the owner of Lot 1 DP 1012165 and Lot 5 DP 609622 had lodged a development application with Bega Valley Shire Council to subdivide these two lots to create 22 lots with lot sizes generally in the order of 4,000m². This equates approximately with the estimate in the table above of 23.6 lots that may be yielded from Lots 1 and 5. The plan of subdivision also proposes boundary adjustments to incorporate constrained land within the existing developed lots fronting Redfern Close.

3.4 Servicing requirements

Preliminary consultation has been held with Council's engineering division. It has been advised that there is capacity in the existing water and sewerage systems although some upgrades to infrastructure would be required. These include:

- Upsizing the existing 100mm water mains to 200mm. The existing water mains are not large enough
 to supply all industrial land without having to provide a new balancing tank (reservoir) to provide flow
 when necessary. All extensions to the existing mains are to be sized 200mm, and
- the addition of a tank at the end of the sewer mains to upsize holding volumes and the installation of a pump rising main to access the Merimbula sewer pump station would be required.

Options to fund infrastructure augmentation and sources of potential grant funding have been identified and are discussed in section 5. A masterplan prepared and adopted by Council could be used to seek federal and state funds to provide water and sewer services and road upgrades. Masterplanning for the subdivision of remaining vacant land and providing essential services by securing external funding would be expected to stimulate subdivision and development by reducing the costs of subdivision borne by land holders.



4. ENVIRONMENTALLY CONSTRAINED INDUSTRIAL AREAS

Stage 1 of the Enterprise Land Review examined the opportunities and constraints of all existing industrial areas across Bega Valley Shire. The environmental constraints that affect some industrial land warrants further investigation and potentially rezoning to an environmental or rural zone to prevent degradation of environmental attributes. The constrained industrial areas are located at North Bega, South Bega, Eden, Kalaru and Pambula. These areas are examined in further detail below. If necessary a revised estimate of the potential lot yield of vacant land within each industrial area is provided.

Other industrial areas located at Central Bega, Bermagui, Edrom, Snug Cove and Wallagoot are not considered constrained and the lot yield estimates provided in the Enterprise Land Review Stage 1 Report remain the same.

4.1 North Bega

4.1.1 Stage 1 recommendation

Land at North Bega is zoned IN1 General Industrial and IN2 Light Industrial under *Bega Valley LEP 2013* as shown in Figure 11 below.

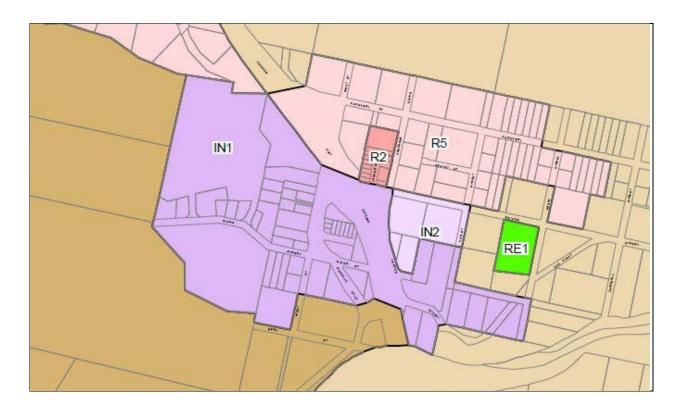


Figure 11: North Bega industrial zone. Source: Bega Valley LEP 2013



The recommendation in the Stage 1 Report was:

Some constraints exist at North Bega though development of any vacant or underutilised land can be carried out in a manner that would not cause adverse impacts. The north eastern corner of the North Bega industrial area is constrained by the presence of a wetland.

4.1.2 Biodiversity assessment

Land at the North Bega industrial area is constrained by a watercourse that traverses vacant land west of the Princes Highway and north of Ridge Street. This watercourse then runs east of the highway across land to the north of Bega Cheese.

Land at the edge of the Bega River is also noted as terrestrial biodiversity due to riparian vegetation remaining on the banks. This land has been developed by Bega Cheese and other light industrial uses.

Land at the north eastern corner of the industrial area that is zoned IN2 is constrained by the presence of a wetland which is mapped on the Riparian Lands and Watercourses Map of *Bega Valley LEP 2013*.

The wetland is located north of and is partly within the property occupied and developed by Bega Cheese. The wetland is variously zoned IN1 General Industrial, IN2 Light Industrial, RE1 Public Recreation, R5 large Lot Residential and RU1 Primary Production. Its boundaries are shown in the aerial image below.



Figure 12: Aerial image of North Bega industrial area. Source: SIX Maps



Research of species sightings and vegetation communities has found that there are have been no threatened species sightings, including sightings of koalas. The vegetation communities surrounding the wetland to the west comprise Southeast Floodplain Wetlands and Coastal Freshwater Lagoon. These same communities exist to the south of the industrial area west of the highway with the addition of Southeast Lowland Grassy Woodland. All three are listed endangered ecological communities in the *Biodiversity Conservation Act 2016*. It was concluded in Stage 1 that although some constraints exist at North Bega the development of any vacant or underutilised land can be carried out in a manner that would not cause adverse environmental impacts. However, development of land occupied by the wetland and endangered ecological communities should be avoided. Any development on the vacant land would need to have regard to impacts on water quality and provide a suitable buffer to the watercourse.

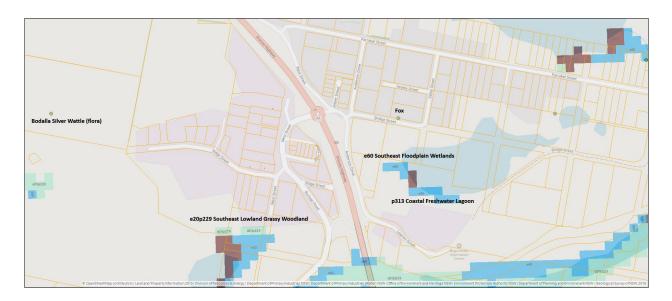


Figure 13: Species sightings and vegetation communities, North Bega industrial area. Source: SEED

An *Environment Protection and Biodiversity Conservation Act 1999* protected matters report notes that there are potentially one threatened ecological community, 22 threatened species and 13 migratory species listed as matters of national environmental significance within an area that includes a one kilometre buffer around the industrial area. The vegetation community Lowland Grassy Woodland in the South East Corner Bioregion is listed as critically endangered. This community corresponds with e20p229 Southeast Lowland Grassy Woodland listed in the *Biodiversity Conservation Act 2016*.

4.1.3 Lot yield estimate

The area of the wetland that is zoned for industrial development is 4.03 hectares. This is currently in single ownership and is unlikely to be developed due to costs associated with construction standards, prevailing legislation and community attitudes towards development of environmentally sensitive areas. There is no impact in the estimated lot yield for North Bega industrial area as the area of the wetland was deducted in



calculations carried out for the Enterprise Land Review Stage 1 Report. Yield is estimated to be 44 lots at a 2,000m² lot size allowing for 20% of vacant land to be taken up by services and easements.

4.1.4 Conclusion

The wetland east of the Princes Highway is of environmental significance due to its potential to provide habitat for threatened and migratory species. Endangered ecological communities are also present to the west of the wetland on land that is zoned IN2 Light Industrial. It is considered that adequate protection is afforded to these environmentally sensitive areas through listing in the *Biodiversity Conservation Act 2016* and the *Environment Protection & Biodiversity Conservation Act 1999* meaning that rezoning is unnecessary. Any future development proposal would need to address biodiversity values and avoid any impact on the ecological integrity of these attributes and on watercourses within and in the vicinity of industrial zones.

4.2 South Bega

4.2.1 Stage 1 recommendation

Land at South Bega is zoned IN1 General Industrial and IN2 Light Industrial under *Bega Valley LEP 2013*. It is spread across several parcels on the eastern side of the Princes Highway.

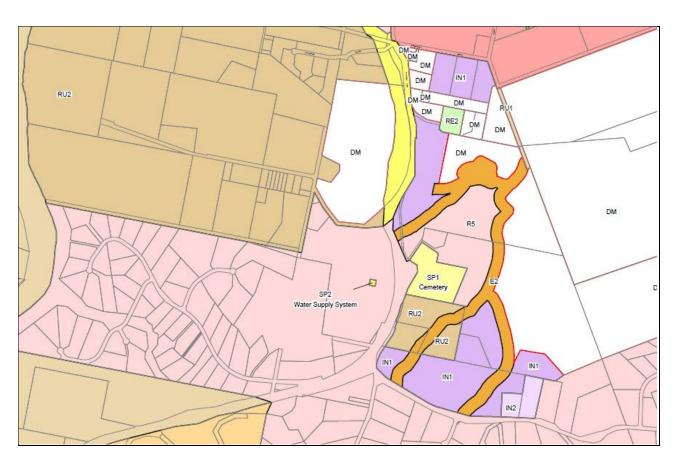


Figure 14: South Bega industrial zone. Source: Bega Valley LEP 2013



The Recommendation in the Stage 1 Report was:

Land at South Bega at the corner of the Princes Highway and Kerrisons Lane is constrained by the presence of a listed vegetation community and indigenous heritage. Further investigation of this area is recommended to determine limits to development. Another allotment at South Bega which adjoins the land subject to the planning proposal is also constrained by indigenous heritage which requires careful management to further develop. It would be prudent to carry out detailed Aboriginal heritage studies of each of these allotments prior to further subdivision or development.

An industrial parcel at South Bega is likely to be expanded by 10.7 hectares following the gazettal of amendments to Bega Valley LEP 2013 to rezone land to IN2 Light Industrial.

4.2.2 Biodiversity assessment

The industrial zoned land at the intersection of the Princes Highway and Kerrisons Lane is constrained by terrestrial biodiversity and watercourses. There have been a number of species sightings recorded in the vicinity of the South Bega industrial area. The location and composition of sightings of threatened flora and fauna species are shown in Figure 15. These comprise:

- A koala
- Greater broad-nosed bat
- Masked owl
- · Hickory wattle

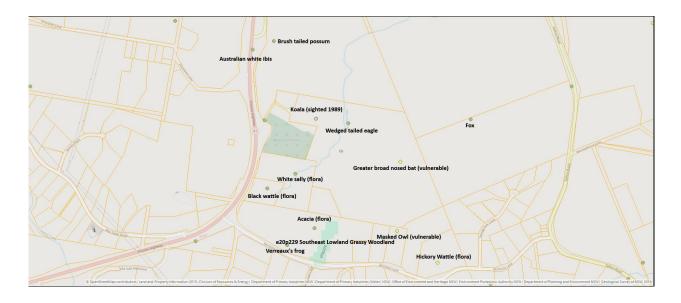


Figure 15: Species sightings and vegetation communities, South Bega industrial area. Source: SEED



Mapping of vegetation communities indicates the presence of an endangered ecological community. This is a patch of Southeast Lowland Grassy Woodland that runs north-south off Kerrisons Lane. The patch is roughly 2.3 hectares in area. A large industrial operation has been developed to the west on the same allotment.

An *Environment Protection and Biodiversity Conservation Act 1999* protected matters report notes that there is one threatened ecological community, and potentially 22 threatened species and 13 migratory species listed as matters of national environmental significance within an area that includes a one kilometre buffer around the industrial area. The vegetation community are the Lowland Grassy Woodland in the South East Corner Bioregion which is critically endangered. This vegetation community corresponds with the EEC listed in the *Biodiversity Conservation Act 2016* that is present off Kerrisons Lane.

4.2.3 Heritage assessment

An extensive search has been carried out of the Aboriginal Heritage Management Information System (AHIMS) maintained by the former Office of Environment & Heritage. This search identified the positioning of 18 potential archaeological deposits across Lot 4 DP 1077434 and Lot 2432 DP 793758. The approximate location of these deposits are shown as blue circles in Figures 16 and 17 below.

Two sites are located within the land zoned for industrial development in Lot 4 off Newtown Road and four sites are located within land zoned for industrial development in Lot 2432 off Kerrisons Lane.

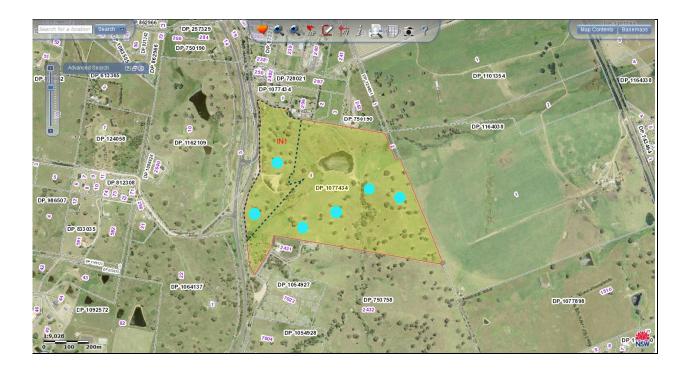


Figure 16: Open site potential archaeological deposits Lot 4 DP 1077434



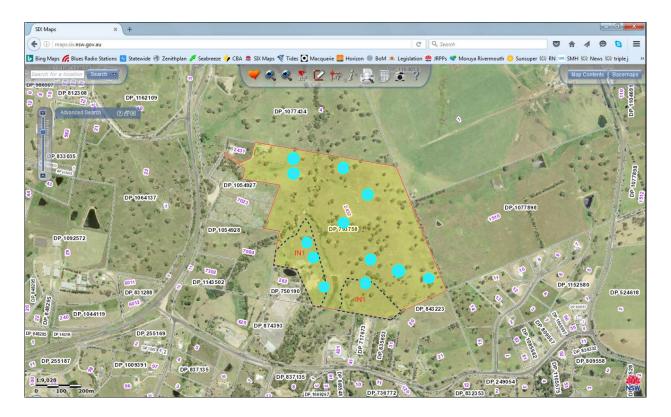


Figure 17: Open site potential archaeological deposits Lot 2432 DP 793758

4.2.4 Lot yield estimate

It was found in the Stage 1 Report that at a minimum lot size of 2,000m², there is the potential for an additional 118 additional lots at South Bega allowing for 20% of land to be set aside for services and easements. Deducting 6 hectares of land that is an endangered vegetation community at South Bega at the corner of the Princes Highway and Kerrisons lane reduces the yield by 30 lots giving a total potential yield of 88 additional lots for South Bega.

The area occupied by the EEC is now estimated to be 2.3 hectares in area meaning that an additional 3.7 hectares is able to be developed for industrial use. This increases the lot yield by 15 lots allowing 20% for services and easements giving a total yield for South Bega industrial area of 103 lots.

In addition to this estimate, 10.7 hectares of land south of Corkhill Place has been rezoned to IN2 Light Industrial since the Stage 1 report was completed. This has the potential to generate 43 lots at 2,000m² and is unconstrained. The total lot yield at South Bega is now 146 lots.

4.2.5 Conclusion

Future development of the South Bega industrial area should be designed to avoid the EEC. Archaeological surveys should also be carried out to determine the precise location of each deposit that may be affected



by proposed development in the vicinity of the potential archaeological deposits. Aboriginal Heritage Impact Permits may be required to disturb or destroy the relevant deposits.

4.3 Eden

4.3.1 Stage 1 recommendation

Industrial land at Eden is zoned IN1 General Industrial under *Bega Valley LEP 2013*. It is located in two sections to the north of the town centre.

The Recommendation in the Stage 1 Report was:

Although there are substantial areas of vacant or under-utilised land in both industrial areas, the presence of mapped biodiversity poses a serious limitation of further subdivision for industrial lots in the small to medium sized range at Imlay Street and to a lesser extent at North Eden due to flooding. Further investigation of the extent and significance of native vegetation communities should be carried out to determine whether there are opportunities to further develop both of these estates.

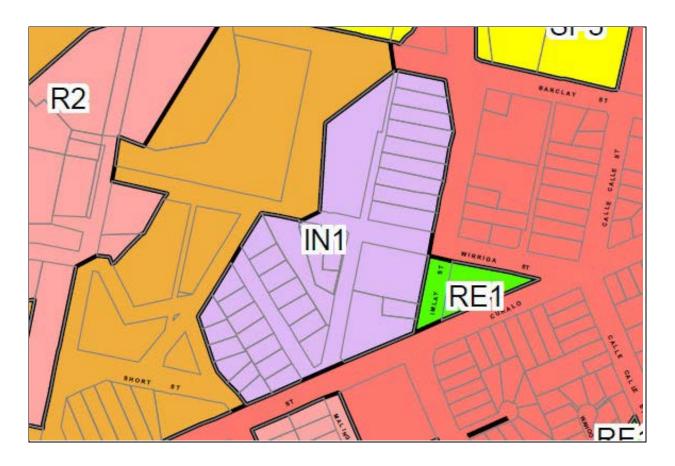


Figure 18: Imlay Street, Eden industrial zone. Source: Bega Valley LEP 2013



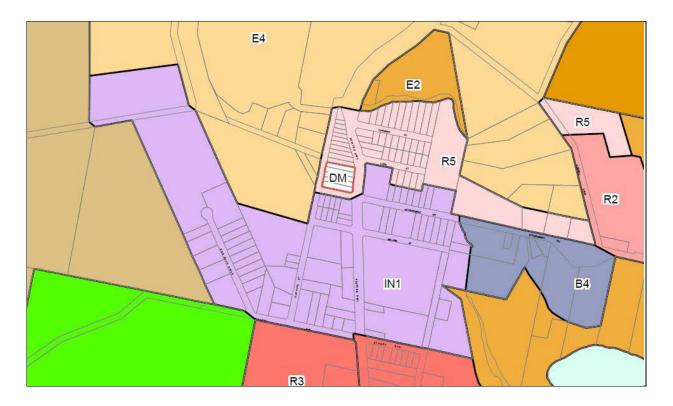


Figure 19: Government Road, Eden industrial zone. Source: Bega Valley LEP 2013

4.3.2 Biodiversity assessment

The vacant lots at Imlay Street are constrained by vegetation comprising Eden Dry Shrub Forest. Two other vegetation communities exist to the west of the industrial zoned land. These are South Coast River Flat Forest and Southeast Hinterland Wet Shrub Forest. There have been no sightings of vulnerable flora or fauna recorded in the industrial area. The South Coast River Flat Forest is listed as the endangered ecological community River-flat eucalypt forest on coastal floodplains of the NSW North Coast, Sydney Basin and South East Corner bioregions in the *Biodiversity Conservation Act 2016*. This community is located to the north-west of the industrial area.

An *Environment Protection and Biodiversity Conservation Act 1999* protected matters report notes that there are three threatened ecological communities, and potentially 58 threatened species and 44 migratory species listed as matters of national environmental significance within an area that includes a one kilometre buffer around the Imlay Street industrial area. The vegetation communities are the critically endangered Lowland Grassy Woodland in the South East Corner Bioregion, Littoral Rainforest and Coastal Vine Thickets of Eastern Australia which is also listed as critically endangered, and the endangered Subtropical and Temperate Coastal Saltmarsh. These vegetation communities are likely to occur within the area surrounding the industrial zone. The high numbers of threatened and migratory species is unsurprising given the extent of extant native vegetation to the west of the industrial zone.





Figure 20: Species sightings and vegetation communities, Imlay Street, Eden industrial area. Source: SEED

Industrial land to the west of the Princes Highway at the North Eden industrial area is also constrained by terrestrial biodiversity comprising Southeast Lowland Gully Shrub Forest and Southeast Lowland Dry Shrub Forest. Neither of these vegetation communities are listed as EECs in the *Biodiversity Conservation Act 2016*. The eastern portion of this industrial zone has been cleared. There have been no sightings of vulnerable flora or fauna recorded in this industrial area.



Figure 21: Species sightings and vegetation communities, Government Road, Eden industrial area. Source: SEED

An *Environment Protection and Biodiversity Conservation Act 1999* protected matters report notes that there are two threatened ecological communities, and potentially 29 threatened species and 15 migratory species listed as matters of national environmental significance within an area that includes a one kilometre buffer around the Government Road industrial area. The vegetation communities are the critically endangered



Lowland Grassy Woodland in the South East Corner Bioregion, and the endangered Subtropical and Temperate Coastal Saltmarsh. These vegetation communities are likely to occur within the area surrounding the industrial zone.

4.3.3 Lot yield estimate

Allowing for 20% of land area to be used for services and easements and applying a minimum lot size of 2,000m², it was estimated in the Stage 1 report that vacant land and under-utilised land could potentially generate 10 lots at Imlay Street (or 1 additional lot if biodiversity affected land is deducted) and 18 lots at Government Road after removing land area affected by flooding.

Despite being mapped as environmentally sensitive in *Bega Valley LEP 2013* due to terrestrial biodiversity, neither industrial area is directly affected by endangered ecological communities. There is therefore the potential to create 28 new industrial lots.

4.3.4 Conclusion

Development of vegetated land should be avoided if possible, however, the provisions of *Bega Valley LEP* 2013 permit the development of land mapped as being affected by terrestrial biodiversity if vegetation removal can be minimised or adverse impacts mitigated.

Similarly, any watercourses traversing land zoned for industrial use should be protected in accordance with provisions of *Bega Valley LEP 2013*.

4.4 Kalaru

4.4.1 Stage 1 recommendation

Land at Kalaru is zoned IN1 General Industrial under Bega Valley LEP 2013.

The Stage 1 recommendation was:

As the settlement of Kalaru grows demand should increase for industrial land over the longer term to provide light industrial services. However, ecological values (subject to validation) and slope may limit further development of this site. It is recommended that the current industrial zone be retained and that ecological values be addressed through offsetting when further subdivision is proposed.



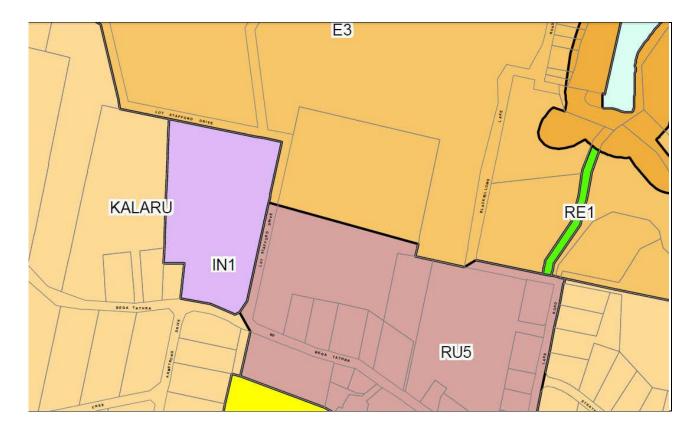


Figure 22: Kalaru industrial zone. Source: Bega Valley LEP 2013

4.4.2 Biodiversity assessment

The northern half of the lot is mapped as terrestrial biodiversity in *Bega Valley LEP 2013* and a watercourse that crosses the south-eastern corner of the lot is mapped in the Riparian Lands and Watercourses Map. The Stage 1 report concluded that these attributes may prove to be a constraint to further subdivision or industrial expansion. The vegetation is shown in the aerial image below although the watercourse is not apparent.

Research of species sightings and vegetation communities has found that there are have been no threatened species sightings, including sightings of koalas, and there are no recorded endangered ecological communities at the industrial area. There is a recorded sighting of a common eastern froglet on the property but this is not listed as threatened in the *Biodiversity Conservation Act 2016*.

Three vegetation communities are mapped as being present on the northern section of the property. These are the Southeast Coastal Gully Shrub Forest (e34), the Far South Coastal Foothills Dry Shrub Forest (e32b) and small patches of Southeast Lowland Grassy Woodland. None of these are listed as an endangered ecological community in the *Biodiversity Conservation Act 2016*.



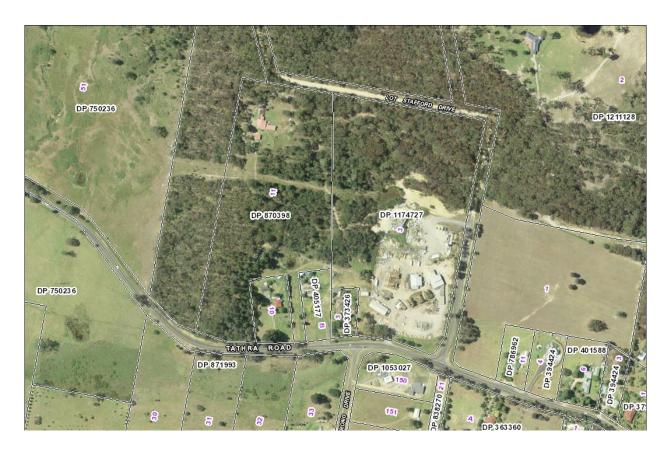


Figure 23: Kalaru industrial area. Source: SIX Maps



Figure 24: Species sightings and vegetation communities, Kalaru industrial area. Source: SEED

An *Environment Protection and Biodiversity Conservation Act 1999* protected matters report notes that there are potentially two threatened ecological communities, 51 threatened species and 35 migratory species listed as matters of national environmental significance within an area that includes a one kilometre



buffer around the industrial area. The two vegetation communities are the Lowland Grassy Woodland in the South East Corner Bioregion and the Subtropical and Temperate Coastal Saltmarch. Neither of these communities are present on the site.

4.4.3 Heritage assessment

The land contains the Kalaru brickworks which is listed as item 746 in *Schedule 5 Environmental Heritage* of *Bega Valley LEP 2013* and Database Number 1100180 in the *NSW State Heritage Inventory*. This item is the old brickworks the remains of which are scattered amongst the existing industrial development. This item is of local heritage significance. The inventory contains the following historical notes:

William Stafford built the brickworks in 1930's with design sourced from Goulburn brickworks. William first settled in Eden area in 1897 buying land on top of Bellbird Hill, where there was a good source of clay, however, bricks were mostly produced on the Pambula flats near Palestine due to issues with transportation. William had 2 step-sons and 5 sons who all became involved with brick making and as adults supplied their own areas. The geographical areas covered equated to the current electorate of Eden-Monaro, including Cann River and ? in Victoria, the current Bega Valley Shire and the Cooma-Monaro district. Clay for the Kalaru Brickworks was sourced from three sites, the brickworks itself, White Rock, and ?. One of the kilns was near completion on the day WWII was announced.

The physical description of the item is given in the inventory as: *Early brickworks. Remnant kilns for firing clay bricks. Five? kilns on site in varying degrees of preservation. Some would require considerable structural work. Made from bricks fired on the site.* Its condition is described as: *All kilns show signs of deterioration and would require some restoration/conservation to preserve and make safe.*

The inventory entry contains the following Statement of Significance:

Historic, technical significance. The kilns have historical and technical significance, show-casing a prominent industry in the district. Many buildings in the region have been made from bricks made from this site. Significance is enhanced by the continued occupancy by the Stafford family to this day.

4.4.4 Lot yield estimate

The land is contained in a single allotment with an area of approximately 8.16 hectares of which 4.86 hectares remains vacant and available for industrial development.

Lot yield of vacant land is estimated to be 19 lots at a minimum lot size of 2,000m² and 10 lots at a lot size of 4,000m² allowing for 20% of land area to be used for services and easements.



4.4.5 Conclusion

The continued use of the site as a brickworks should ensure that the heritage values of the historic brickworks are retained. Given that the vegetation communities are not listed as endangered under the *Biodiversity Conservation Act 2016* and that there have been no recorded sightings of threatened species on the property it is recommended that the current industrial zoning be retained. Maintaining water quality in the watercourse can be addressed with adequate stormwater management measures.

4.5 Pambula

4.5.1 Stage 1 recommendation

Industrial land at Pambula that is located at Arthur Kaine Drive is zoned IN2 Light Industrial under *Bega Valley LEP 2013*. Land at McKell Street is zoned IN1 General Industrial.

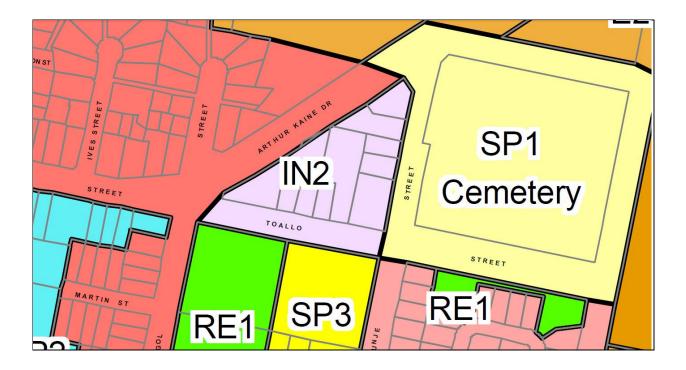


Figure 25: Arthur Kaine Drive, Pambula industrial zone. Source: Bega Valley LEP 2013

The recommendation of the Stage 1 Report was:

No changes are recommended for the Arthur Kaine Drive industrial area as this estate is fully developed and at capacity. Further investigation is warranted at McKell Street. The presence of environmental constraints due to hollow bearing trees and the presence of threatened fauna species may mean that there is limited or no potential for further industrial subdivision and that this area is also at capacity.





Figure 26: McKell Street, Pambula industrial zone. Source: Bega Valley LEP 2013

4.5.2 Biodiversity assessment

Arthur Kaine Drive is fully developed and not subject to any environmental constraints. The McKell Street industrial area is constrained by terrestrial biodiversity over most remaining vacant land. A vacant area at the entry off Pambula Beach Drive is constrained by a watercourse and a second watercourse cuts across the south-eastern corner of the large vegetated lot and passes through cleared industrial zoned land. These watercourses drain to the wet area to the south and south-west of the occupied industrial lots.

Research of species sightings and vegetation communities has found that there are have been no threatened species sightings, including sightings of koalas, on the industrial zoned land. Yellow-bellied gliders, a vulnerable species listed in the *Biodiversity Conservation Act 2016*, have been sighted on adjoining vegetated land to the east indicating that they are present and likely to venture into vegetation communities within the industrial area.

The McKell Street industrial area is heavily vegetated. Vegetation communities within the industrial area include Southeast Lowland Gully Shrub Forest, Eden Dry Shrub Forest, Estuarine Creekflat Scrub, and Southeast Lowland Grassy Woodland. This latter community is an endangered ecological community under the *Biodiversity Conservation Act 2016* and is present within a large parcel of vacant industrial land at the southern extent of the zone and along the south-western boundary of subdivided lots.



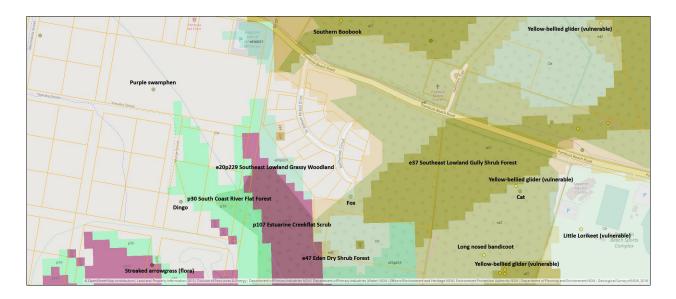


Figure 27: McKell Street, Pambula industrial zone. Source: SEED

An *Environment Protection and Biodiversity Conservation Act 1999* protected matters report notes that there are potentially two threatened ecological communities, 47 threatened species and 33 migratory species listed as matters of national environmental significance within an area that includes a one kilometre buffer around the industrial area. The two vegetation communities are the Lowland Grassy Woodland in the South East Corner Bioregion and the Subtropical and Temperate Coastal Saltmarch. The Lowland Grassy Woodland that is present on the site corresponds with Southeast Lowland Grassy Woodland listed in the *Biodiversity Conservation Act 2016* as River-flat eucalypt forest on coastal floodplains of the NSW North Coast, Sydney Basin and South East Corner bioregions.

4.5.3 Lot yield estimate

The eastern half of Lot 377 DP 750227, located at the south-eastern corner of the McKell industrial area is constrained by the EEC Southeast Lowland Grassy Woodland. Approximately 2 hectares should be excluded from developable land. In addition a 30 metre vegetated buffer amounting to 2 hectares could be retained along Pambula Beach Road.

The remaining 10.9 hectares across the whole industrial area is developable land and could be sensitively developed to generate about 44 lots at a lot size of 2,000m² and allowing for 20% of land to be utilised by easements and services.

4.5.4 Conclusion

As the McKell Street is currently heavily vegetated future development should aim to retain as much native vegetation as possible particularly where lots would be visible to Pambula Beach Road. A vegetated buffer of approximately 30 metres depth could be retained for visual screening. The EEC at the south-eastern corner should be retained and not developed.



5. Conclusion and recommendations

5.1 Survey results

Responses to the first round of land holder surveys indicates that building on the character of Bega Valley settlements and natural resources is the key to stimulating future potential industrial development. Barriers to growth have been identified as the costs associated with planning and obtaining approvals, as well as the costs associated with servicing land for development.

The second round of surveys elicited a comprehensive response from the owners of South Pambula industrial land. Responses reiterated that servicing costs, particularly those associated with access, are impeding subdivision of industrial land. There is divided support to masterplan vacant industrial land south of Mount Darragh Road, however, it is considered that a masterplan would provide certainty to land owners in terms of the costs associated with servicing.

5.2 Revised lot yield estimates

The Enterprise Land Review Stage 1 Report included details of lot yield estimates that were based on:

- an estimate of vacant land area for each industrial area,
- a lot size of 2,000m², and
- allowing for 20% of land to be utilised by easements and services.

Table 2 below summaries the lot yield estimates of the Stage 1 Report and provides a revised lot yield estimate taking into account the findings of this Stage 2 Phase 2 report. Land that is affected by mapped environmental constraints has not been deducted from the Stage 1 lot yield estimate in Table 2. Estimates of lot yield fro the two areas of land identified as being suitable at Wolumla are included in the table.

Table 2: Summary of lot yield estimates at a minimum lot size of 2,000m²

Industrial area	Stage 1 lot yield estimate	Revised Stage 2 lot yield estimate
Bega (north, central and south)	221	196
Bermagui	36	21
Eden (Government Road & Imlay Street)	32	28
Edrom	0	0
Kalaru	19	19
Pambula (Arthur Kaine Drive and McKell Street)	57	44



Industrial area	Stage 1 lot yield estimate	Revised Stage 2 lot yield estimate
South Pambula	409	159
Snug Cove	0	0
Wallagoot	30	30
Sub-total existing industrial areas	804	497
Lot 1 DP 1114713 and Lot 5 DP 750211, Wolumla		100
Lots 4 and 5 DP 1021345, Wolumla		80

The total number of lots that could potentially be created according to Stage 2 estimates is 497. This compares favourably with the Stage 1 estimate of 406 lots that took into account mapped environmental constraints prior to a desktop biodiversity assessment.

5.3 Financing service provision

It has been suggested that Council should consider land use alternatives to encourage industrial development, such as encouraging a greater range of industry types within industrial areas and facilitating residential dwellings for caretakers, managers and home industries. Financial incentives to facilitate the provisions of essential services are also supported in the knowledge that by stimulating industrial development there are wider benefits to the community through job creation and flow-on direct and indirect expenditure. Incentives could take the form of:

- Low-interest or interest-free loans secured by Council and offered to land owners upon approval of industrial subdivision. Loans could be sourced from financial institutions and underwritten by Council
- Applying a levy on all ratepayers, similar to a tourism or environmental levy, to raise funds for infrastructure provision as a subsidy by the community
- Levying land owners for contributions to supply water and sewer services to new industrial lots in accordance with Development Servicing Plan – Water Supply and Development Servicing Plan – Sewerage Services both adopted by Council in 2013. These plans do not make any allowance for varying the contributions amounts
- Discounting contributions made by land owners that are used to fund water and sewer headworks under section 64 of the Local Government Act 1993 and roads under Part 7 Of the Environmental Planning and Assessment Act 1979 in accordance with an adopted Council policy. This is a method used by Shoalhaven City Council which discounts water and sewer headworks charges by 75% for less than or equal to 2 equivalent tenements and 50% for greater than 2ETs for all types of development
- Subsidising service provision from Council's general revenue stream collected through land rates



Securing grant funding specifically tied to infrastructure projects is likely to be the simplest and most efficient means to fund service provision. Using grants Council may construct new or augment existing infrastructure to support industrial development.

At a federal level the Building Better Regions Fund Infrastructure Projects Stream provides organisations including local government, with grants of between \$20,000 to \$10 million to support projects that involve constructing new infrastructure, the upgrade or extension of existing infrastructure, or the replacement of infrastructure. Grant funding is usually between 50% and 75% of project costs depending on the location of the local government area. Criteria are the economic and social benefits to the region; capacity, capability and resources to deliver; and the impact of grant funding on the project. The latest round of Building Better Regions funding, Round 3, has closed and whether another round of funding will be made available is dependent upon an announcement by the Commonwealth Government.

At the state level, the Regional Growth Fund offers grants to develop infrastructure to support job creation and economic growth in regional NSW under the Growing Local Economies program. Local government projects are supported that activate economic potential, generate jobs, attract business and improve local infrastructure. Funding of up to \$500 million is available under this program with a minimum grant amount of \$1 million and a co-contribution of 25%. Eligible projects must be for the use and benefit of multiple businesses; bring forward investment for new or existing industry; deliver economic benefits to residents and businesses; and would not likely proceed in the absence of government funding. The Regional Growth Fund commenced in 2018 and continues until grant monies are fully allocated. A business case must be presented with an application for grant funding.

It is recommended that Council proceed with preparation of a masterplan for the South Pambula industrial area. This plan would necessarily include cost estimates of service provision which would provide a business case to apply for grant funding under the NSW Regional Growth Fund.

5.4 Industrial land zoning

In light of the investigations into biodiversity and heritage constraints affecting industrial zoned land, it is recommended that all existing industrial zoned land, including environmentally sensitive or heritage constrained land, be retained as per the current IN1 General Industrial or IN2 Light Industrial zone. This is because there is other legislation in addition to the provisions of Bega Valley LEP 2013 to protect or prevent degradation of the natural environment and cultural heritage places or items.

If at some point in the future the supply of industrial land declines sharply, then mapped environmentally sensitive areas may be subdivided and utilized by providing offsets to the clearing of vegetated areas as enabled by the *Biodiversity Conservation Act 2016*. However, Council may extend the supply of industrial land by acting on the recommendation of the Stage 2 Phase 1 report to enter negotiations to develop a new industrial area between Bega and Wolumla.



AHIMS Web Services (AWS) Extensive search - Site list report

Attachment A

Your Ref/PO Number: 0417 Sth Bega 1

Client Service ID: 408745

SiteID 62-6-0633	SiteName South Bega - Survey Unit 26	Datum GDA	Zone 55		Northing 5934560	Context Open site	<u>Site Status</u> Valid	SiteFeatures Potential Archaeological	SiteTypes	Reports 99725
	<u>Contact</u> Searle	<u>Record</u>	<u>ders</u> Do	ctor.Julie Dibd	en			Deposit (PAD) : - <u>Permits</u>	2433,2434	
62-6-0631	South Bega - Survey Unit 23	GDA	55	5 754440	5934520	Open site	Valid	Potential Archaeological Deposit (PAD) : -		99725
	<u>Contact</u> Searle	<u>Record</u>	ders Do	ctor.Julie Dibd	en			<u>Permits</u>	2433,2434	
62-6-0647	South Bega - Survey Unit 47	GDA	55	753900	5934690	Open site	Valid	Potential Archaeological Deposit (PAD) : -		
	<u>Contact</u> Searle	Record	ders Do	ctor.Julie Dibd	en			<u>Permits</u>	2433,2434,4316	
62-6-0648	South Bega - Survey Unit 52, inc Locale 1	cluding site Survey Unit 52 / GDA	55	753800	5934480	Open site	Valid	Artefact : 1		
	<u>Contact</u> Searle	<u>Record</u>	ders Do	ctor.Julie Dibd	en			<u>Permits</u>	2433,2434,4316	
62-6-0649	South Bega - Survey Unit 56	GDA	55	5 754000	5934400	Open site	Valid	Potential Archaeological Deposit (PAD) : -		
	<u>Contact</u> Searle	Record	ders Do	ctor.Julie Dibd	en			<u>Permits</u>	2433,2434	
62-6-0650	South Bega - Survey Unit 58	AGD	55	754150	5934480	Open site	Valid	Potential Archaeological Deposit (PAD) : -		
	<u>Contact</u> Searle	<u>Record</u>	ders Do	ctor.Julie Dibd	en			<u>Permits</u>	2433,2434	

Report generated by AHIMS Web Service on 21/03/2019 for Allen Grimwood for the following area at Lot: 4, DP:DP1077434 with a Buffer of 0 meters. Additional Info: To identify sites within or close to land zoned for industrial use and recommend protection of those sites as part of a strategy being prepared for Bega Valley Shire Council. Number of Aboriginal sites and Aboriginal objects found is 6



AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number: 0417 Sth Bega 2

Client Service ID: 408750

<u>SiteID</u>	<u>SiteName</u>	<u>Datum</u>	Zone	Easting	Northing	Context	Site Status	<u>SiteFeatures</u>	<u>SiteTypes</u>	Reports
62-6-0638	South Bega - Survey Unit 36	GDA	55	754250	5933800	Open site	Valid	Potential Archaeological		99725
	Control C. 1	D	ъ	m 1:.: 1	A1 1.E1.1	. II '' C	11	Deposit (PAD) : -	24222424	
(0. (0.(0.4	Contact Searle	Recorders				lers Heritage Coun		<u>Permits</u>	2433,2434	00505
52-6-0634	South Bega - Survey Unit 30, including site Survey Unit 30/Locale 1	GDA	55	754400	5934220	Open site	Valid	Artefact : 2, Potential Archaeological Deposit (PAD) : -		99725
	<u>Contact</u> Searle	Recorders	Do	ctor.Julie Dibo	len			<u>Permits</u>	2433,2434	
52-6-0635	South Bega - Survey Unit 31	GDA	55	754510	5934090	Open site	Valid	Potential Archaeological Deposit (PAD) : -		99725
	<u>Contact</u> Searle	<u>Recorders</u>	Do	ctor.Julie Dibo	len			<u>Permits</u>	2433,2434	
62-6-0636	South Bega - Survey Unit 33, Including sites Survey Unit 33 / Locale 2 & Survey Unit 33/ locale 3	GDA		754400	5933950	Open site	Valid	Artefact : 5, Potential Archaeological Deposit (PAD) : -		99725
	<u>Contact</u> Searle	Recorders	Do	ctor.Julie Dibo				<u>Permits</u>	2433,2434	
62-6-0637	South Bega - Survey Unit 35	GDA		754290	5933700	Open site	Valid	Potential Archaeological Deposit (PAD) : -		99725
	<u>Contact</u> Searle	<u>Recorders</u>		ctor.Julie Dibo				<u>Permits</u>	2433,2434	
2-6-0629	South Bega - Survey Unit 17	GDA		754650	5933750	Open site	Valid	Potential Archaeological Deposit (PAD) : -		99725
0 6 0 600	Contact Searle	Recorders		ctor.Julie Dibo			** 1. 1	<u>Permits</u>	2433,2434	22-2-
62-6-0639	South Bega Survey Unit 37, including site survey Unit 37/ Locale 1	GDA		754220	5933900	Open site	Valid	Artefact : 12, Potential Archaeological Deposit (PAD) : -		99725
	<u>Contact</u> Searle	<u>Recorders</u>		ctor.Julie Dibo				<u>Permits</u>	2433,2434	
52-6-0641	South Bega - Survey Unit 40, including site Survey Unit 40 / Locale 1	GDA	55	754190	5934180	Open site	Valid	Artefact : 5, Potential Archaeological Deposit (PAD) : -		99725
	<u>Contact</u> Searle	<u>Recorders</u>	Do	ctor.Julie Dibo	len			<u>Permits</u>	2433,2434	
52-6-0642	South Bega - Survey Unit 41	GDA	55	754200	5934260	Open site	Valid	Potential Archaeological Deposit (PAD) : -		99725
	<u>Contact</u> Searle	Recorders	Do	ctor.Julie Dibo	len			<u>Permits</u>	2433,2434	
62-6-0643	South Bega - Survey Unit 42	GDA	55	754500	5933810	Open site	Valid	Potential Archaeological Deposit (PAD) : -		99725

Report generated by AHIMS Web Service on 21/03/2019 for Allen Grimwood for the following area at Lot: 2432, DP:DP793758 with a Buffer of 0 meters. Additional Info: to identify sites to exclude from industrial development in a strategy fro Bega Valley Shire Council. Number of Aboriginal sites and Aboriginal objects found is 12

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AHIMS Web Services (AWS) Extensive search - Site list report

Your Ref/PO Number: 0417 Sth Bega 2

Client Service ID: 408750

<u>SiteID</u>	SiteName	<u>Datum</u>	Zone	Easting	Northing	<u>Context</u>	Site Status	<u>SiteFeatures</u>	<u>SiteTypes</u>	Reports
	<u>Contact</u> Searle	Recorders	Doct	tor.Julie Dibd	en			<u>Permits</u>	2433,2434	
62-6-0644	South Bega - Survey Unit 43	GDA	55	754500	5933680	Open site	Valid	Potential Archaeological Deposit (PAD) : -		99725
	<u>Contact</u> Searle	Recorders	Doct	tor.Julie Dibd	en			<u>Permits</u>	2433,2434	
62-6-0628	South Bega - Survey Unit 16	GDA	55	754750	5933700	Open site	Valid	Potential Archaeological Deposit (PAD) : -		99725
	<u>Contact</u> Searle	Recorders	Doct	or.Julie Dibd	en			<u>Permits</u>	2433,2434	