

From: [Tom Gray](#)
To: [Sorell Council](#)
Subject: LPS Representation, Fulham.
Date: Sunday, 15 August 2021 6:44:01 PM
Attachments: [GravT_20210811.zip](#)
[Fulham Ag Report Aug 2021.pdf](#)
[Certified - Fulham FPP_03Feb21.pdf](#)

To Whom it may concern,

Please find attached the agricultural report for the property of Fulham, 258 Fulham Road Dunalley. This report encompasses all titles on the property that have been deemed suitable for Agricultural zoning and clearly demonstrates why the agricultural zoning is not suitable for these particular titles.

There has been many inaccurate assumptions in relation to these titles being suitable for irrigation and therefore having cropping potential. The report clearly states that any form of irrigation scheme can not and will not happen and that the potential use of closer water sources (Carlton River) are not suitable due to both water quality and the costs involved in moving water the distance and height required plus the storage.

Our representation has also included the BOM weather history since 2012 (USB Drive included) which clearly demonstrates why any form of tillage/cropping/horticulture/viticulture is not an option due to the high wind gusts we experience at Fulham. This wind intensity coupled with poor water quality and quantity along with poor soil quality, virtually eliminates any possibility of cropping and also has severe limitations on stocking densities and grazing periods.

Any form of tillage and over stocking causes immense loss of topsoil and erosion. Wind is such a major issue here at Fulham we have gone to great expense to plant 20,000 trees in August 2021 to help minimise wind and evaporation rates thus providing more ground cover to hold the topsoil together. Tree species have been carefully selected to suit the restrictive growing conditions. Please see attached our Forest Practices Plan and tree map that gives a clear indication of the scale of the planting program and therefore the significance of the wind strength.

While we understand the need for agricultural zoning in Tasmania due to the reasons given in the documentation provided, the property Fulham is not suitable agricultural zoning. We can provide or elaborate on any further information you may require and are happy to defend our reasoning vigorously.

Regards,

Alexander Gray
Fulham Pty Ltd

Agricultural Report

FULHAM, 258 FULHAM ROAD DUNALLEY

AUGUST 2021





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Document status:

Date	Status	Issue Number	Reviewed by	Transmission method
6/8/21	Draft	1	L Peterson	Email
11/8/21	Final	2	L Peterson	Email

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Executive Summary

This report examines the land capability and classification of property Id. No. 9402777 title references 210322/1, 249059/1, 50004/3, 233107/1, 176805/1, 176860/1 and 176804/1, 258 Fulham Road Dunalley, in respect to the proposed rezoning of the property from Rural Resource under the Tasmanian Interim Planning Scheme 2015, Sorell to zoning of Agriculture under the proposed statewide Tasmanian Planning Scheme, Local Provisions Schedule (LPS) Sorell.

The PID 9433742 title 176804/4 adjoins the property to the southwest has a different owner but is managed as part of the overall enterprise. As such it has been included in the land capability assessment and Enterprise Suitability Criteria analysis.

The land capability and soils assessment has demonstrated that large areas of the property are not suitable for intensive agriculture and coastal areas are at major risk of erosion due to agricultural activity.

In addition, the property has been incorrectly deemed to have irrigation potential, a key factor in undertaking the criteria analysis to determine suitability for Agriculture Zone.

Based on the Constraints Analysis Criteria Assessment of Fulham, whilst some titles have been correctly assessed as Rural Zone, others have been incorrectly assessed and these do not meet the requirements to be zoned Agriculture under the proposed LPS and consideration should be made for reviewing the methodology applied to these titles.

Introduction

This report, by Dr Lee Peterson, Principal Consultant, Nicholbrook Pty Ltd, has been prepared to provide an expert agricultural assessment of the property Fulham, 258 Fulham Road.

This report reviews the current agricultural usage of the present land titles and the surrounding region in relation to the Land Capability and Land Classification. This includes soils, aspect, topography, water resource, and impact in relation to agricultural activities.

Qualifications and Experience

Dr Lee Peterson is an agricultural science graduate from the University of Tasmania with 35 years of experience in primary industry production, research and consulting. Dr Peterson has worked with a variety of farming enterprises throughout Tasmania and other mainland states. A detailed outline of experience and qualifications is attached in Appendix A.

Location

The property, PID 9402777 consists of 7 titles, title references 210322/1, 249059/1, 50004/3, 233107/1, 176805/1, 176860/1 and 176804/1, and is situated 2.6 km along Fulham Road from Dunalley .

The 7 titles total 1078 hectares and comprises of grazing, small area of irrigated cropping, forestry and native vegetation. The property rises from sea level to 170 metres elevation.

An area of approximately 7.7 hectares is leased for shellfish cultivation which requires direct access to Frederick Henry Bay for sea water supply.

4 titles 210322/1, 249059/1, 50004/3, 233107/1 have been zoned Rural under the proposed LPS. 3 of these titles are 100% private timber reserves and one title (5004/3) is 39%. One other private timber reserve is present on title 176860/1 but this is proposed zoned Agriculture. These titles have not been included in the land capability assessment as already zone Rural.

The property is bordered by grazing land on the west and east, Frederick Henry Bay to the south and further private timer reserves to the north. The PID 9433742 title 176804/4 adjoins the property to the south west has a different owner but is managed as part of the overall enterprise. As such it has been included in the land capability assessment.

Land Classification

Land capability of the property was assessed according to the Tasmanian Land Capability Classification System (Grose, 1999). Land is ranked according to its ability to sustain a range of agricultural activities without degradation of the land resource. Class 1 land is the best land and Class 7 land is the poorest. A wide range of limitations are

considered and the most significant limitation determines its final classification, or ranking. Limitations in relation to soils include stoniness, topsoil depth, drainage and erosion hazard. Limitations to topography include slope and associated erosion hazard. Limitations relating to climate include low rainfall and frost.

A full explanation of the Land Capability System is available in the *DPIPWE Tasmanian Land Capability Handbook*.

The classification system assumes an average standard of land management and that production will be sustainable if the land is managed according to the guidelines of its Class. The system does not take into account the economics of production, distance from markets, social or political factors, all of which can change over time.

Class 4 land is described as follows:

Land primarily suitable for grazing but which may be used for occasional cropping. Severe limitations restrict the length of cropping phase and/or severely restrict the range of crops that could be grown. Major conservation treatments and/or careful management is required to minimize degradation.

Cropping rotations should be restricted to one to two years out of ten in a rotation with pasture or equivalent, during 'normal' years to avoid damage to the soil resource. In some areas longer cropping phases may be possible but the versatility of the land is very limited.

Class 5 land is described as follows:

Land with slight to moderate limitations to pastoral use but which is unsuitable for cropping, although some areas on easier slopes may be cultivated for pasture establishment or renewal and occasional fodder crops may be possible. The effects of limitations on the grazing potential may be reduced by applying appropriate soil conservation measures and land management practices.

Class 6 land is described as follows:

Land marginally suitable for grazing because of severe limitations. This land has low productivity, high risk of erosion, low natural fertility or other limitations that severely restrict agricultural use.

A detailed, site specific assessment of land classification of the property was undertaken by the author on 28th July 2021.

The attached map (Appendix B) illustrates the extent of each land capability class within the property.

Table 1 provides a detailed description of each land capability class for the total area assessed of 731.5 hectares of which 34 hectares is Private Timber Reserve.

Table 1: Land Capability Summary

Land Capability Class ¹	Area (ha)	Limitation	Soil Description	Cropping Suitability Rating ²	Land Use Types ³	Cropping Frequency ⁴
4s	159.8	Soil structure	Predominantly Podzols on Sandstone (10-25%).	Low to Moderate	H(limited), IP, DP ISD/DS	Annual 1 to 2 in 10 years
5s	94.2	Soil structure	Podzols on Dolerite (10-25%).	Not suitable	DP	Annual
5w	37.0	Low lying, prone to wet areas	Undifferentiated alluvium generally over dispersive clay subsoils, low slopes <10%	Not suitable	DP	Annual
5e	45.4	Mass movement (aeolian)	Quaternary windblown sands (5-15%)	Not suitable	DP	Annual but low stocking rates due to erosion risk
5x	205.7	Topography, complex	Podzols on Dolerite (10->30%).	Not suitable	DP	Annual
6	131.9	Native vegetation, high slopes > 30%	Podzols on Dolerite with rock outcrops and steep slopes	Not suitable	DP	Annual

¹ Land Capability Class

Land capability was assessed according to the Tasmanian Land Capability Classification System (Grose, 1999). Land is ranked according to its ability to sustain a range of agricultural activities without degradation of the land resource. Class 1 land is the best land and Class 7 land is the poorest. A wide range of limitations are considered and the most significant limitation determines its final classification, or ranking. The classification system assumes an average standard of land management and that production will be sustainable if the land is managed according to the guidelines of its Class. The system does not take into account the economics of production, distance from markets, social or political factors, all of which can change over time.

² Cropping Suitability Rating

- High - Soils with no or only slight limitations to use. Can support a wide range of intensive cropping and grazing activities. Cropping can occur almost continuously with only occasional pasture breaks.
- Moderate - Soils with moderate limitations to use. Conservation practices and sound management are needed to overcome limitations. Regular short-term pasture breaks are also required.
- Low - Soils suited to occasional cropping through severe limitations. Major conservation treatments and/or careful management required to minimise degradation.
- Very low - Very limited cropping with long pasture breaks (greater than 8 years).
- Unsuitable - No cropping should be undertaken.
-

³ Land Use Types

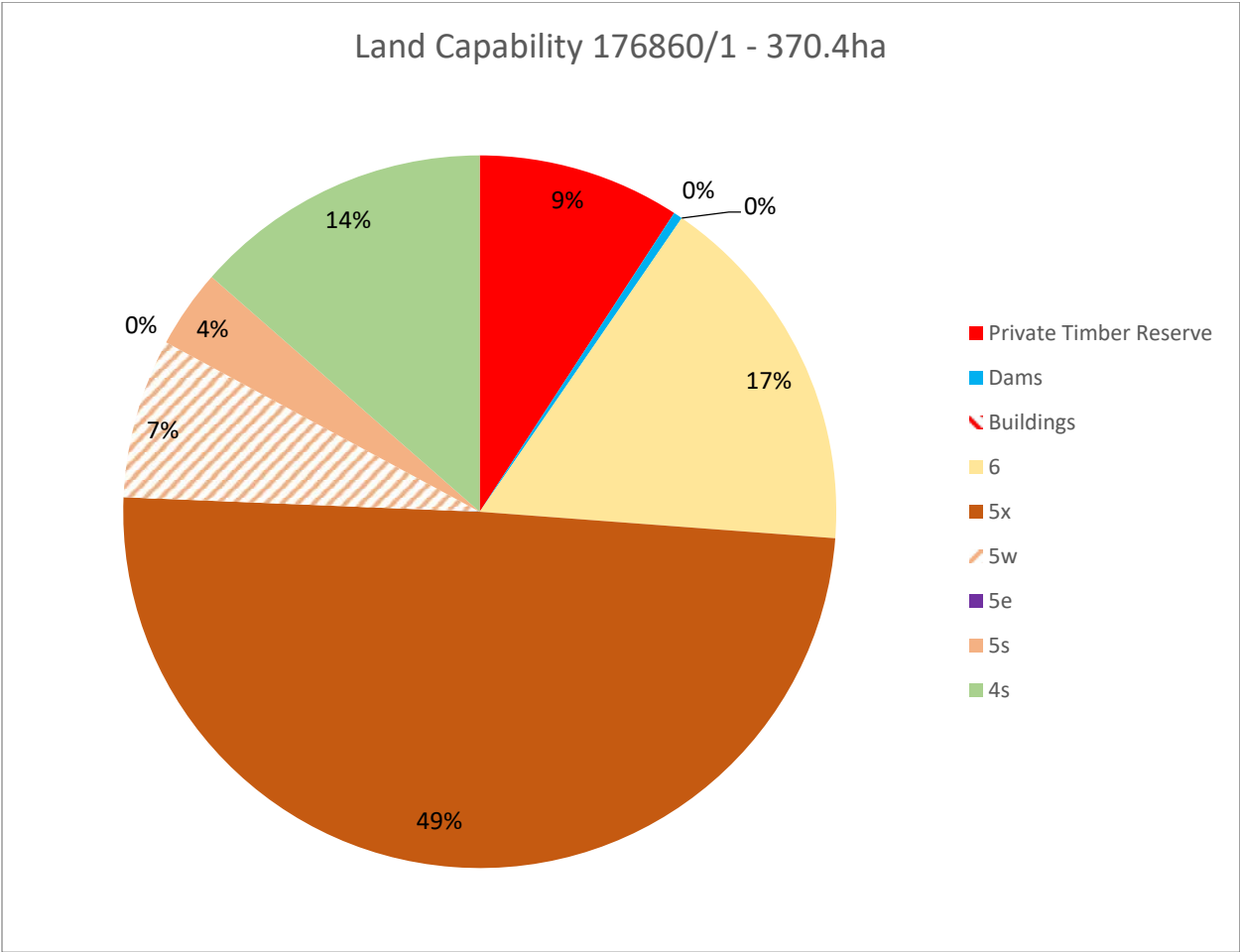
- DP (Dryland pasture)
- IP (Irrigated pasture)
- DS (Dryland surface cropping; i.e. cereals and poppies)
- ISD (Irrigated surface cropping – dry harvest; i.e. cereals, poppies, carrot seed and grass seed)
- ISW (Irrigated surface cropping – wet harvest; i.e. peas, beans and broccoli)
- IRC (Irrigated root cropping; i.e. potatoes and carrots)
- H (Horticulture; i.e. grapes, olives and fruit)
- F (Forestry)

⁴ Cropping Frequency is given as an approximate range only. It assumes that best practices are being implemented in relation to soil management, sustainable crop rotations undertaken, and that seasonal and long term climatic conditions are favourable for cropping activities. Best practice soil management includes cultivation at an appropriate soil moisture level so as to maintain soil structure, management of cropping residues to assist in maintaining soil structure, and implementation of the most appropriate cultivation techniques. The lower range pertains to a more intensive cropping rotation (i.e. typically including irrigated root cropping) and/or less favourable seasonal/growing conditions. The upper range pertains to non-intensive cropping rotations (i.e. cereals and poppies) and/or more favourable seasonal/growing conditions (see Appendix 1). Cropping frequency does not include irrigated pasture which can be irrigated annually.

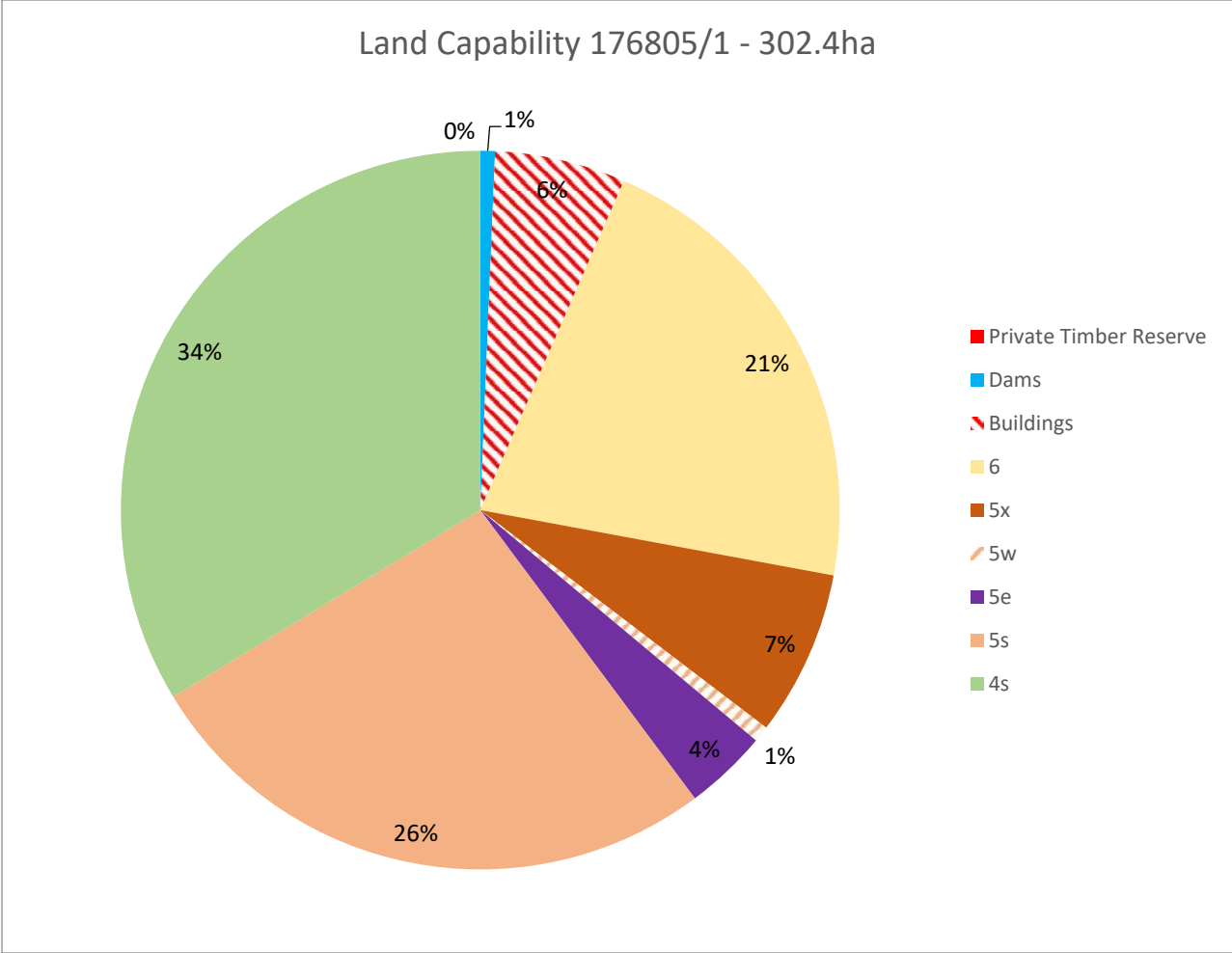
It should be noted that there is currently underway the planting of 20,000 trees under Forest Practices Plan No: JEB0021 underway (Attached).

These trees plantings will total 20.8 hectares and provide extension of native vegetation and wind breaks to the prevailing winds of Frederick Henry Bay.

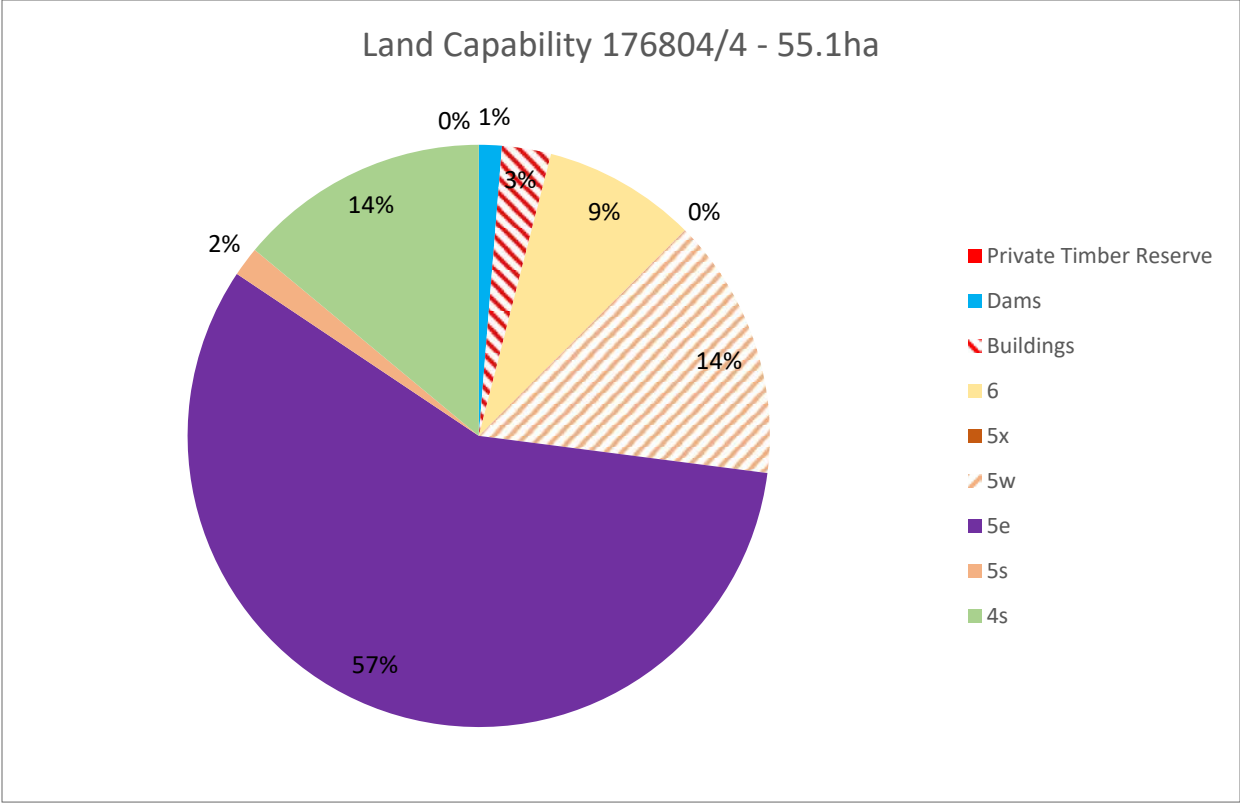
Individual title assessments are presented in charts below:



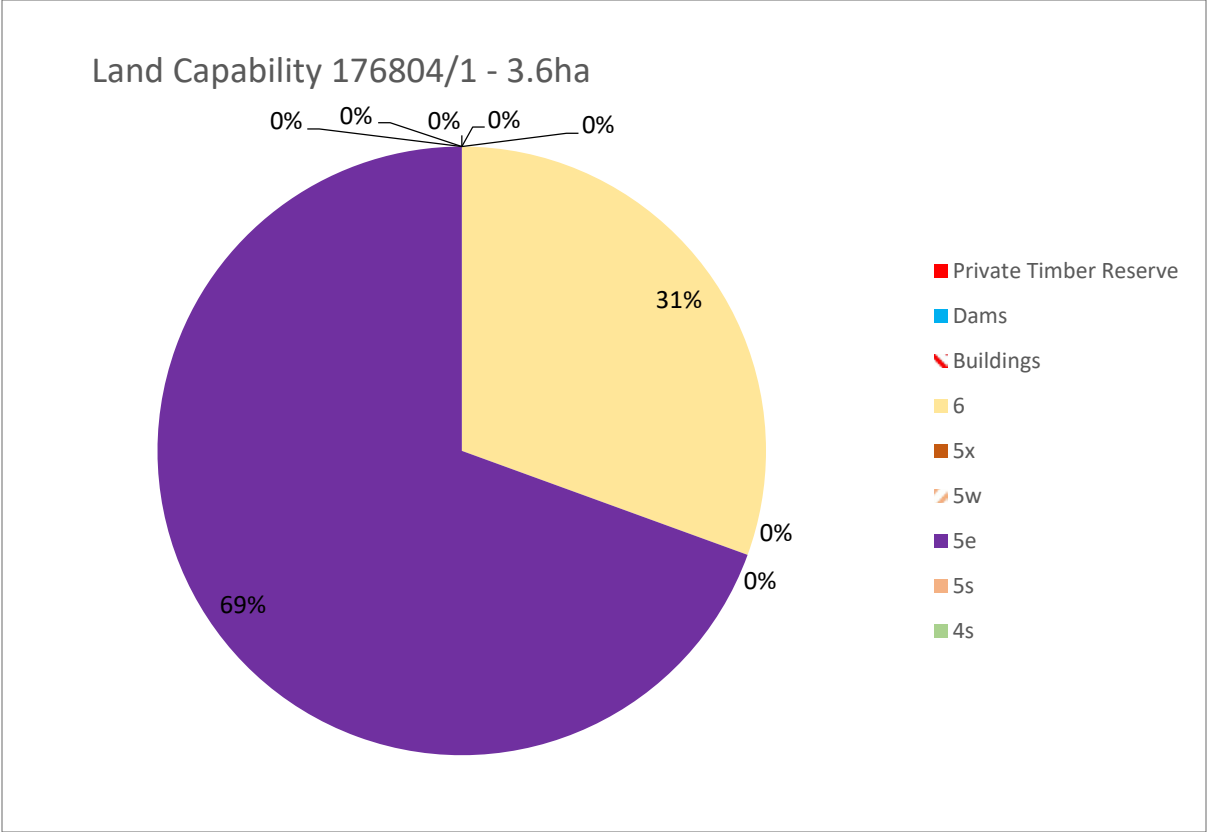
Title 176860/1 is predominatly Class 5 limited by topography and only 14% has limited potential for cropping. Most areas of 4s do not have appropriate aspect, or are exposed to prevailing winds rendering unsuitable for viticulture or stonefruit



Title 176805/1 has the largest are of 4s, limited cropping potential, but again is exposed to prevailing winds and soils tending to alluviums not suitable for viticulture and stonefruit.



Title 176804/4 is predominantly 5e, prone to mass movement due to windblown sands present. 5s ow lying areas are sands over clay with minimal slope that are prone to waterlogging and have high salinity. The area of 4s is highly exposed and unsuitable for any horticultural crops.



Title 1786804/1 is a small title on a headland into the bay that is nearly 70% wind blown sand and as such should never be cultivated as highly exposed.

Soils

Three main soil types are present on the property. Podzols on Dolerite, imperfectly drained texture contrast soils developed on Jurassic dolerite bedrock and colluvium on rolling to steep. These soils regularly have rocky outcrops on the steep slopes and hilltops. The steep slopes are prone to erosion if ground cover is removed, these areas are only suited to regeneration of native bushland and occasional grazing once vegetation is established.

Mid slopes are predominantly undifferentiated alluviums on low slopes that transition from Quaternary wind-blown sands on the coastline. General fertility is low, with the windblown sands generally very low pH and high salinity.

Ground cover must be maintained on the wind-blown sands, there is evidence of significant mass movement in the past especially on the more exposed points into Frederick Henry Bay. Even grazing can lead to erosion risk.

Climate

The climate of the region is described by Musk and Derosé (2000) as temperate climate moderated by the proximity to sea. As a result, frost risk is assessed as low.

Nearest temperature data is available for Dunalley, station number 94254, which is some 10 kms away. The lowest temperature recorded is 0.7 degrees in the month of July.

According to the rainfall information supplied by the Bureau of Meteorology, the nearest weather station (Number 94254) at Stroud Point mean annual rainfall is 542mm. The highest annual rainfall recorded is 684mm and the lowest recorded is 404mm demonstrating that the rainfall in this region is consistently low and very similar to the Coal Valley region.

The properties proximity to the bay and lack of native vegetation cover make it highly exposed to winds which significantly limits opportunity for cropping or horticulture. Cropping has been undertaken in the past unsuccessfully on the coastal areas and is only limited to a very small area inland that is more sheltered from prevailing winds.

Water Resources

There is a 12ML dam adjacent to the main house and outbuildings but no irrigation infrastructure present. A 30ML dam is present on title 50004/3 which is zone Rural. This dam is currently utilized to irrigate a fresh potato crop under contract.

General small livestock watering dams are present utilizing surface water runoff collection. No further permits for dams are allowed within the region.

No irrigation scheme is present in the region. Tasmanian Irrigation have no long-term plans for irrigation feasibility in the region as the area potentially available for irrigation is small and supply and distribution will be expensive, therefore not meeting the business case requirements. In addition, the closest resource is the Carlton River which is ephemeral in nature and has poor water quality due to the catchment geology that is

unsuitable for sustainable production of horticultural crops. Extension of the South East Irrigation Scheme to this region would be cost prohibitive and therefore not meeting the business case requirements.

In respect to a private scheme for the property only, there is a water right available for winter flood flow extraction from the Carlton River, but this has been deemed uneconomic to access for the property due to the combination of flood flow availability and high elevation pumping to the property. The extraction point is on another property and property owner and would require an easement. There is also potential risk of contamination from leachate from the Southern landfill site as the extraction point is below this facility.

Due to the highly ephemeral nature of the Carlton River, to extract sufficient winter flow volumes for summer irrigation would require high flow pumps to be able to extract the water right quickly during flood flows, this then must be pumped over 120 metres elevation into a storage dam. The capital requirement for pumps, pipes and storage would be prohibitive per ML extracted for agriculture. Again, the water quality of the Carlton River would be unsuitable for horticultural crops as the extraction point is at the lowest reaches of the river.

Current Land Use

The properties current land use is predominantly grazing for livestock and small area of contract cropping. The cropping is limited to the current area by the available water resource. Areas are leased to shellfish production.

Tasmanian Planning Scheme Assessment

The following are assessments of the property title in relation to the Zone Application Guidelines of the proposed Tasmanian Planning Scheme – Agriculture

AZ1	The property is identified in the 'Land Potentially Suitable for Agriculture Zone' but titles do not comply with the criteria assessment (see later section)
AZ2	Not applicable – The property is not within the Significant Agriculture Zone in the interim planning scheme
AZ3	Titles have not been correctly assessed in relation to Potentially Constrained Criteria.
AZ4	The 'Potential Agricultural Land Initial Analysis' layer encompasses the property title but has been incorrectly assessed as indicated above
AZ5	The titles are not appropriate for split zoning
AZ6	Some titles may be considered for alternate zoning, in this case Rural, as not integral to management of a larger farm holding and there are significant constraints to agricultural use that have been incorrectly assessed.
AZ7	Not applicable as land currently assessed as "Land Potentially Suitable for Agriculture Zone"

Constraints Analysis

Land within the region has been initially assessed for zoning Agriculture based on a range of criteria under the "Agricultural Land Mapping Project "2017 (ALMP) and then further assessed for the Southern Group of Councils.

Below is a summary of the criteria assessment for the titles reported here:

Entity	volume	folio	pid	Ha	Require Irrigation			Dryland		Comment	Constraint
					ES1 - 10ha	ES2 - 25ha	ES3 - 40ha	ES4 - 133ha	ES5 - 333ha		
Fulham Pty Ltd	176805	1	9402777	302.4	Yes	No	Yes	No	No	Areas suitable for ES1 and ES2 but no irrigation potential	2B
Fulham Pty Ltd	176804	1	9402777	3.6	No	No	No	No	No	No criteria met	2A
Fulham Pty Ltd	176860	1	9402777	370.4	Yes	No	Yes	No	No	Areas suitable for ES1 and ES2 but no irrigation potential	2B
Hutcheon	176804	4	9433742	55.1	No	No	No	No	No	No criteria met	2A potentially 2B with current values

Note: Criteria ES1, ES2 and ES3 all require irrigation. Under the initial ALMP the region was deemed to have irrigation potential. Given this is not the case these criteria are not valid. In addition, the Enterprise Suitability Analysis data utilised, especially areas suitable for viticulture are inaccurate and not reflected in the on-site survey.

Recommendation

Based on the Constraints Analysis Criteria Assessment of Fulham, whilst some titles have been correctly assessed as Rural Zone, (primarily based on Private Timber Reserve areas present) others have been incorrectly assessed and these do not meet the requirements to be zoned Agriculture under the proposed LPS and consideration should be made for reviewing the methodology applied to these titles.

References

Grose C.J. (1999) Land Capability Handbook: Guidelines for the Classification of Agricultural Land in Tasmania. 2nd Edition, DPIWE, Tasmania

Musk R.A. and DeRose R.C. (2000) Land Capability Survey of Tasmania. Derwent Report, Land Capability Study, DPIWE, Tasmania

Agricultural Land Mapping Project - Identifying land suitable for inclusion within the Tasmanian Planning Scheme's Agriculture Zone (2017), Department of Justice, Planning Policy Unit

Declaration

I declare that I have made all the enquiries which I consider desirable or appropriate, and no matters of significance which I regard as relevant have, to my knowledge, been withheld.

Dr Lee Peterson B. Agri. Sci (Hons), ISHS, MAICD, CPag
Principal Consultant
Nicholbrook Horticultural Consulting
August 2021



Lee Peterson

Principal Consultant

Qualifications:

B Ag Sc (Hons) University of Tasmania

PhD (Ag Science) Horticultural Research Group University of Tasmania

Professional Associations:

Certified Practicing Agriculturalist (CPAg)

Company Directors Graduate Diploma 2007

Member of the International Society of Horticultural Science

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Introduction

Dr Lee Peterson is an agricultural professional with extensive expertise in many aspects of agricultural production gained over a period of 35 years in industry, consulting and research. Lee has considerable experience in the areas of new crop development, horticultural production systems, plant extracts and waste stream management in agricultural.

Professional Experience

2020-present	Director Nicholbrook Horticultural Consulting
2018-2020:	National Technical Manager BerryWorld
2011–2018:	Principal Consultant Macquarie Franklin
2005-2011:	Executive Director – Agribusiness Agricultural Resource Management (AGRM Pty Ltd)
2000- 2004:	Agricultural Resource Management Group
1998- 1999:	Serve-Ag Senior Project Agronomist
1996-1997:	Private agricultural consultancy and contract research provider
1993- 1995:	General Manager of Essential Oils of Tasmania
1989- 1993:	Production Manager of Essential Oils of Tasmania
1985- 1989:	Post-Graduate at the University of Tasmania
1984- 1985:	Agricultural Officer with the Tasmanian Department of Agriculture, Pasture and Field Crops Branch

Recent Projects

- Technical advisor to Houston's Farm roles include production system development, variety assessment, market research, crop scheduling, pesticide strategies, IPM program and representation of the company in respect to technical issues such as biosecurity and IPM
- Tasmanian contractor for the CSIRO land use and management information system estimating changes in soil carbon from changes in land use, an Australian Greenhouse Organisation project
- Project manager for the agricultural component of 8 wastewater reuse developments including Tasmania's two largest schemes, Brighton and Clarence.

- Agricultural advisor to United Utilities bid to develop effluent reuse for Ballarat North waste water treatment plant.
- Independent advisor and author to the “Environmental Guidelines for Recycled Water Use in Tasmania, 2002”.
- Development of annual soil monitoring programs for Clarence, Brighton and Collinsvale reuse schemes.
- Project Manager for the land capability assessment for the Meander Dam Development Proposal
- Agricultural potential study for the Jordan Dam Feasibility Study
- Review of the Australian Lavender industry for RIRDC
- Project manager for Rekuna Pty Ltd, a Panax ginseng production company supported by an AusIndustry Commercial Ready Grant
- Climatic and resource suitability assessment for salad vegetable production on Australia’s east coast, including risk assessment
- Technical advisor to Raspberry Fresh, out of season glasshouse raspberry production company
- Study tour and technical review of latest developments in hydroponic production of salad vegetables, Canada, Belgium, Holland and Italy
- Project manager for field services operation establishment for Tasmanian Poppy Enterprises
- Technical advisor to South Pacific Oils, essential oil production and extraction company, Vanuatu – Sandalwood production and research
- Technical resource to Southern Water for the coordinate and manage Tasmania’s largest agricultural recycled water irrigation scheme, the Clarence Recycled Water (CRW)
- Technical advisor to Heydon Park Olives, Talmalmo, Victoria
- Production system economic assessment and inputs for TIDB feasibility studies – Musselrow, Great Forester and South East irrigation scheme developments
- Land capability assessments for numerous properties throughout rural Tasmania to support agricultural development, subdivision of non-agricultural land and expert witness reporting for legal representation
- Review of Industrial Hemp as a commercial cropping opportunity in Tasmania
- Review of pyrethrum industry strategic plan and industry development officer program
- Economic and socio analysis of the impact of blueberry rust incursion to the Tasmanian blueberry industry

Areas of Expertise

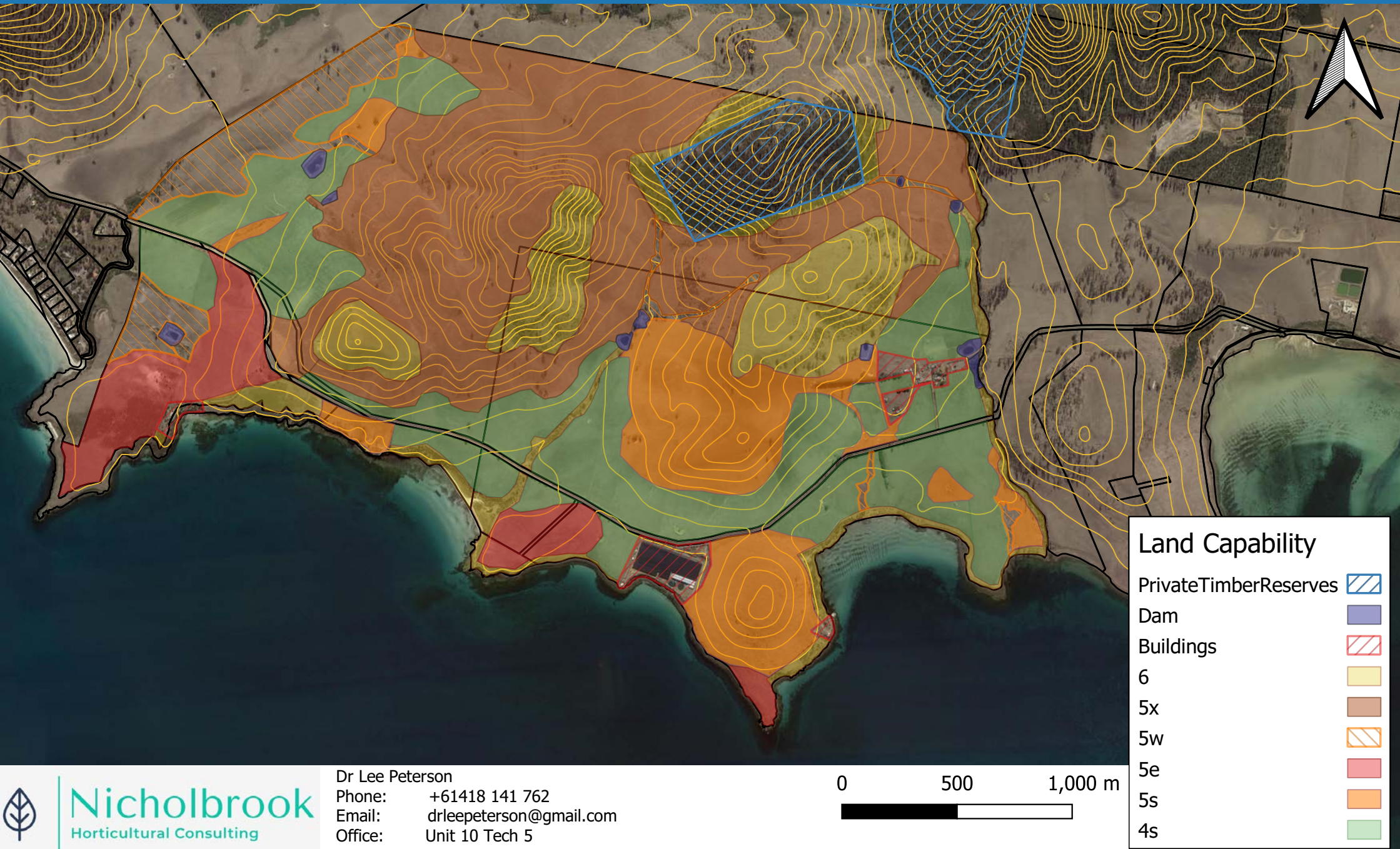
- New crop development including essential oils, culinary herbs, medicinals and leafy vegetables
- Design of innovative harvest systems for new crops
- Waste water and effluent reuse
- Agricultural research and development
- Sustainable agricultural system design and implementation
- Environmental monitoring
- Plant physiology
- Land capability assessment
- Group training
- Agribusiness and financial management
- Socio and economic impact assessment

Nicholbrook Expertise

- Economic studies
- Business and farm management
- Feasibility studies
- State and regional development
- Irrigation and water development
- Land capability and mapping
- Natural resource management
- Training and extension
- Technical agricultural consulting

- Site assessment, property liaison and development of Irrigation and Ground Water Management Plans for effluent management of Tassal hatchery expansion at Ranelagh and waste processing plant at Triabunna including representation to EPA.
- Quinoa trial coordination for commercialisation of an emerging “super food” in Australia
- Review of pyrethrum industry strategic plan and industry development officer program
- Market, production and feasibility study of medicinal cannabis production for Tasmanian Alkaloids
- Importation of new varieties and coordination and production system development for BerryWorld Australia in Tasmania and Queensland

Land Capability Assessment Fulham, 258 Fulham Road Dunalley



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Horticultural Consulting



FOREST PRACTICES PLAN

A. General

- Forest Practices will be carried out in accordance with the principles and approaches specified in the Forest Practices Code 2020 (FPC 2020). All Forest Practices Code mandatory statements ("will" statements) apply, whether or not they are referred to below. The specific requirements set out below are also mandatory.
- The Contractor is required to have the following on site during **ALL** active forest practices;
 - ✓ A copy of the certified Forest Practice Plan, and any/all subsequent variation/s.
 - ✓ A copy of the current Forest Practices Code 2020. Electronic versions of the code can be accessed at: https://www.fpa.tas.gov.au/_data/assets/file/0004/264370/Forest_Practices_Code_2020.pdf
- All machinery will be washed down as per the *Tasmanian Washdown Guidelines* prior to entering and before leaving the site. The Landowner may provide a written exemption, in some instances, at their discretion.
- Refuelling sites will be located at least forty (40) metres from any water course. Where deemed practical, these sites should be surrounded by an earthen bund to minimise the risk of any spillage.
- Management of fuels, oils, rubbish and emissions will be carried out according to **Section F** of the Forest Practices Code 2020. Any spills that cause or threaten to cause environmental harm will be reported as soon as possible to the Environmental Protection Authority on **1800 001 170**.
- The current "Fire Prevention at Forest Operations" procedure should be adhered to during all operational phases of this plan. As determined by the Tasmanian Fire Service Act 1979 and current Regulations.

WARNING - This plan involves earthworks in areas known to contain underground communications infrastructure. The Contractor and Landowner will ensure this infrastructure is located by accredited contractor and demarked in the field, prior to any tilling/ripping commencing. Cultivation will be excluded from areas within 5m of underground cables.

Common abbreviations used in this Forest Practices Plan;

- DOP:** Discreet Operational Phase;
- DPIPWE:** Department of Primary Industries, Parks, Water and Environment
- FPA:** Forest Practices Authority
- FPO:** Forest Practices Officer;
- FPC:** Forest Practices Code 2020;
- FPP:** Forest Practices Plan;
- MEZ:** Machinery Exclusion Zone;
- SSR:** Streamside Reserve.

B. Building Access to the Forest (Roothing)

Refer also to Part D. Conservation of Natural and Cultural Values

- Access will be via existing roads and tracks. No new roading or substantial upgrading of existing roads is required.
- All culverts, table drains and silt traps are to be maintained as clear, serviceable and fit for purpose during operations.

Coupe: Fulham Farm

FPP No: JEB0021

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Initials of Parties to the Plan							
Landowner 1		Landowner 2		Applicant		FPO:	
Date:	20/1/21	Date:	20/1/21	Date:	20/1/21	Date:	03/02/21



C. Harvesting of the Timber

Refer also to Part D. Conservation of Natural and Cultural Values

- No harvesting or clearing is required under this FPP.

Person or organisation assuming primary responsibility for management of forest practices under this section of the plan: **Not Applicable**

D. Conservation of Natural and Cultural Values

Prescriptions to manage flora, fauna, geomorphic, cultural heritage, landscape and soil and water values

Reporting new sites for threatened fauna and flora - If new sites for threatened fauna (e.g raptor nests, devil dens etc) for flora are found during the implementation of a forest practices plan, the sites must be reported to the Forest Practices Authority as soon as practical.

FLORA

- No clearing of *Eucalyptus globulus* paddock trees is permitted.

FAUNA

Tasmanian Devil, Spotted-tailed & Eastern Quolls

- If a suspected den is found, operations must cease within 50m of the suspected den site. Further advice will be sought from the responsible forester and/or the FPA prior to operations entering the 50m exclusion.

Wedge-tailed Eagle & White-bellied Sea-eagle

The management constraint for raptor species is July to Feb inclusive; in most years. Late seasons may also include the month of March. The FPA will notify stakeholders in the event of a late season being declared

- If a nest is discovered during the constraint period; cease all forestry activity within 500 m of the nest, or within 1 km line-of-sight of the nest and promptly notify the responsible forester and/or the FPA.
- If a nest is discovered outside the management constraint period, March-June inclusive; in most seasons cease all forestry activities within 500 m of the nest, the responsible forester and/or the FPA will be notified.

Green and Gold Frog

- No machinery should enter within 10 m of any still water body edge.
- Avoid pesticide runoff to water bodies at all stages of the operation. Where chemicals are used, it is recommended that only chemicals registered for use near waterways by the National Registration Authority are applied.

Initials of Parties to the Plan							
Landowner 1		Landowner 2		Applicant		FPO:	
Date:	20/1/21	Date:	20/1/21	Date:	20/1/21	Date:	03/02/21



EARTH SCIENCES

- If any unmapped watercourse (that do not have specific management prescriptions within the FPP) is encountered, operations are to cease within its vicinity until advice of a FPO or the FPA has been received.
- Additional streams may be included within this FPP. Any such streams will be managed in accordance with the FPC and their location captured in a file note with the original FPP file.

CULTURAL HERITAGE

- A formal survey will be conducted by an FPO in those areas within 200m of the coastline (*Shelterbelt 1,8 &9*) and areas within 100m of Class 2 & 3 streams; where significant soil exposure has occurred. The FPO will document any unusual rock forms including flakes and other evidence of aboriginal use and provide to the FPA if located. Evidence of the formal survey will be noted in the FPP file.
- The FPO or FPA responsible for monitoring this operation will be contacted in the event that any cultural sites are identified during the conduct of operations in accordance with this FPP.
- Operations will cease immediately, and any cultural site located during the operation will be excluded from the operation area until the advice of a FPO or the FPA is obtained.

Person or organisation responsible for organising Aboriginal archaeological survey: **Landowner**

LANDSCAPE

- No prescriptions required.

E. Establishing and Maintaining Forests

Refer also to Part D. Conservation of Natural and Cultural Values

BOUNDARIES

- Establishment will consist of 15 distinct mix species plantations. Planted in a shelterbelt configuration. *See also the attached map.*
- The shelterbelt paths follow existing fencelines and are clearly defined. No demarcation will be required.

ESTABLISHMENT

- Site preparation boundaries will take into account any stream reserves, utilities, and other exclusion zones and will remain the required distance away from these.
- No machinery disturbance to both soil and native vegetation is permitted within 30m of the "Protected Areas" shown on the FPP map.
- Lineal and spot cultivation spacing will be designed to facilitate replanting at a density of 1100 SPH. Line spacing will be approximately 3.75 metre spacing

Initials of Parties to the Plan							
Landowner 1		Landowner 2		Applicant		FPO:	
Date:	20/1/21	Date:	20/1/21	Date:	20/1/21	Date:	03/02/21



- Ripping depth should be a minimum of 30 cm.
- Site preparation activities will not be undertaken when soil conditions are wet; or
 - When turbid water is flowing for more than 10m; or,
 - When machinery causes rutting to a depth of more than 200mm below ground level over a 15m section.
- Cultivation near inlet/outlet points of culverts will be avoided.

WEED CONTROL

- Requirement to undertake any weed control (either pre or post planting) will be determined at the relevant time, based on the weed spectrum present and it's assessed potential to restrict seedling survival and growth.
- If herbicide spraying is required, then it will be in accordance with a Pesticide Application Plan. Herbicides will only be applied at the prescribed label rates, or relevant off-label permits, and in accordance with the relevant codes of practice for chemical application.

STREAM MANAGEMENT – See also Section D

- To enable conventional harvest of shelterbelts on their maturity;
 - Site preparation will not occur within 10m of the full supply level of all classed stream features shown on the FPP map.
 - Site preparation will be excluded within 2m of the full supply level of all drainage depressions.
- Shelterbelt 2 & 13 are both planned for establishment along natural drainage depressions. Establishment should be excluded from all areas within 2m of these flow channels.
- Movement of site preparation machinery across drainage depressions should be avoided in wet soil conditions.
- Consideration should be given to restorative planting of local native species within the Class 2 that runs parallel to Shelterbelt 10.

PLANTING TREATMENTS

- Plantings will consist of the mixes outlined in Table 1, below.

Planting Prescription	Row Count	Approx. Width (m)	Shelterbelt Number
<i>Pinus radiata</i> (1 row, windward) <i>Eucalyptus globulus</i> (6 rows)	7	25	1,3,4,5,6,7,8,9,14 & 15
<i>Acacia melanoxylon</i>	7	25	2 & 13
<i>Pinus radiata</i>	7	25	11 & 12
<i>Eucalyptus globulus</i>	7	25	10

Table 1. Outlines planting configuration of the 15 shelterwood plantings prescribed by this FPP.

E.Globulus/P.radiata Shelterbelts

Coupe: Fulham Farm

FPP No.: JEB0021

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Initials of Parties to the Plan							
Landowner 1		Landowner 2		Applicant		FPO:	
Date:	20/1/21	Date:	20/1/21	Date:	20/1/21	Date:	03/02/21



- One row in seven within these shelterbelts (Table 1) will be established with radiata pine seedlings. This planting will occur on the external row of the windward side, for each of these belts. The windward side will be nominated by the Landowner, based on local knowledge, at the time of planting.

FERTILISER APPLICATION

- Fertilising of seedlings to be undertaken at time of planting using a controlled release fertiliser product.
- Application rates should be determined by specialist advice, label rates and soil type.

TRACKING

- Unsurfaced access tracks may be constructed to conduct the establishment works. Permanent crossing points on trafficked class 4 streams should be considered. Class 4 streams will not be crossed by heavy machinery where they carry water or in moist-wet soils.
- Access tracks will be constructed at the appropriate distance from stream reserves, utilities, and other exclusion zones, and will be drained as per Table 5 (Maximum Spacing between Cross Drains on Snig Tracks) of the FPC 2020 for MODERATE erodibility soils.

Table 5 Maximum spacing between grips on extraction tracks

Gradient of Track	Soil Erodibility Class				
	Low	Moderate	Moderate-to-high	High	Very High
0–3°	Nil	Nil	Nil	100 m	40 m
4–14°	120 m	100 m	80 m	60 m	30 m
15–19°	80 m	70 m	60 m	40 m	20 m
20–26°	40 m	35 m	30 m	20 m	NH
over 26°	20 m	20 m	NH	NH	NH

Notes:

- Use drain spacing corresponding to the next highest soil erodibility class for the following situations:
 - tracks diagonally across contours
 - areas subject to periods of high intensity rainfall (e.g. eastern parts of Tasmania)
 - karst catchments.
- On well-drained very sandy soils grips may not be required; seek specialist advice.
- If the track is out-sloped and water cannot flow for a distance greater than the required grip spacing, grips may not be required.
- Apply grip standards for the high erodibility class on all soils in karst terrain. Sediment traps may be required.
- NH = Generally no harvesting.

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Landowner 1		Landowner 2		Applicant		FPO:	
Date:	20/1/21	Date:	20/1/21	Date:	20/1/21	Date:	03/02/21



PROTECTION OF GROWING STOCK

- Each shelterbelt will be fenced to exclude grazing animals. This fence should be maintained in-situ until the planted stock reach a height equal to, or greater than 3 m.
- Insect, frost damage and weed competition will be monitored and appropriate action taken where necessary.
- The area will be monitored for browsing and action taken as required by the Landowner where required. Any browsing control will be in accordance with Legislation, Codes of Practice and Licensing administered by DPIPW. Game Services Tasmania can be contacted on 03 6165 3225, for further information.

ASSESSMENT FOR REFORESTATION

- Stocking surveys should be undertaken approximately 4 - 6 months after planting to determine overall seedling survival. This should be determined by formal recorded survey.
- Target survival is >80% of prescribed initial stocking, refilling should be considered if the assessed survival level is less than 85%.
- Refilling and associated activities will occur if survival is <70% and it is considered that the refilling is likely to be successful. This will be dependent on local site conditions.
- Refilling and associated activities will occur on contiguous areas greater than 0.5 hectare in size, where seedling survival is assessed at <50% and it is considered that the refilling is likely to be successful. This will include where average coupe survival is >70%.

Person or organisation responsible for reforestation and having primary responsibility for management of forest practices under this section of the plan: **Landowner**

F. Management of Fuels, Oils, Rubbish and Emissions

Will be carried out in accordance with Section F of the FPC.

MANAGEMENT OF FUEL AND LUBRICANTS

- Site for equipment refuelling will be located at least forty (40) metres from any water course to minimise the adverse effects on water quality in the event of any spillage and will be surrounded by an earthen bund capable of containing a fuel spill.
- Any fuel and oil spills will be contained as soon as possible and clean up procedures will be promptly implemented where necessary.
- Fuel and oil spills that cause or threaten to cause environmental harm and where containment has not been effective (entering waterways or coastal areas) will be reported to the Environmental Protection Authority on 1800 005 171 as soon as possible.

RUBBISH

- All other rubbish (e.g. wire rope, plastic wrappings, grease cartridges, etc.) will be stored in a water tight contained, and removed regularly to a collection depot, transfer station or recycled as appropriate.

Initials of Parties to the Plan							
Landowner 1		Landowner 2		Applicant		FPO:	
Date:	20/1/21	Date:	20/1/21	Date:	20/1/21	Date:	03/02/21



Forest Practices Officer (Planning)			
Forest Practices Plan JEB0021 certified by:			
Name:	Robert Eian Gordon Scott		
Signature:		Date:	03/02/21
Pursuant to a delegation from the Forest Practices Authority under section 43 of the Forest Practices Act 1985.			

Initials of Parties to the Plan							
Landowner 1		Landowner 2		Applicant		FPO:	
Date:	20/1/21	Date:	20/1/21	Date:	20/1/21	Date:	03/02/21



Acknowledgment of persons/organisations in relation to Forest Practices Plan Number JEB0021

Applicant

I submit the attached Forest Practices Plan No. JEB0021 to the Forest Practices Authority and apply for its certification. I acknowledge that I understand the provisions of the plan, and that I am responsible for ensuring that the plan is complied with unless otherwise stated in the plan. I understand that I am responsible for the lodgement of interim compliance reports with the Forest Practices Authority within 30 days of the completion of each discrete operational phase* under the plan; and further, for the lodgement of a final compliance report with the Forest Practices Authority within 30 days of the expiry of the plan. I understand that under sections 18(4A) and 18(4B) of the Forest Practices Act 1985, I must pay a prescribed application fee at a time, and in a manner, determined by the Authority.

Name	Alice Gray	Company or other entity	—
Address	258 Fulham Road. Dunally Tas 7177	Telephone	0408292559
Signature	Alice Gray.	Date	20/1/21.

Landowner 1. Consent

I am the owner of the land or the authorised agent of the owner of the land referred to in the attached Forest Practices Plan Number JEB0021 and has given my approval for the plan to be submitted to the Forest Practices Authority for certification under section 19 of the Forest Practices Act 1985. I understand that, under section 25C of the Private Forests Act 1994, if I am a private landowner, I may be required to pay a levy to Private Forests Tasmania based on the nett area of forest operations under the plan.

Name	A. B. G. A. B. GRAY.	Company or other entity	FULHAM P/L
Address	258 Fulham Rd. Dunally TAS.	Telephone	0438 035 616
Signature	A. B. G.	Date	20/1/21.

Initials of Parties to the Plan							
Landowner 1		Landowner 2		Applicant		FPO:	
Date:	20/1/21	Date:	20/1/21	Date:	20/1/21	Date:	03/02/21



Landowner 2. Consent			
I am the owner of the land or the authorised agent of the owner of the land referred to in the attached Forest Practices Plan Number JEB0021 and has given my approval for the plan to be submitted to the Forest Practices Authority for certification under section 19 of the <i>Forest Practices Act 1985</i>. I understand that, under section 25C of the <i>Private Forests Act 1994</i>, if I am a private landowner, I may be required to pay a levy to Private Forests Tasmania based on the nett area of forest operations under the plan.			
Name	DEROAN J. HUTCHESON	Company or other entity	
Address	583 FULHAM ROAD SUNNYSIDE 7177	Telephone	0438 035 616
Signature		Date	20.1.21

Initials of Parties to the Plan			
Landowner 1		Landowner 2	
Date:	20/1/21	Date:	20/1/21
Applicant		FPO:	
Date:	20/1/21	Date:	03/02/21



Discrete operational phases under this plan include (enter YES or NO against each forest practice proposed):			
NO	Road Construction	NO	Tree Clearing
NO	Timber Harvesting	NO	Quarry Operation
YES	Forest establishment (including reforestation)	NO	Tree Fern Harvesting
YES	Assessment of reforestation		

Initials of Parties to the Plan							
Landowner 1		Landowner 2		Applicant		FPO:	
Date:	20/1/21	Date:	20/1/21	Date:	20/1/21	Date:	03/02/21

Each of the undersigned acknowledges that as an individual/authorised representative of a company or other entity, they are/that entity is the person responsible for the forest practice to be conducted under Forest Practices Plan No. JEB0021 that appears to the immediate left of that signature. It is understood that this responsibility does not include the day to day oversight of contractor employees, which is the responsibility of the individual contractors.

Activity specified in Forest Practices Plan	Signature	Date	Name	Company or Entity	Address
Road construction					
Tree fern harvesting					
Timber harvesting					
Forest establishment					
Assessment of reforestation					
Tree clearing					
Quarry operation					

* This form does not need to be completed if the applicant to the FPP is also the person responsible (as above) for all forest practices to be undertaken.

Acknowledgement of persons or organisations with specific responsibilities under Forest Practices Plan No. JEB0021*

As an individual/authorised representative of a company or other entity, I acknowledge that I/We accept that entity accepts responsibility for undertaking the activity specified in Forest Practices Plan No. JEB0021 that appears to the immediate left of my signature.

Activity specified in Forest Practices Plan	Signature	Date	Name	Company or Entity	Address
Marking of proposed road locations					
Marking of harvesting and reserve boundaries					
Marking of reforestation boundaries					
Organising an Aboriginal archaeological survey					

* This form does not need to be completed if the applicant to the FPP accepts the responsibility for undertaking the activities listed.