

This planning application is open for
public comment until
16 January 2026

Reference no	PLN-25-0243
Site	109 DEDDINGTON ROAD DEDDINGTON & 372 NILE RD EVANDALE
Proposed Development	Land application - Reuse Liquid Waste
Zone	21.0 Agriculture
Use class	Resource Processing

Written representations may be made during this time to the General Manager;
mailed to PO Box 156, Longford, Tasmania 7301,
delivered to Council offices or
a pdf letter emailed to planning@nmc.tas.gov.au

(no special form required)

PLANNING APPLICATION

FOR BUILDINGS, WORKS AND CHANGE OF USE
(E.g. Residential houses, sheds, carports, retaining
walls, visitor accommodation, commercial
development, signage etc.)

Office Use Only:

Exhibited

The Proposal

Description of proposal:

Liquid waste reuse activities, including the receipt and controlled application of approved beneficial liquid waste streams, conducted in accordance with current regulatory conditions and the processes outlined in the Environmental Management Plan (EMP).

Driveway construction material:

Unsealed hardstand

The Land

Site address:

Camperdown: 109 Deddington Road, Nile TAS 7212

Redbanks: 372 Nile Road Evandale TAS 7212

Title reference:

C/T: Camperdown: 102383/1 & Redbanks: 139122/1

Existing buildings on site:

See attached maps.

Existing use of site:

Agriculture Use

Applicant justification of any variation/discretion to the *Tasmanian Planning Scheme – Northern Midlands*

No new buildings, structures, or changes to land use are proposed.

The activities outlined in the supporting EMP will provide the land with beneficial organic nutrients, improving soil health and reducing the need for synthetic fertiliser applications.

FILE NUMBER Y.19875 GRANTEE PART OF 2290A-OR-OP GTD. TO JAMES COX PART OF 2448A-OR-OP GTD. TO JAMES COX		CONVERSION PLAN LOCATION CORNWALL - LYMINGTON CONVERTED FROM GL.289 NOT TO SCALE LENGTHS IN METRES		Registered Number P.139122 APPROVED 10 APRIL 2003 <i>Alice Kawa</i> Recorder of Titles
MAPSHEET MUNICIPAL CODE No. (123) 5239	LAST UPI No. 4700178	ALL EXISTING SURVEY NUMBERS TO BE CROSS REFERENCED ON THIS PLAN		DRAWN CL

SKETCH BY WAY OF ILLUSTRATION ONLY
'EXCEPTED LANDS'

APPROVED -7 OCT 1992 <i>Michael Smith</i> RECORDER OF TITLES	CONVERSION PLAN CONVERTED FROM 55/3204	REGISTERED NUMBER D.102383
FILE NUMBER A.11279	GRANTEE: PARTS OF 200-0-0, 1600-0-0 & 500-0-0 BTD. TO JAMES AITKIN, THOMAS WILLIAMS & JOHN SINCLAIR & PART OF 1250 ACRES BTD. TO JOHN SINCLAIR, JAMES AITKIN & THOMAS WILLIAMS.	DRAWN C. FRA 5-10-92

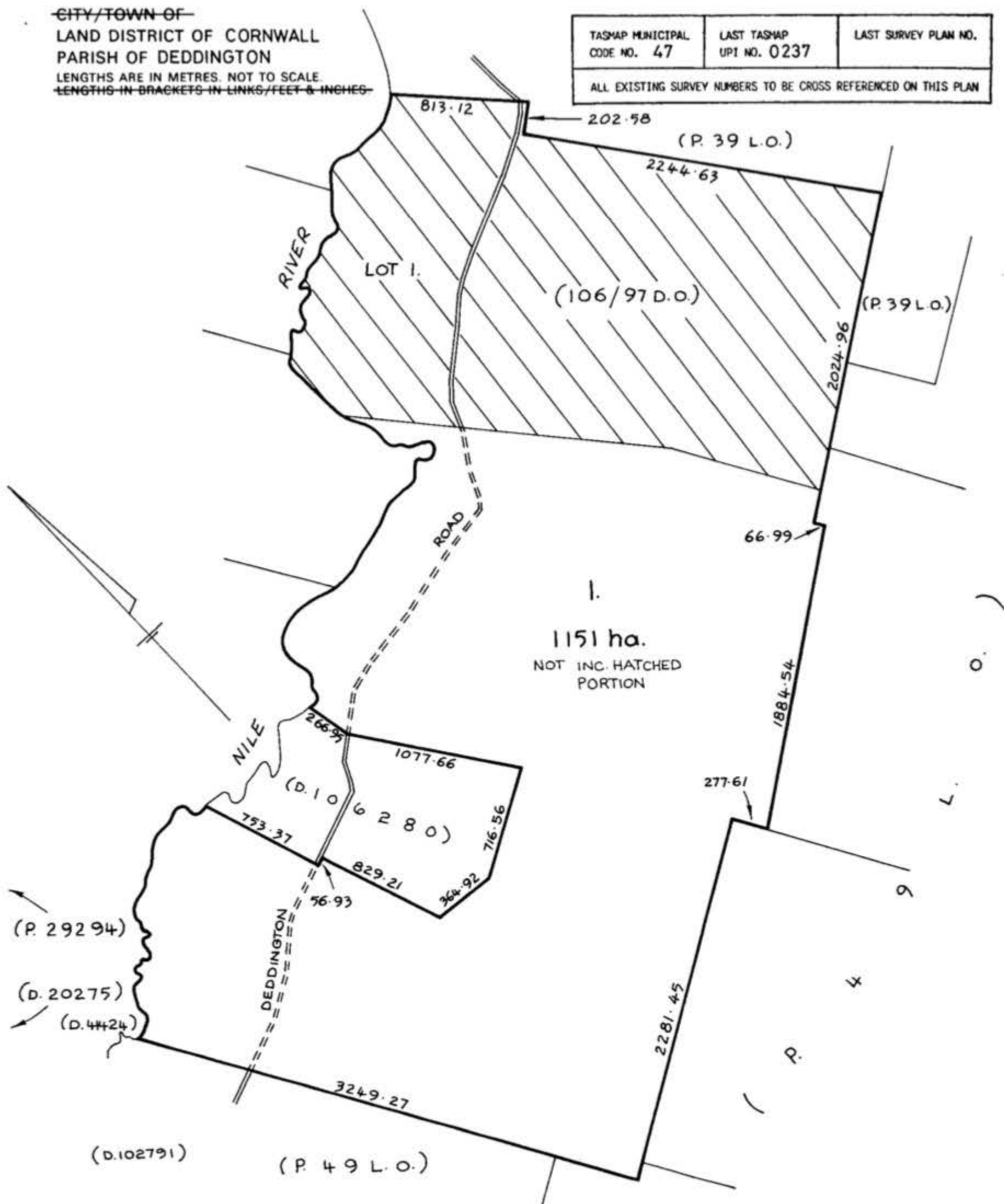
09-K-2082

SKETCH BY WAY OF ILLUSTRATION ONLY

~~CITY/TOWN OF~~
LAND DISTRICT OF CORNWALL
PARISH OF DEDDINGTON

LENGTHS ARE IN METRES. NOT TO SCALE.
~~LENGTHS IN BRACKETS IN LINKS/FEET & INCHES~~

TASMAP MUNICIPAL CODE NO. 47	LAST TASMAP UPI NO. 0237	LAST SURVEY PLAN NO.
ALL EXISTING SURVEY NUMBERS TO BE CROSS REFERENCED ON THIS PLAN		



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Exhibited

Received
11.12.2025



Environmental Management Plan

Nile

Spectran Group
6 Birdwood Avenue, Moonah TAS 7009



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Document control

Version	Date	Author/s	Reviewed by
V1	31/10/2025	Sam Marsh	Jarrold Rufus
V2	07/11/2025	Sam Marsh	Jarrold Rufus
V3	10/11/2025	Sam Marsh	Jarrold Rufus
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1. Introduction

Spectran Environmental Management (Spectran) manage several landspreading sites distributed throughout Tasmania to allow the localised reuse of organic wastes. Operations move regularly from one property to the next depending on the ground availability.

This Management Plan has been developed to support the beneficial reuse of fish morts and other organic waste at Nile, on the two properties of Camperdown and Redbanks. This report has been written to assess and qualify organic waste that is proposed to be spread at the property, determine appropriate application rates and other controls to prevent environmental harm and to ultimately provide sustainable, beneficial outcomes to the property and the wider community.

The application of the wastes offsets requirements for significant quantities of synthetic fertiliser and increases soil carbon, promotes soil biology and improves soil water holding capacity.

Note: This document must be read in conjunction with Spectra Group’s Land Spreading Policy and Land Spreading Information for Farmers documents. Compliance with all requirements outlined within these documents is mandatory to ensure environmental protection, regulatory adherence, and safe land application practices.

1.1 Regulatory Context

The application of organic wastes to land presents a risk to the environment and communities if not managed appropriately. Mismanagement of organic waste reuse activities have the potential to contravene the *Environmental Management and Pollution Control (Waste Management) Regulations 2010* (The Regulations).

This EMP is intended to detail the controls to be used to ensure compliance with The Regulations and ensure compliance with Section 23A; General Environmental Duty of the *Environmental Management and Pollution Control Act 1994* (EMPCA).

Activities shall also consider controls to ensure compliance the Biosecurity Act 2019 and the Land Use Planning and Approvals Act 1993 (LUPAA).

Land Application of organic wastes to benefit agricultural activities is generally considered a Level 1 activity. To ensure compliance with the General Environmental Duty the land application of the liquid wastes described in this EMP shall be regulated by the issuing of an Environmental Protection Notice (EPN) under section 44 of The Act. A Council Officer may issue an EPN under The Act.

The EPN shall detail all the required conduct of the activity so as to assist in the effective management, reduction and/or mitigation of any environmental harm that the activity may cause.

Table 1: Relevant legislation and regulating authorities.

Legislation	Regulating Authority	Regulatory Documentation
EMPCA	EPA or Council as a delegate	Environmental Protection Notice ¹
LUPAA	Council	To be determined by Local Government Planning Representative
Biosecurity Act	Biosecurity Tasmania	The Biosecurity Act 2019 Macquarie Harbour Movement Permit ²

¹Mandatory

²Mandatory when reusing wastes originating from salmon farmed in Macquarie Harbour, to be issued individually to the respective salmon farming companies.

2. Permit Status and Property Details

Addresses

Camperdown: 109 Deddington Road, Nile TAS 7212

Redbanks: 372 Nile Road Evandale TAS 7212

Property Identification Codes

Camperdown: MFEV0077

Redbanks: TBC by Northern Midlands Council

PID/Lease Numbers

Camperdown: 6399032

Redbanks: 3430161

Certificate of Title References

Camperdown: 102383/1

Redbanks: 139122/1

Municipality: Northern Midlands Council

Planning Scheme: Tasmanian Planning Scheme – Northern Midlands Council

Zoning: Agriculture Zone (21)

Use Class: Resource Development

Overlays: Priority Vegetation Area, Waterway and Coastal Protection Area, Bushfire-Prone Area, Airport Obstacle Limitation Area, Flood-Prone Areas and Low Landslip Hazard Bands

Permit Status: To be determined by Northern Midlands Planning Team

The subject properties are located within the Northern Midlands municipality and zoned as Agriculture under the Tasmanian Planning Scheme. The proposed activity involves the landspreading of liquid waste (e.g., food industry by-products, milk waste, or similar biodegradable materials) for the purpose of soil conditioning and agricultural benefit.

Under Clause 21.2 of the State Planning Provisions, Resource Development is a No Permit Required use in the Agriculture Zone, provided the activity does not damage the soil profile, and preclude future agricultural use. The proposed landspreading activity is considered a form of Resource Development, as it involves the application of biodegradable liquid waste to improve soil fertility and support agricultural production.

The activity will comply with EPA Tasmania guidelines, including the Guide to Land Spreading of Food Industry Waste (2019), Guide to Land Spreading of Milk and Milk By-products (2020), and Environmental Management and Pollution Control (Waste Management) Regulations 2020. Key requirements include site selection, application rates based on soil type and crop needs, exclusion zones from waterways and dwellings, and a documented management plan outlining waste sources, transport, storage, application methods, and risk mitigation.

The properties are affected by overlays including Bushfire-Prone Area, Waterway and Coastal Protection Area, Priority Vegetation Area, Airport Obstacle Limitation Area, Flood-Prone Areas and Low Landslip Hazard Bands. These overlays do not prohibit landspreading but require site-specific risk assessments and management measures to ensure environmental protection.

The proposed landspreading activity aligns with the No Permit Required provisions of the Tasmanian Planning Scheme, supports the agricultural use of the land, and will be conducted in accordance with EPA Tasmania guidelines and best practice environmental management.

In addition, This EMP will fully comply with the requirements of the C9.0 Attenuation Code under the Tasmanian Planning Scheme. In accordance with C9.1.1 and C9.1.2, the development and associated activities will be managed to:

- Minimise adverse impacts on the health, safety, and amenity of sensitive uses from activities that have the potential to cause emissions.
- Reduce the likelihood of conflict or constraint between sensitive uses and activities that generate emissions, ensuring that both can coexist without interference.

All planning and operational measures will be implemented to achieve these objectives, including adherence to attenuation distances and any relevant provisions outlined in Tables C9.1 and C9.2. This EMP will incorporate best practice environmental management systems to ensure compliance with the State Planning Provisions and maintain the integrity of surrounding land uses.

3. Activity Location and Application Methodology

3.1 Land Area Description

Nile is split across the two properties of Camperdown and Redbanks, which are located next to each other, near the township of Nile, Tasmania, 7212. The property boundaries including the total areas of the properties and the proposed spreading areas with applicable buffer zones in relation to sensitive receptors are shown in Appendix A.

These two properties are relatively large landholdings for the area and are considered suitable for receiving liquid fish morts and other organic waste for the following reasons:

- With a combined area of almost 2000 ha, the properties provided significant scale and sit in a sparsely populated region, with long distances from sensitive receptors.
- The properties are gentle undulating on stable soil types, allowing for the safe trafficking of delivery trucks and spreading equipment for most of the year.
- Contingency, all-weather unloading areas exist at a number of locations across the properties.
- Existing, well designed road infrastructure allows for safe access by trucks to spread areas internal to the properties.
- Paddocks are of an ideal size relative to the scale of the properties, reducing the impact of required liquid waste withholding periods on grazing rotations. Including an allowance for discing organic waste across multiple paddocks on site.
- Multiple areas exist that will benefit from the addition of organic-based inputs to improve soil structure, nutrient levels and water-holding capacity.
- The property is in close proximity to the Launceston area and fish processing facilities in northern regions of the state, reducing transport costs.

The property is predominantly used for lamb grazing and potato farming with areas of pivot irrigation.



Figure 1, Image showing property near Nile with typical terrain and internal farm roading conditions.

3.2 Rainfall and wind

Table 2: Monthly rainfall of the nearby Evandale weather station. Data from other sites included for comparison.

Average monthly rainfall (accessed via BOM)													
Site	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Evandale	38.7	37	47.3	54.6	59.4	59.1	70	78.4	61.7	54.3	49	50.4	658.2

The area is relatively moderate in rainfall with rainfall generally spread evenly throughout the year. Wind is predominately from the North and West.

3.3 Delivery of wastes to site

Spectran tankers collect the wastes and transport them to the property. On arrival, the tanker will transfer the material to storage tanks in a hardened accessible area. The storage tanks allow for consolidation of spreading operations and allow flexibility for timing of applications around rainfall, wind, ground conditions etc. At time of writing Spectran has 10 x 24,000 litre tanks available for storage. This volume of storage allows for spreading to cease 2 days before a rain event and 3 days following the rain event with normal delivered volumes.



Figure 2: Delivery area at "Strathburn" Oatlands 2024.

3.4 Application Method

A tractor-towed liquid spreader will be utilised to spread the wastes accurately across terrain. The spreader is equipped with a vacuum pump to allow creation of either a vacuum or pressure in the spreading tank; this allows for ‘clearing out’ of transfer hoses at the loading area preventing mess on transfer. The vacuum transfer system protects for spills; any leaks in hoses or fittings allow air ingress rather than waste egress. A link to a video of the spreading equipment in operation can be found [here](#).

3.4.1 Application Rate Control

Application rates are managed by adjusting tractor speed. Calibrations are to be performed on any new equipment and need to account for variable product flowability.

Spread areas must be recorded using an appropriate proof of placement system (Section 5.11). The persons responsible for managing the activity are to regularly validate that total spread areas as recorded on the proof of placement system are consistent with spread area expectations calculated from the tonnages delivered to site over a given period.

The speed required for a given application rate is calculated with the following formula:

$$V = 0.06 \left(\left(\frac{\left(\frac{1}{AR} \right) * 10000}{SW} \right) / \left(\frac{1000}{Q} \right) \right)$$

Where:

V = Travel speed required in km/h

AR = Target Application Rate in tonnes/ha

SW = Spread Width of spreading implement in meters

Q = Discharge flow rate of material in litres per minute

Table 3: Data used to calibrate travel speed to obtain target application rates on Pichon TCI2700 liquid spreader shown in Figure 4.

Product viscosity	Applicator type	Discharge duration (min)	Discharge rate (litres/min)	Spread Width
Thick	12m Dribble Bar	13	1592	12
Normal		6.8	3044	12
Water		4.5	4600	12
Thick	Splashplate	12.5	1656	5
Normal		6.5	3185	8
Water		4.6	4500	9

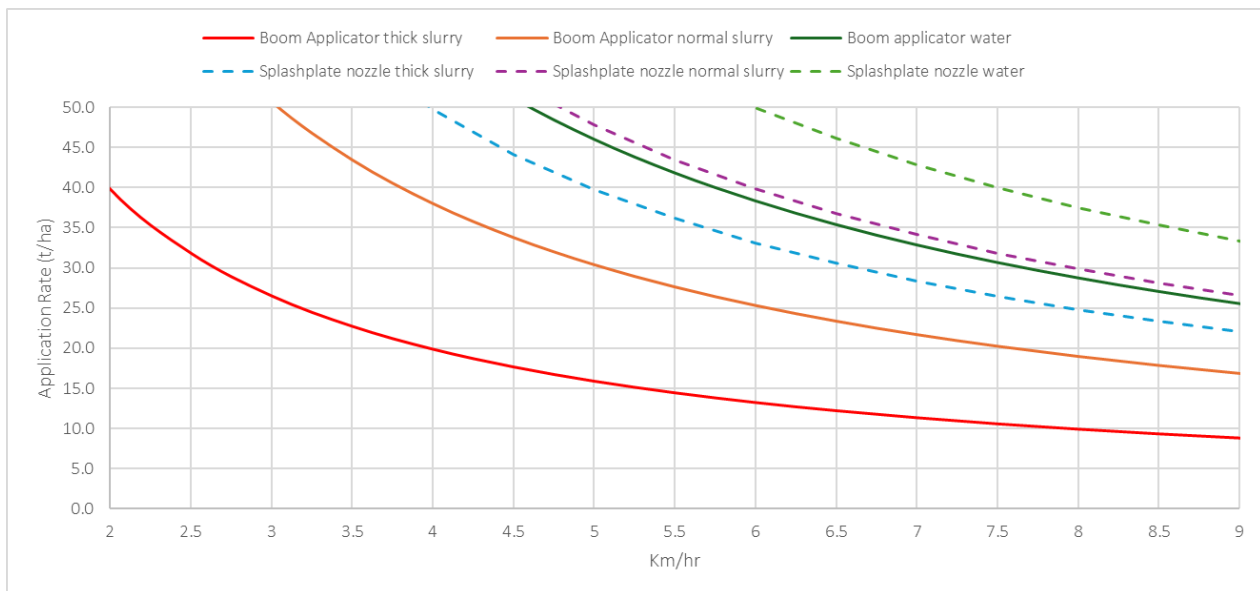


Figure 3: Calibration curves for Pichon TCI 20700 liquid spreader



Figure 4: Typical spreader arrangement. Photo shows a Pichon 20700 litre vacuum spreader and 335hp 4WD tractor, taken at St Peters Pass Oatlands 2021

3.5 Alternatives

3.5.1 Localised reuse

Where there is suitable land adjacent or close to a site producing liquid wastes, reuse on these areas is the most efficient approach. Even at sites where there is access to land nearby there may be insufficient scale to warrant investment in irrigation infrastructure or spreading equipment or there may be sustainability concerns with reliance on a single area for reuse.

3.5.2 Trade waste discharge

TasWater operate STP's to treat sewage and some STP's have capacity to accept trade waste inputs. In many cases however wastes can exceed acceptance criteria such as BOD, COD and conductivity and also exceed the hydraulic input allowances. With a focus on improving the performance and reliability of STP's there are increasing restrictions on industrial inputs.

3.5.3 Dewatering

Due to the inefficiencies of transporting water and the limited options for storage, reuse and disposal of liquids in Tasmania, dewatering of waste is the preferred approach. Dewatering plants however are expensive to establish, require skilled personnel to operate, require expensive consumables and once solids are dewatered the liquid component still has to be managed onsite, either through further wastewater treatment or localised irrigation which is often not possible.

3.5.4 Composting

Composting is the most predominant means of processing organic wastes and producing a stable, storable and saleable product, however in Tasmania the composting capacity is insufficient to meet the needs of industry especially where there are seasonal peaks. Additionally, high liquid inputs can be detrimental to the composting process and increase leachate production which when combined with rainfall inputs at unroofed sites can upset the water balance and lead to compliance issues.

3.5.5 Rendering

Certain liquid wastes are of sufficient protein and oil content to warrant rendering to separate the various fractions into high value products. Tassal operate a rendering plant for Salmon mortalities, processing trimmings, head and frames and Viscera at their site at Triabunna however it has capacity restrictions, and the liquid component (Stickwater) still requires reuse via landspreading. The site also shuts down for planned maintenance and upgrades from time to time.

3.5.6 Emerging options

A biogas facility is proposed at Westbury. As this facility is designed to recover carbon to create a natural gas substitute, wastes with a high moisture content or a high protein to carbon ratio may not be suitable. As the facility recovers gas only, the remaining liquid "digestate" requires landspreading, so it cannot be considered a replacement for landspreading. The distance required to deliver to the site is cost prohibitive for many waste streams with low calorific value.

Pyrolysis or waste-to-energy plants are generally not considered suitable for liquid wastes due to the significant energy imbalance resulting from the need to forcefully dry the material prior to combustion.

4. Waste Information

4.1 Hatchery sludges

Salmon Hatcheries have an effluent filtration system where fish excreta and uneaten food is captured and filtered out. Conditioning tanks settle the sludges, and regular collections are undertaken. The sludge contains valuable nutrients and low amounts of salts. The digested, settled nature of the wastes generates an unremarkable, organic odour.

The sludges can be applied directly to pasture and can be treated in the same way as manures, wastewater or biosolids.

4.2 Brewing Sludges

4.2.1 Yeast Sludge

As part of the beer and cider brewing process various strains of the yeast *Saccharomyces cerevisiae* digest carbohydrates in barley, apples, pears etcetera and in doing so produce alcohol and an amount of yeast biomass. The biomass is allowed to settle, and this sludge is retained for collection. The analysis is similar to the aquaculture hatchery sludges and as such can be managed for reuse in the same way. There are no specific hazard characteristics, implications for stock or biosecurity concerns.

4.2.2 Stillage / Pot Ale

The recently completed Greenbanks Distillery in Bridgewater runs a whisky distilling operation that utilises a continuous process where the grains remain in the liquid to be distilled; With the ethanol and other volatile components distilled and recovered, the remaining material is called “stillage” and is consistent with the analysis of the yeast sludge recovered from Cascade Brewery (Section 4.2.1). This is a different process to distilleries which recover the grains prior to distilling; the liquid component left over after the distilling process is termed Pot Ale, which has been land spread by Spectran in 2022 for Callington Mill Distillery in Oatlands. Stillage and Pot Ale are included in this EMP for contingency purposes.

4.2.3 Winery Sludge

Tas Vintners operate a winery at Cambridge and produce wine on contract for several vineyards and wine brands. They operate a wastewater treatment plant that retains activated sludge. The treatment plant processes mainly washdown water and grape residues left in the bottom of vats at the end of the brewing process.

4.3 Salmon Viscera

Approximately 13% of harvested Salmon is viscera. The viscera is mechanically removed and pressured water is used to wash out the gut cavity. The mix of water and viscera is recovered via a vacuum system and sent to a storage tank where it is further macerated, agitated and ensiled via the addition of acid to break down solids and prevent biological degradation. Viscera is prioritised for rendering and an expansion of Tassal’s rendering plant in early 2025 is expected to see the requirement for land application reduce significantly. The properties described in this EMP will be utilised for contingency purposes.

4.4 DAF Sludge

Huon’s Paramatta Creek processing facility has a Dissolved Air Flotation (DAF) plant that recovers suspended solids from processing room washdown water prior to the water proceeding to a Wastewater Treatment Plant. This low volume product is typically collected with a full load of viscera on occasion.

JBS operate an Abattoir and run a large DAF plant and associated dewatering plant which converts their DAF sludge into a cake. The DAF is produced from wastewater from the killing room floor and holding pens. On occasion the dewatering plant requires maintenance and in these instances the collection of the DAF as a liquid is required.

4.5 Salmon Silage (Macerated Morts)

Marine farming sites are progressively investing in processing capacity onshore to improve the management of Salmon Mortalities. Salmon “morts” are macerated, agitated and pH reduced with the addition of an organic acid to break down all solids into a stable, low-odour and storable product that can be reused directly via land application. The material contains high levels of useful nutrients and is a valuable source of phosphorous. Its appearance is that of a pink smoothie. Mortalities are typically seasonal and most of the delivered volumes are during the warmer summer months.

4.6 Netwash

Salmon pens are regularly brought to shore and washed in a large tumble-washer in fresh water and this wash water is retained. Nets are handled by crane. Algae and seaweed, high in organic matter and nutrients, is filtered and the water recirculated.

The analysis of the product shows nutrient levels at lower concentrations than other waste streams. Historically, the netwash has had high levels of copper from biofouling paints and elevated levels of lead from lead weights. With industry changes these contaminants have been removed.

4.7 Blood Water

All salmon that are harvested are bled out and the blood retained. At Strahan the blood water is retained separately. Whilst containing valuable nutrients it is not as nutrient dense as other waste streams and is best suited for ‘shandying’ with other wastes.

4.8 Stickwater

Stickwater is the liquid component recovered from the rendering process of Salmon waste at Tassal’s Triabunna rendering plant. The Stickwater contains valuable nutrients and is sometimes sold as a liquid fertiliser in other parts of the world. The installation of a waste heat evaporator at the rendering plant in 2025 is expected to see a significant reduction in the requirement for land applications.

4.9 Hydrolysate

Hydrolysate is produced via Alkaline Hydrolysis, a commonly used process for breaking down organics. Alkaline Hydrolysis is used in Water Cremations, with approximately 1000 litres of Hydrolysate produced per process. The hydrolysate contains valuable nutrients and has the appearance of weak, black tea. It is suitable to be used as a liquid fertiliser. Whilst common in the US and Europe, the first Water Crematorium in Australia was opened in Hobart in 2024.

4.10 Cadbury USAB Effluent

Mondelez International operate a chocolate factory in Hobart. Water that is recovered during the manufacturing process is put through an onsite wastewater treatment plant to reduce the concentration of residual sugars prior to it being discharged into the sewer network. When this effluent exceeds allowable sugar concentrations for TasWater trade waste acceptance it requires reuse via land application.

5. Application Rates and Management Controls

Accurate calculations of waste application rates and adherence to management controls are essential to obtain the most beneficial outcomes whilst preventing environmental harm.

At an application rate of 50 tonnes per hectare, the planned landspreading program at Camperdown and Redbanks will utilise approximately 20,450 tonnes of organic material across 409 hectares. The material will predominantly consists of, salmon silage (45%), complemented by a blend of nutrient-rich by-products including viscera (13%), hatchery waste (15%), dissolved air flotation (DAF) sludge (6%), brewing sludges (5%), netwash residues (2%), bloodwater (2%), stickwater (10%), hydrolysate (1%), and Cadbury USAB effluent (1%). This integrated approach supports sustainable waste management by recycling diverse organic streams into soil amendments, improving fertility and organic matter content while reducing reliance on synthetic inputs and supporting a circular economical approach.

5.1 Soil Testing

Prior to application, we will conduct a full assessment of the implications of spreading multiple waste streams on single spread areas. This will include nutrient balance analysis, potential contaminant risks, and soil health impacts. Where sampling has not yet been undertaken, a detailed plan with timeframes will be provided to Council, including laboratory testing protocols and reporting schedules.

All proposed spread areas are to be soil tested within 12 months preceding the spreading activity. Agronomic advice shall be used to confirm that tested areas are suitable to receive wastes; any areas deemed unsuitable shall be avoided.

Soil tests are to be taken within six months of completion of the spreading activity to monitor changes in nutrient analysis and guide subsequent land use or follow up applications of other fertilisers or soil amendments such as lime.

All results will be tested by a NATA and ASPAC approved laboratory, accompanied by commentary from a suitably qualified environmental specialist at Ag Assist. The soil results will be submitted to Council based on monitoring frequency (Pre and post testing) to maintain transparency and compliance with section 5.7. All soil tests shall be retained in a register and used to demonstrate benefit to receiving areas to property owners, regulators and other stakeholders.

5.2 Particle Size Testing

All fish waste will be processed to meet particle size requirements as specified in Spectrans SOP: landspreading particle size sampling guide. A 90% passing rate through a 4-5mm sieve is required to ensure this requirement is met. Landspreading operators will verify compliance on-site before spreading commences.

5.3 Weather Conditions for Spreading

Spreading will only occur under suitable weather conditions, defined as:

- **Wind speed:** below 15 km/h
- **Wind direction:** In the opposite direction (away) from sensitive receptors
- **Rainfall:** no spreading during rainfall or when heavy rain is forecast within 24 hours
These measures will minimise odour and runoff risks (section 5.13).

5.4 Pasture Burn and Soil pH

Most of the wastes detailed in this EMP cause foliar burn. The wastes should only be spread on ground prior cultivation or resowing, or in pasture where the short-lived leaf burn is acceptable.

Several of the wastes are acidic and, in many cases, this is intentional and an important step in making the material suitable for reuse. Low pH wastes can contribute to foliar damage especially when the spread material contains salts, protein or oils. Salmon Viscera contains oils which when exposed to oxygen sets into a crumbly crust. Whilst this amplifies the slow-release qualities of this waste and can act as a stabiliser for wind-blown soils, the “drying oil” smothers leaf surfaces and causes osmotic stress to foliage, causing it to yellow off in a couple of days.

The addition of low pH liquids to soils has not been observed to influence soil pH in other landspreading operations that reuse low pH wastes. This is likely due to applied liquids only affecting the pH of the liquid portion of the soil which becomes significantly diluted once applied and diluted further following irrigation or rainfall. Additionally, soils are generally highly buffered and resist pH change, especially soils of high clay content.

A dribble-bar or trailing shoe applicator can be used to spread the waste in strips to allow for the inter-row foliage to remain healthy; these implements add complexity to operations and may not be suitable on all terrain types but should be considered for use depending on the situation.

5.5 Hydraulic Limiting Application Rate

Liquids can flow across the landscape before they are absorbed into the soil surface. As such, the maximum application rate is limited to the hydraulic holding capacity of the ground where it is being applied and the slope of terrain.

No single application shall exceed 50t/ha. 50t/ha is equivalent to an instantaneous 5mm rainfall event.

Application rates above this risk physical movement downslope, especially where soil is compacted and without vegetation cover. Spreading rates shall be reduced further if surface movement of the waste is observed.

5.6 Mineralisation Rate for Application Rate Calculations

As the wastes are organic, nutrients are held tightly in proteins until they are released in plant available forms via biological degradation. The rate of this microbial-driven process is dependent on the availability of moisture and the temperature; thus, the release of nutrients typically aligns with the growth rates (and nutrient demand) of plants. This is one of the more elegant aspects of waste reuse; the slow-release qualities allow for the supply of nutrients in synchrony with the seasons, and farms can expect to see the benefit of the applications for several years following applications.

The rate of conversion of organic forms of nutrients into the mobile, plant available forms is termed “Mineralisation Rate” and for application rate calculations is assumed to be 20%, which is consistent with the mineralisation rate of biosolids.

5.7 Nitrogen Limiting Application Rate (NLAR)

Nitrogen is a critical input to agricultural operations however over-application of mobile forms can have negative impacts on plant quality and aquatic health. Nitrogen release from inputs from both organic and synthetic inputs shall never exceed the removal rates of the land where it is applied.

NLAR is calculated with the following formula:

$$NLAR = \frac{CNR}{ABN}$$

Where:

CNR = Crop Nutrient Requirement (kg/ha) - A CNR of 100kgN/ha/year is assumed; this is typical for moderately well-managed, dryland pastures. Cropping areas under irrigation will have a higher CNR.

ABN = Available Biosolids Nitrogen (ABN) and is calculated as with the following formula:

$$ABN \text{ (kg/t)} = (\text{Ammonium N (mg/kg)} + \text{N as Nitrate and Nitrite (mg/kg)} + ((\text{Total Kjeldahl Nitrogen} - \text{Ammonium N}) \times (\text{Mineralisation Rate \% / 100}))) / 1000$$

5.8 Phosphorous Limiting Application Rate (PLAR)

Phosphorous is less mobile than Nitrogen in soils and is taken up luxuriantly by plants so there are less environmental and plant health risk associated with the over-application of P. Additionally, building up background phosphorous levels takes several years and significant financial investment, so it is rare to see high P levels in most dryland Tasmanian soils. However, if Phosphorous is over-applied this can lead to leaching to waterways, especially where soils have a low Phosphorous Buffering Capacity. A crop removal rate of 50kgP/ha/year is used.

Management of NLAR typically manages PLAR, however the maximum PLAR is shown in Table 5.

5.9 Repeat Applications

Repeat applications are permissible in the same year if the total nutrient limiting application rate is not exceeded and applications are spread evenly throughout the year. Once the maximum application rate is applied no further applications shall occur in the same area for three years unless soil tests demonstrate further applications are warranted. Table 5 details limitations on repeat applications for each waste type.

5.10 Prevention of Soil Salinity and Sodicty

Soils can become saline and/or sodic if excessive salts applied to the surface through irrigation water, rainfall, rising of water table or through addition of inputs such as synthetic or organic fertilisers. The addition of excessive sodium salts can degrade soil structure. Whilst not critical for plant growth for most pasture species, sodium is essential for animal health and considered applications of sodium is warranted in grazing situations.

Many areas in Australia irrigate with saline irrigation water and a careful balance is required to ensure applied salts are leached from the soil profile during winter rains to allow further irrigation the following season. As the application of wastes at Cluny is a one-off event preceding pasture renovation, any applied salts present a short-lived impact to soil salinity before being leached via rainfall through the following weeks and months.

The EC of the combined liquid waste and rainfall volume shall not exceed 8000 μ S/cm to keep the collective water inputs consistent with irrigating with Class 2 irrigation water.

5.11 Prevention and Correction of Soil Acidity

Soils may be naturally acidic or gradually decrease in pH through modern agricultural practices such as cultivation and addition of fertilisers that promote biologically driven reactions creating acid in soils. A lower than optimal soil pH reduces the nutrient availability to plants and crops. Agricultural operations regularly soil test for pH and correct as required by the addition of lime.

The addition of low pH liquids to soils has not been observed to influence soil pH in other landspreading operations that reuse low pH wastes. This is likely due to applied liquids only affecting the pH of the liquid portion of the soil which becomes significantly diluted once applied and diluted further following irrigation or rainfall. Additionally, soils are generally highly buffered and resist pH change, especially soils of high clay content.

pH correction of the liquid wastes detailed in Section 4 prior to land application is not considered warranted or beneficial.

The soil testing post application will inform if any soil pH adjustments are required through the addition of lime.

Table 4: Summarised analysis of waste types

Waste Type	pH	Ammonia (mg/l)	Nitrate and Nitrite (mg/l)	Total Kjeldahl Nitrogen (mg/l)	Potassium, Total (mg/L)	Total Phosphorous (mg/l)	EC (µS/cm)	Available Nitrogen (ABN) (kg/t)	Available Phosphorous (kg/t)
Salmon Silage	4.3	1380	0.26	14400	1682	1536	23733	2.88	0.31
Viscera	4.5	618	1.17	3867	387	327	7104	0.77	0.07
Stickwater	7.1	3238	0.21	13800	2268	1026	46850	2.76	0.21
Yeast Sludge	5.1	1360		2640	295	438	17060	0.53	0.09
Hatchery Sludge	5.4	984	1.74	5804	209	2584	8488	1.16	0.52
DAF Sludge	4.7	242.25	0.60	3285	86	305	2397	0.66	0.06
Netwash	6.9	968	0.02	2443	458	372	15150	0.49	0.07
Blood Water	7.2	164	0.02	224		19.45	7780	0.04	0.00
Hydrolysate	10	150		470		50	7000	0.09	0.01
Pot Ale	4.2			2415	998	223	4320	0.48	0.04
Winery Sludge	4.4			580	1250	84	947	0.12	0.02
Cadbury UASB effluent	7.1	0.12	0.02	22.8		5.54	6500	0.005	0.001

Table 5: Application rate summary. The attribute limiting application rate is shown in red.

Waste Type	Forecast annual tonnes (2025)	Max application rate (Net EC <8000µS/cm)	Nitrogen Limiting Application Rate (t/ha)	Phosphorous Limiting Application Rate (t/ha)	Maximum total application rate (t/ha)	Maximum single pass application rate (t/ha)	Maximum number of passes	Total area required per year (ha)	Area required per year under cultivation (ha)
Salmon Silage	5000	184	35	326	35	35	1	144	144
Viscera	1000	616	129	1529	129	50	3	8	8
Stickwater	2000	93	36	487	36	36	1	55	
Yeast Sludge	900	257	189	1142	189	50	4	5	
Hatchery Sludge	4000	516	86	193	86	50	2	47	
DAF Sludge	100	1826	152	1639	152	50	3	1	1
Netwash	600	289	205	1344	205	50	4	3	
Blood Water	700	562	2231	25707	562	50	11	1	
Hydrolysate	60	625	1064	10000	625	50	13	0	
Pot Ale	Contingency	1013	207	2242	207	50	4		
Winery Sludge	Contingency	4621	862	5952	862	50	17		
Cadbury UASB effluent	Contingency	673	21834	90253	673	50	13		
					Total Area Required (ha)			263	153

5.12 Buffer Distances

Buffer zones are to be adhered to reduce the risk of movement of the applied waste into sensitive areas (Tables 7-9). These default buffer zones have been adopted in accordance with Spectran Environmental Landspreading Policy, dated September 2025.

Waterway buffer distances are derived in accordance with Integrated Conservation Value (ICV) ratings, as mandated under the Conservation of Freshwater Ecosystem Values (CFEV) framework. These requirements are established by the Department of Natural Resources and Environment Tasmania to ensure compliance with statutory provisions for riparian zone management and freshwater ecosystem protection.

Table 7: Default buffer distances

Occupied dwellings (on-farm)	100m	To prevent odour nuisance
Occupied dwellings (off farm)	1000m	
Public roads	10m-100m	Apply extra buffer for high use roads or with clear line-of-sight, low buffer on low use roads acceptable to prevent off-site nuisance.
Native forests and significant vegetation	10m	
Property access roads	5m	To reduce risk of material drifting on to roads and being trafficked off-site

Table 8: CFEV and ICV buffer distances

CFEV Integrated Conservation Value (ICV) classification	Minimum buffer distance
Very High	50m
High	30m
Medium	20m
Low	10m

Table 9: waterbody buffer distances

Waterbody type	Minimum buffer distance
Farm drains	5m
Ramsar wetlands and lakes	100m
Farm dams	15m
Town water supply offtakes (upstream)	3000m
Drinking water bore	250m

This EMP will also comply with the attenuation requirements specified in Table C9.1 of the C9.0 Attenuation Code under the Tasmanian Planning Scheme. All sensitive uses will be located outside the prescribed attenuation distances for activities listed in Table C9.1, measured as the shortest distance from the boundary of the site on which the activity occurs. Where an attenuation area overlay applies, the greater distance between the overlay and Table C9.1 has been adopted to ensure full compliance.

The operational layout of the development has been assessed against these distances to prevent adverse impacts on health, safety, and amenity, and to minimise potential conflict between sensitive uses (residential buildings) and activities that generate emissions (tractors). This approach aligns with the objectives of C9.1.1 and C9.1.2, ensuring that attenuation buffers are maintained in accordance with State Planning Provisions.

Based on the property locations of Camperdown and Redbanks, no activities in relation to Table C9.1 have been identified within attenuation distance, specifically in relation to Level 1 and 2 activities.

5.13 Proof Of Placement

All spreading vehicles are to have a system installed that displays permitted spread areas to the operator, tracks vehicle position and records areas where waste has been applied. Operators are to be effectively trained on the operation of this system.

Data is to be retained and is to be used on an as-needs basis to demonstrate:

- That buffer zones in the proximity of spread areas have been mapped and avoided by spreading equipment.
- The total spread area covered over a given period reconciles with the waste volumes delivered to site during that period and the appropriate application rate for that waste type.
- Timing and locations of spreading operations



Figure 5: Example proof of placement report showing an area spread with liquids at “Strathburn”, Bowhill Road Oatlands, May-June 2025.

5.14 Unloading Area Management

Areas where wastes are transferred from delivery vehicles to storage tanks (Figure 2) and where spreading equipment collects wastes to be spread present a high risk for waste spillages. The following rules are to apply when establishing and maintaining these areas:

- Unloading areas are to be located as far as practical from public roads, residences, waterways and other sensitive areas, significantly greater than the minimum buffer distances stipulated in Tables 7-9, ensuring full compliance.
- Fencing shall be erected around the unloading areas to exclude stock entry.
- Drains, berms and sediment traps shall be installed where warranted to prevent excessive downslope movement of spilled wastes and/or to prevent waste movement outside fenced area.
- All rubbish, including broken hoses, fittings, and similar items, must be disposed of immediately in designated, contained bins. Any rubbish observed during operations should be promptly placed in these bins and secured to prevent dispersal in adverse weather conditions.
- A stockpile of sawdust shall be available to absorb minor spills.
- Large spills shall be allowed to dry (if practical), collected with appropriate machinery and applied to spread areas.
- Equipment, tanks and fittings are to be cleaned regularly.
- Fuels and oils are to be kept in appropriate bunded storage either onsite or offsite.
- All vehicles including tractors are to have a hydrocarbon spill kit onboard.
- The site shall be remediated to an acceptable condition on completion of the activity and assessed for visible RAM (Section 5.14)

These rules are to comply with housekeeping and environmental standards for site cleanliness and safety.

5.15 Odour

The activity is required to manage multiple odorous waste streams. The primary driver of the selection of this and similar properties for the reuse of the wastes detailed in Section 4 is to allow for significant distance from sensitive receptors and prevent offsite odour impacts.

Waste producing sites are required to undertake effective pre-processing of the waste to prevent degradation and allow for safe storage and transport, including the prevention of nuisance odour in transit. Products like viscera and macerated morts are ensiled to meet this requirement and remain low odour as long as this processing is done effectively. Where wastes are collected that exhibit signs of degradation (e.g. froth generation), this is to be reported to the customer for corrective action.

Forecast weather conditions shall be constantly monitored. Should the weather be considered unsuitable for spreading, the wastes will either be stored onsite until conditions improve or are taken to alternative disposal sites.

When land spreading, odour is most noticeable at the spread area but typically disperses with distance. Additionally, the odour generation falls after application as the wastes infiltrate the soil and rapidly desiccate on the soil surface. Increased temperature can increase odour generation however this also correlates to a much faster drying of the waste on the surface and as such can be self-managing.

If waste is broadcast applied to standing vegetation (e.g. bracken or rank pasture) this can promote generation of aerosols through increased exposure to air. Should nuisance odours occur there is the option to immediately stop odour generation by mechanical incorporation into the soil. Many odour issues are avoided when wastes are applied via low-emission applicators rather than through a broadcast nozzle.

Forecast weather conditions shall be constantly monitored. Should the weather be considered unsuitable for spreading, the wastes should either be stored onsite until conditions improve or are taken to alternative disposal sites.

5.16 Grazing Withholding

Many of the wastes to be reused are classified as Restricted Animal Material (RAM) due to the potential for the presence of animal-derived products. Animal products have the potential to contain prions which can cause Transmissible Spongiform Encephalopathy (TSE) if ingested. TSE type diseases are ultimately fatal and follow a degeneration of the nervous system. Mad Cow disease and Scrapie in sheep are the two main TSE's affecting Ruminants.

Prions that cause TSE are resistant to decay from normal processing and disinfection practices. Animals that eat animal products such as humans, chickens and farmed salmon can contain and excrete RAM. For this reason, common organic fertilisers such as compost, chicken litter and biosolids are also categorised as RAM. The only viable control methods are through control of transmission and through complete destruction of stock that are found to be infected.

Section 9(1) of the *Biosecurity Regulations 2022* (The Regulations) prohibits a person from feeding RAM to ruminant animals. Feeding is considered to have been prevented when access has been prevented. In practice, when RAM is visible on the soil surface from eye level this is considered to be accessible to stock and if stock is found to be (or have been) in these areas this would be in contravention to The Regulations.

Biosecurity Tasmania, as the regulator, have powers to issue directives to land managers and stock owners and this may include prohibiting landowners from grazing spread areas or preventing sale of stock to certain abattoirs or export markets when they have been found to access RAM.

Prioritising spreading of wastes on land intended for cultivation shall occur, with wastes derived from the processing of raw animal products spread exclusively on ground intended for cultivation (Table 5).

For wastes such as hatchery sludges, stickwater and bloodwater, spreading onto pasture not intended for cultivation is permissible however material must no longer be visible when stock is reintroduced to the spread area. The time it takes for RAM to break down and become incorporated into the soil will vary depending on numerous variables however a minimum withholding period (WHP) of 30 days shall be observed, noting that the minimum requirement under the legislation is 21 days. A 30-day WHP audit will be conducted on site to ensure all material has been incorporated into the soil and once notified compliant, livestock can safely return to site.

Reintroduction of stock must be preceded by an inspection by a suitably qualified person. The suitably qualified person must be trained in the contents of this EMP and an associated procedure for identification of RAM.

Regular inspections of fencing and ensuring all gates are closed are required to prevent unintentional access to the unloading and spread areas by stock.

5.17 Prevention of Vermin

An ongoing assessment will be conducted to determine whether flies, birds etc are becoming a nuisance or if they have the potential to move the waste from the spread area. Should vermin issues be identified mitigation measures shall be investigated.

Vermin activity will be assessed weekly during active spreading periods using visual inspections and bait station monitoring. Results will be documented and corrective actions implemented where necessary.

The proliferation of vermin such as feral cats and crows may be indicative of improperly processed putrescible wastes being reused and this is to be investigated and rectified. Section 12(1) of the Regulations prohibits the unhygienic management of animal carcasses.

5.18 Vehicle and Equipment Hygiene

The movement of equipment and vehicles has the potential to transfer weeds and pathogens between sites. In the case of Aquaculture based wastes poor hygiene with regards to transport vehicles, boots, gloves, hoses and fittings can increase the risk of disease transfer between aquaculture sites.

All washdown areas must be fenced to exclude stock and assessed for visible RAM prior to demobilising from the site (Section 5.14).

5.18.1 Landspreading equipment

Landspreading equipment shall be cleaned periodically as required. As much as practically possible, landspreading equipment shall avoid driving over spread areas to prevent transfer of material out of spread areas and onto hardened roads and areas not intended for spreading.

Loading ports on spreading equipment where hoses are connected must be cleaned daily.

When spreading equipment is moved to a new location a full clean and disinfection shall occur. All organic material is to be removed using a pressure washer and appropriate cleaning products. Virkon S 1% disinfectant shall be used as per manufacturer's instructions.

5.18.2 Delivery vehicles

All trucks transporting wastes to site must remain on hardened roads. Following transfer of wastes into the storage tanks on site, organic material shall be removed from hoses, fittings and wheels using appropriate cleaning equipment. Virkon S 1% disinfectant shall be used as per manufacturer's instructions before the vehicle leaves site.

5.19 Complaints Management

All complaints received will be logged and forwarded to Council within 24 hours of receipt, along with details of any corrective actions taken.

5.21 Emergency Response

5.21.1 Reporting

All hazards and incidents, including near misses, shall be reported as per Spectran’s incident response process (Figure 7).

5.21.2 Relevant Contacts

Table 7: Relevant contacts in case of emergency

Contact	Phone Number	Name
Emergency Services	000	
Environmental Scientist	0409 395 715	Sam Marsh
Site Supervisor	0400 486 884	Peter Tomlison
Senior Manager	0499 447 918	Ben Jones
EPA Incident Hotline	1800 005 171	
Property Owner	0400 341 899	Ben Morrisson

5.21.3 Spill Response

Events such as equipment failure, operator error or accident may result in a spill of waste which may enter or concentrate into sensitive areas. The following approach shall be followed:

1. MAKE AREA SAFE

Once the spill is identified, personnel should be prevented from accessing the area. If safe to do so, stop the source of the spill. This may include turning off a valve or closing a hatch. Emergency services may be required to manage traffic, treat injuries etc.

Where wastes likely contain Restricted Animal Material (RAM), grazing animals shall not be allowed access to the material. Where safe to do so, attempt to exclude grazing animals from the area.

2. IDENTIFY THE EXTENT OF THE SPILL

Assess the spill and what implications this may have on the safety of yourself, others, to animals and the environment. For example, is the spill confined to a concrete bunded area? Is the spill flowing down a drainage line into a river? Is the product lying on the road and potentially endangering others? Anything other than a minor spill that can be safely cleaned up at the time by personnel should be considered an emergency.

3. REPORT THE SPILL

Spectran Management shall be contacted and advise of the situation as soon as safe to do so. If required, contact Emergency Services first. Do not leave the site unattended. Depending on the spill Spectran Management will need to report the event to the EPA, NRE and/or other stakeholders.

4. PLAN HOW TO CONTAIN AND CLEAN UP THE SPILL

Assess what resources are required to contain and clean up the spill. Depending on the size of the spill this may need to be undertaken in consultation with Spectran Management, Emergency Services, and the EPA. For spills larger than a minor spill, Spectran Management will assume control of the incident.

Consider the requirements for disposing of the cleaned-up material (e.g. covered skip bin, 1000 litre tote bin etc). Spectran Management will assist with resourcing the activity.

Larger spills may require resources such as:

- Containment curtains, booms, socks, hay bales etc in drainage lines.
- Material to block or bund drainage lines or spill area.
- Sawdust for soaking up organic liquids.
- Earthmoving equipment to move and load absorbed material.
- Tracked machines to travel on soft or uneven terrain.
- Wash-down equipment for site clean-up.

Traffic management may be required to ensure a safe clean-up operation.

Liaison with landowners, council, parks and wildlife, NRE etc may be required and are to be addressed on a case-by-case basis.

The organic medium used to soak up and stabilise spilled material should be chosen to have a low moisture content and high surface area to volume ratio. For example, pine bark or soft fall has been shown to be ineffective at stabilising liquids, whereas dry sawdust is much more suitable.

5. OBTAIN APPROPRIATE EQUIPMENT, PERSONNEL AND PPE

Depending on the situation, varying types of equipment may be required. For example, a vacuum truck may be required to remove excess liquid from an area. All required PPE, SWMS etc associated with this equipment and the activity should be sourced. A crane may be required to right overturned equipment and qualified operators, dogmen etc need to be used for this activity. A skid-steer loader may be required to collect spilled material and load into a replacement skip bin, and a washdown trailer (with water contained to a bunded area) may be required for a final clean-up.

6. CLEAN UP THE SPILL

Depending on the situation, this may be as simple as a Spectran employee shovelling a small amount of material into a garbage bag or could be a multi-entity effort utilising Traffic Management, Environmental Services, Transport and Equipment Contractors and Equipment. Spectran Management will need to ensure all works are undertaken safely and are covered by relevant Safe Work Procedures. The clean-up methodology may need to be approved by authorities before proceeding. Detailed records of the spill and clean-up activities should be kept, including taking notes and photos.

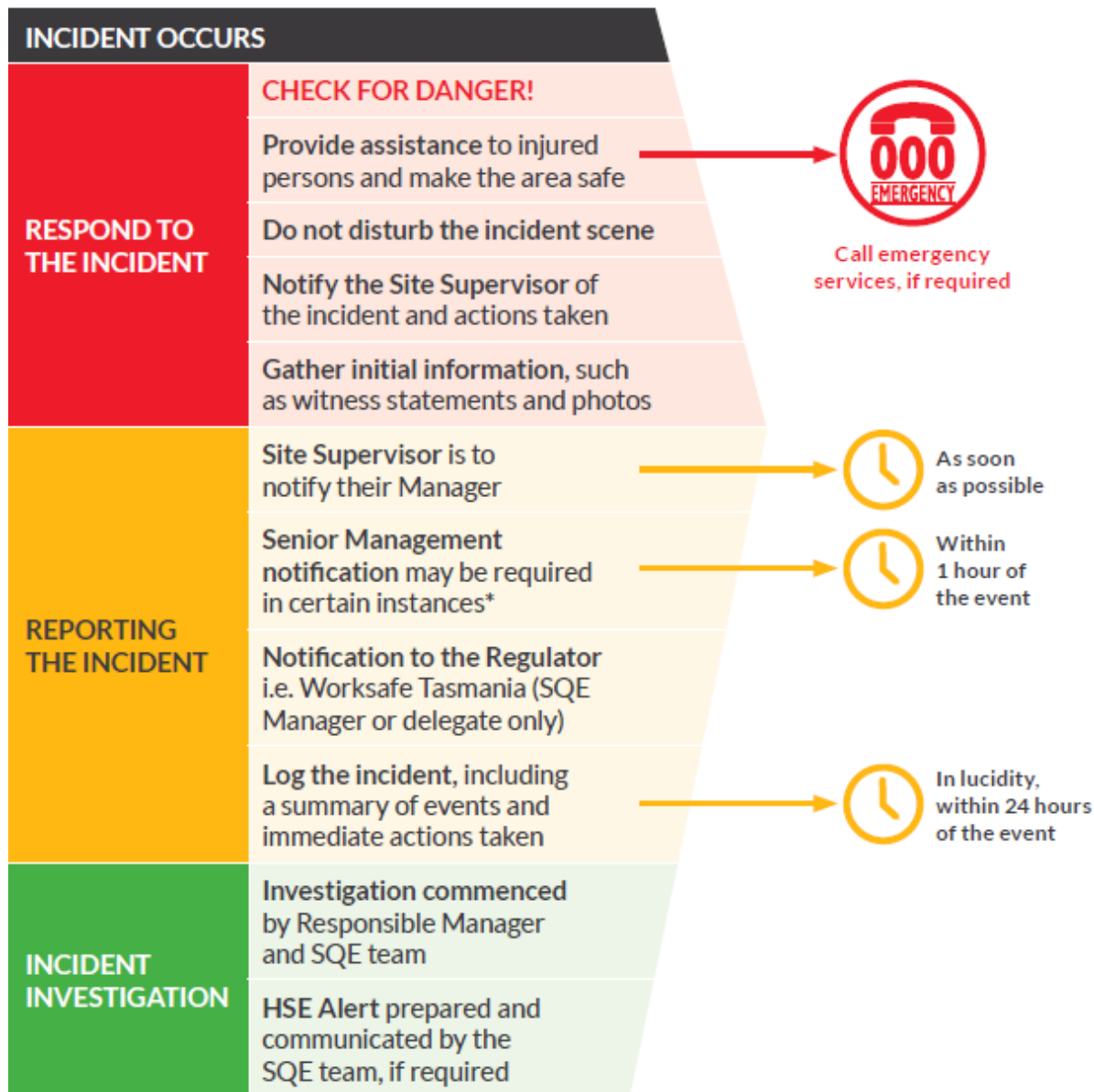
7. DISPOSE OF MATERIAL APPROPRIATELY

The material must be sent to an approved facility that is approved for the waste type. Depending on the situation, specific approvals and consent may be required to allow disposal of the cleaned-up material. Vehicles transporting cleaned-up material need to comply with all controlled waste transporter requirements.

8. REPORT THE INCIDENT AND REVIEW

Any spill event that results in environmental harm needs to be reported to the EPA. All spills should be logged in lucidity as an incident. The spill shall be reviewed through the same process as other incidents and corrective actions implemented.

INCIDENT RESPONSE PROCESS



*The following incidents are to be escalated to Senior Management and the SQE team:

- Any injury involving medical treatment, restricted duties or time off work
- Regulatory 'Notifiable Incidents'
- Any incident, regardless of severity, which did or could have involved contact with live services, dropped objects, environmental impact, mobile plant roll over, fall from height, or any other serious near miss

Where medical treatment is required offsite, the workers manager or delegate must accompany the injured person/s to the medical facility.



Figure 7: Incident Response Process

5.22 Handling of Complaints

All complaints are to be investigated immediately and recorded in Spectran's incident recording system. All investigations shall address the following questions at a minimum:

- What is the nature of the complaint?
 - Odour, noise, environmental, visual?
- What are the times and duration of the activity causing concern?
 - Is it a one off or has it been constant?
- Have there been environmental or weather conditions that may be contributing?
 - Hot/cold weather, wind direction, rainfall
- Are there any non-compliance events that may be contributing?
 - Have buffer zones been observed?
 - Are all biosolids delivered to site verified as Grade B?
 - Is stock being excluded from spread areas?
 - Are delivery vehicles being operated safely?
- Is the complaint potentially vexatious or are there vested interests at play?
- Has the complainant been consulted previously?
 - Do they understand the activity, the duration, location, management measures?
- Are others affected?
 - If so, what is their experience?
- What mitigation measures can be employed?
 - Cultivation of spread areas
 - Cease spreading in a particular area.
 - Dust suppression on access roads.
- What corrective actions were performed?
- Have the corrective actions been effective?
 - Is the original complainant satisfied with the outcomes?
 - Have internal inspections and audits indicated the situation is resolved?
- Do management methods need changing to prevent a recurrence?

5.23 Training

The person(s) responsible for this activity must ensure that all persons who are responsible for undertaking work in relation to this activity, including contractors and sub-contractors, are familiar with these requirements to the extent relevant to their work.

The training shall include as a minimum:

- Safe Operating Procedures for spreading equipment.
- Use of the Proof of Placement system.
- Familiarisation of property, boundaries, and access points.
- identification of key points of environmental value on site including matters of national environmental significance
- Detailing requirements of this environmental management plan and the individual's role in the plan.
- Detailing the conditions of the associated permit.
- Environmental incident emergency response procedures.
- Relevant legislation relating to the activity.
- The potential consequences of not meeting environmental responsibilities.

5.24 Landowner Consent

Landowners are to be provided a copy of this EMP and be briefed on the risks associated with this activity and their responsibilities. Focus is required with regards to Biosecurity and the potential for enforcement activities that may be taken against the landowner and the landowners activity from non-compliance to the Biosecurity Act and the General Biosecurity Duty. A signed document shall be retained that demonstrates that the landowner is aware of the risks and their responsibilities.

5.25 Record Keeping

The following records shall be kept as a minimum and supplied to the regulating authority upon request:

- Delivery records
 - Date
 - Volume
 - Product
 - Driver
 - Truck/Tanker ID
- Spread records
 - Date
 - Time
 - Spread Area
 - Product Type
 - Application rate
- Complaints and corrective actions
- Training records
 - The person receiving the training
 - The date the training was received
 - The name of the person conducting the training
 - A summary of the training

A training record template specific for this type of activity is shown on Page 29.

Spectran Group	Landspreading Operations		
4.23 Environmental Management Plan – Record of Training			
Operator Name		Operator Signature	
Trainer Name		Trainer Signature	
Training Date		Training Location	
Environmental Management Plan Title			
Applicable Property Name(s)			
Version of Management Plan			
Date of Management Plan			
Required Additional Training	On File	N/A	Trainer Comments
Waste Reuse – Environmental Responsibilities Training			
Tractor / Spreader VOC			
Excavator VOC			
Telehandler VOC			
SWMS RA035 Liquid Spreading			
SWMS RA035 Biosolids Spreading			
Tabula Work Instruction			
K100 / K130 Spill Response Procedure			
Other (specify)			
Topic Covered	Yes	N/A	Trainer Comments
Property boundaries			
Paddock ID names and paddock plan			
Intended spread areas			
Property access			
Site contacts			
Sensitive receptors			
Sensitive environments			
Buffer distances			
Unloading area management			
RAM management			
Application rates / travel speeds			
Emergency Response Procedure			
Permit conditions			



**SPECTRAN
Group**

North Tas

23 Merino Street,
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Headquarters

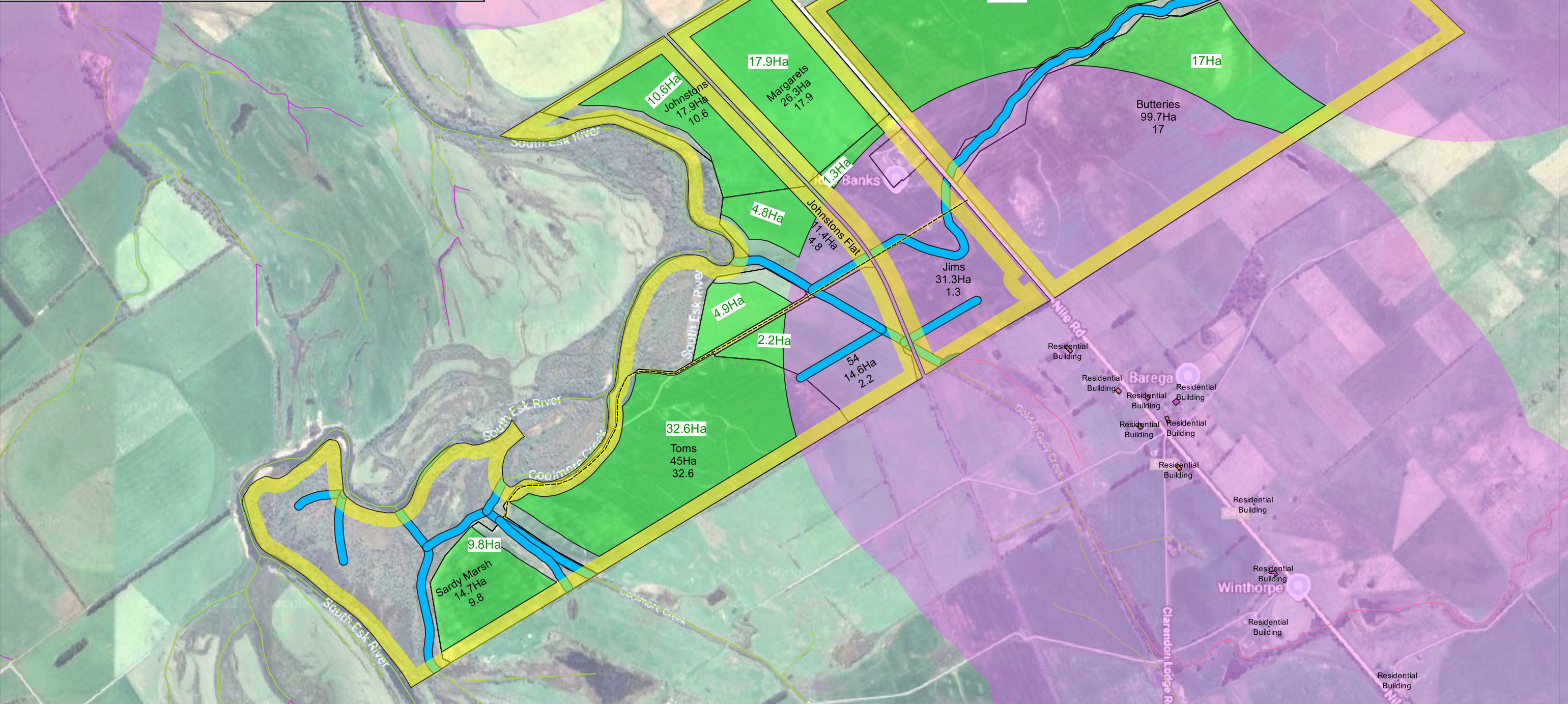
6 Birdwood Avenue,
Moonah TAS 7009

ReProcess Tas

42 Scotts Road,
Risdon Vale TAS 7016

spectrangroup.com.au

- Internal Road 5m Buffer
- Internal Roads
- Occupied Dwelling Buffers (100m internal, 1000m external)
- Occupied Dwellings
- Potential Spread Areas (Green Text)
- Property Boundary and Public Road 50m Buffer
- CFEV Buffers
 - Medium - 20m Buffer
 - High - 30m Buffer



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Date Printed: 10-12-2025
GDA94 / MGA zone 55
Data Source: Google Earth and
TheList



Exhibited


Received
17/12/2025

Building Footprints - TheList

 Residential Building

CFEV Buffers


☐ Integrated Conservation Value (ICV)

 Low - 10m buffer

Medium - 20m Buffer

 High - 30m Buffer

 Very High - 100m Buffer

 Dam 30m Buffers

 Dams

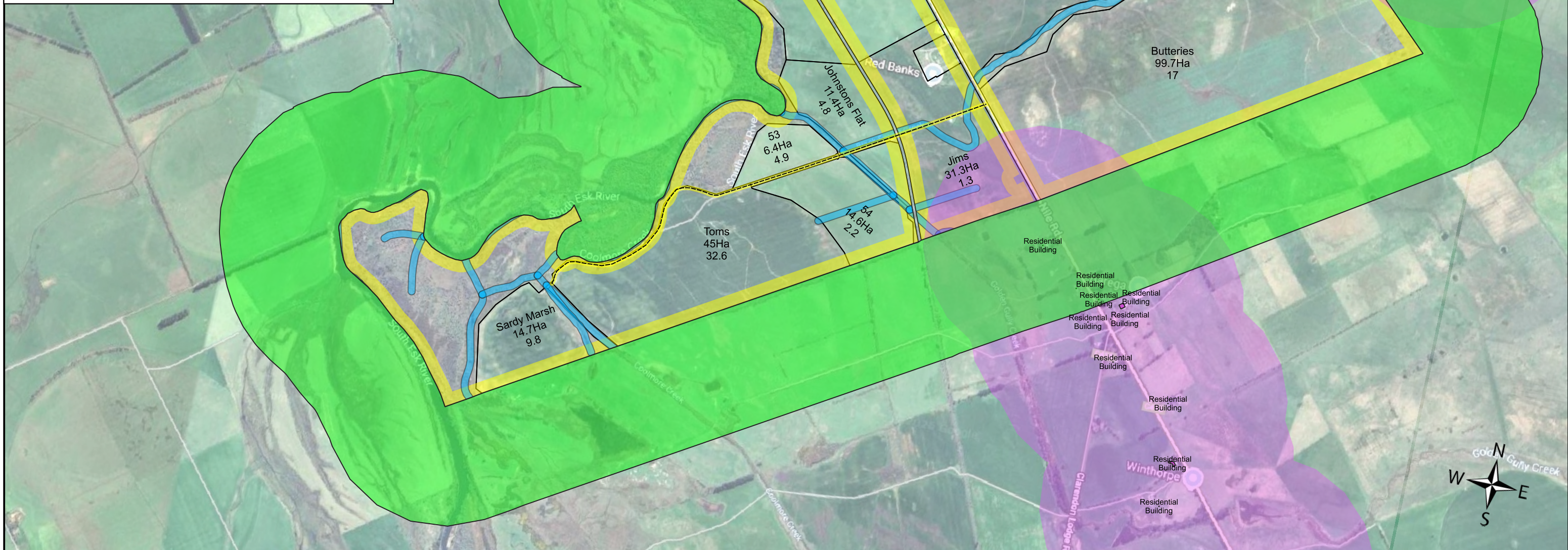
 Internal Road 10m Buffer

Property Boundary and Public Road 50m Buffer

 Property Boundary with 500m buffer

 Threatened Native Veg with 10m Buffer

Occupied Dwelling 500m Buffer



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Morrison - Redbanks - Landspreading Areas

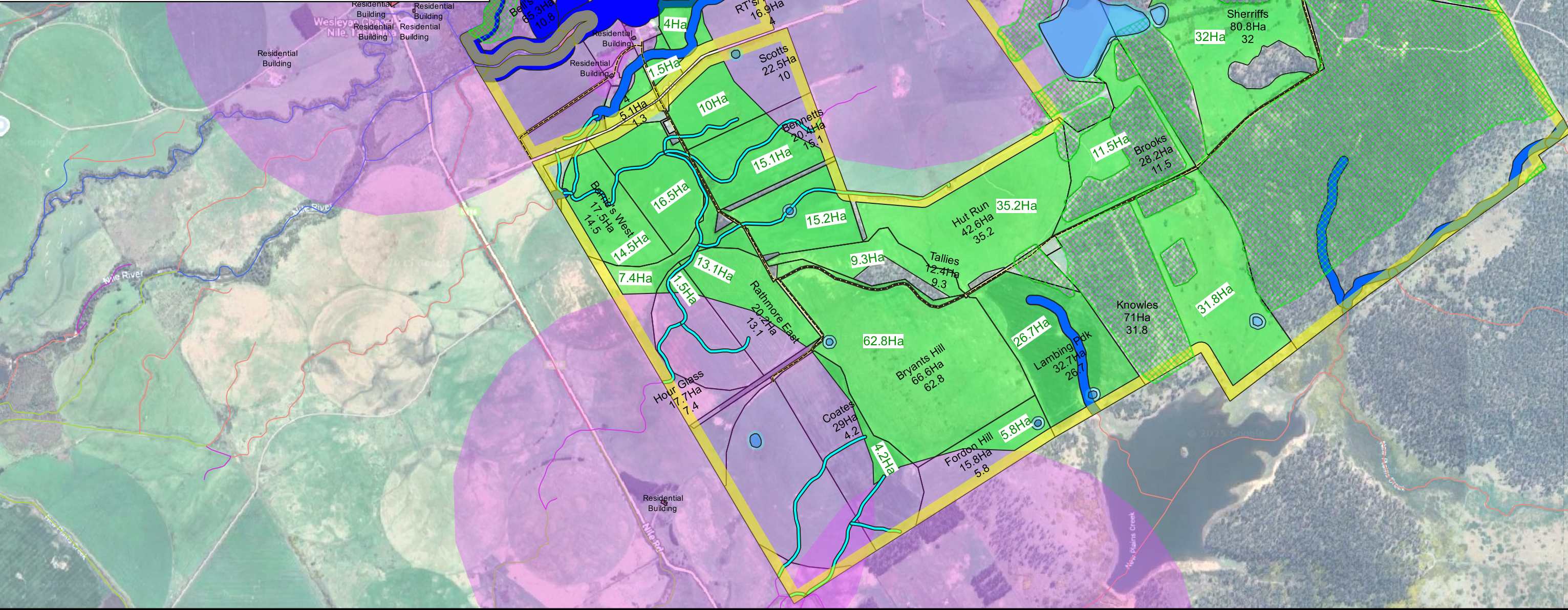
400 0 400 800 1,200 1,600 m

Scaled for printing in A3

Date Printed: 17-12-2025
GDA94 / MGA zone 55
Data Source: Google Earth and
TheList

11.12.2025

- Dam Buffers
 - Dams
 - Internal Road 5m Buffer
 - Internal Roads
 - Occupied Dwelling Buffers (100m internal, 1000m external)
 - Occupied Dwellings
 - Potential Spread Areas (Green Text)
 - Property Boundary and Public Road 50m Buffer
 - Threatened Native Vegetation Communities with 10m Buffer
- CFEV Buffers
- Low - 10m buffer
 - High - 30m Buffer
 - Very High - 100m Buffer



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Morrison - Camperdown - Landspreading Areas

500 0 500 1,000 1,500 2,000 m



Scaled for printing in A3

Date Printed: 10-12-2025
GDA94 / MGA zone 55

Data sources: TheLIST, Tas
Networks and Google Earth



Exhibited

Received
17/12/2025

Building Footprints - TheList

Residential Building

CFEV Buffers

Integrated Conservation Value (ICV)

Low - 10m buffer

Medium - 20m Buffer

High - 30m Buffer

Very High - 100m Buffer

Dam 30m Buffers

Dams

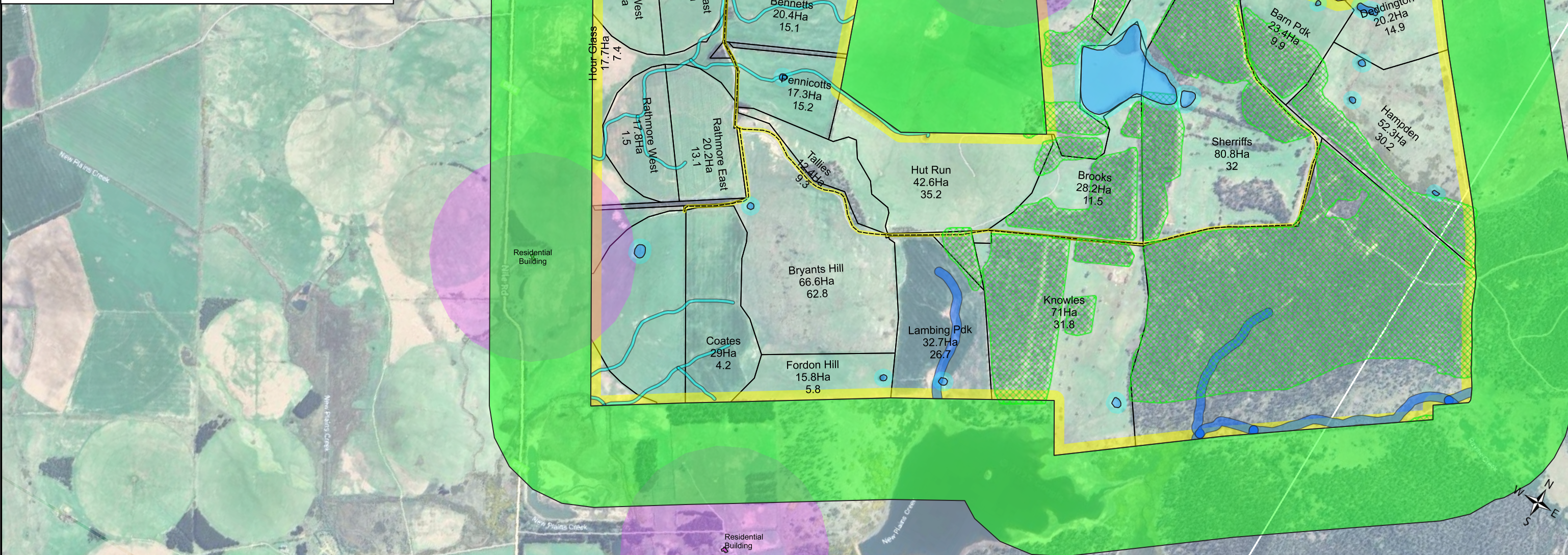
Internal Road 10m Buffer

Property Boundary and Public Road 50m Buffer

Property Boundary with 500m buffer

Threatened Native Veg with 10m Buffer

Occupied Dwelling 500m Buffer



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Morrison - Camperdown - Landspreading Areas

500 0 500 1,000 1,500 2,000 m

Scaled for printing in A3

Date Printed: 17-12-2025
GDA94 / MGA zone 55

Data sources: TheLIST, Tas
Networks and Google Earth