Wildlife Trade Operation Application

Management Plan for the Commercial Harvest and Export of Wallaby from Tasmania

Lenah Game Meats Pty. Ltd.
(in consultation with the Department of Primary Industries, Parks, Water and the Environment)

1. Introduction

This Plan puts forward a mechanism to enable export of wallaby products from Tasmania. It aims to satisfy the requirements for a small-scale, *Approved Wildlife Trade Operation* (WTO) under Section 303FN of the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), thereby allowing wallaby product taken under this Plan to be exported to overseas markets. For the purpose of this Plan

1) 'wallaby' refers to both *Macropus rufogriseus* (Bennetts wallaby) and *Thylogale billardierii* (rufus wallaby).
2) 'products' refers to meat, skins and fur (fibre removed from the skin).

Under the EPBC Act and its associated regulations, an operation is a small-scale operation if it has a low impact on the survival or conservation status of the species to which it relates. This operation can be considered small-scale because the number of specimens it allows to be exported represents only a small proportion of what could be considered a maximum sustainable yield from the Tasmanian wallaby population.

This WTO allows for the export of product from 200,000 wallaby annually. This is only approx 20% of the long term average cull in Tasmania. This long term cull appears to have had no impact on the population (see section 4). This WTO will replace that currently in-place and due to soon expire of a similar nature submitted by Monks enterprises, which is no longer operating. In addition it will invalidate the existing WTO operated by Lenah Game Meats.

Since 2004, the take of wallaby in Tasmania has averaged approximately 900,000-1,000,000 annually (WMB, unpublished data). This level of harvest has had no impact on wallaby populations (Figures 1 & 2) and has been shown to be sustainable in all management regions at this level. The proposed commercial harvest only represents approximately 20% of the total number of wallaby currently taken annually in Tasmania. This WTO simply seeks to divert this small percentage of the annual cull to a commercial harvest to be exported and thus it can be considered small scale. It must be noted that the expectation is not that the over-all State kill of wallaby will increase as a result of this WTO. Rather it is expected take will be diverted from crop protections culls to commercial harvest.

The WTO will apply for three years from approval or until approval of a state-wide wallaby management plan, whichever is sooner. Its intent is to facilitate a small scale export to trial the market potential and thus better inform the decision making process in establishment of any potential Management Plan.

The WTO's intent is not to increase the overall cull of wallaby and indeed it has in place mechanisms to prevent this. Wallaby are currently culled in very large numbers as agricultural damage mitigation. This Plan simply seeks to turn an existing waste of a raw material, which are often currently left to rot, into a valuable export and sustainable resource.

Wallaby are harvested and processed in Tasmania for human consumption and pet food under the control of the *Meat Hygiene Act 1985* and the *Nature Conservation Act 2002*. Meat processing premises and harvesters are registered and licensed by the Food Safety Branch (FSB) and Wildlife Management Branch (WMB) respectively of the Department of Primary Industries, Parks, Water and Environment (DPIPWE).

Wallaby are listed as partly protected wildlife under Schedule 4 of the *Wildlife Regulations 1999* of the *Nature Conservation Act 2002*. As such, they can be taken by licensed hunters during an open season and permits can be issued to allow them to be taken at any time for crop protection, or other approved purposes.

In assisting to develop this WTO, the DPIPWE acknowledges its responsibility in monitoring Tasmania's wallaby population through the undertaking of annual spotlight surveys (Section 5), and providing the resulting data to LGM for reporting to the Commonwealth as required under Section 10. The DPIPWE also acknowledges its responsibilities for ensuring activities undertaken under this WTO comply with the *Wildlife Regulations 1999* of the *Nature Conservation Act 2002* (Section 7) and the *Animal Welfare Act 1993* (Section 8). All other requirements outlined under this WTO remain the responsibility of LGM.

2. Aim of management plan

This WTO lays out a mechanism by which an auditable process can ensure that wallaby product from animals processed by LGM can be exported in a manner which satisfies the public and government requirements that they be taken humanely and sustainably.

3. Harvest details

3.1 Region of Harvest.

Wallaby occur widely throughout Tasmania and occupy most vegetation types with the exception of extensive areas of cleared land (Rounsevell *et al* 1991) and can be harvested from any region of mainland Tasmania, however due largely to its isolation and inaccessible terrain no harvest currently occurs in the South West.

The harvest will take place on private lands. In order for a licensed harvester to take wallaby from private land at night with the aid of a spotlight, the landowner must have a current crop protection permit issued by the DPIPWE. An example is given at Appendix 1.

3.2 Source of product.

All meat product for export will be sourced only from animals processed commercially for their meat in premises licensed by FSB or Dept Agriculture and Water Resources. Mechanisms to ensure the export will not threaten the abundance of the species across its existing range are laid out at Section 6.

3.3 Method of Harvest.

Animals will be taken only by harvesters holding a current Commercial Wallaby Hunters Licence. FSB requires that animals entering the commercial meat trade must be taken by accredited Game Meat Harvesters according to the *Animal Welfare Standard for the Hunting of Wallabies in Tasmania* (Appendix 2) and must be brain-shot. This is regulated by FSB

through regular audits of processing premises (quarterly) and harvesters (at least annually, often more regularly).

3.4 Harvest season.

The harvest will be undertaken throughout the year.

3.5 Size of the Harvest.

The total export of wallaby from Tasmania will be set at a maximum of 200,000. The average take of wallaby in the years 2002/03-2010/11 has been at least 652,367/year. It must be emphasised this is simply the average reported take, it includes years in which reporting was not mandatory. Thus it can be expected the actually average kill is higher than this. The proposed available commercial quota of 200,000/year is approxmently 20% of the current cull. It is not expected this take will be in addition to the existing cull, rather a diversion from the existing cull to a commercial harvest.

4. Impact on the harvested species

Wallaby have been commercially harvested and culled under damage mitigation permits for domestic purposes on mainland Tasmania at rates of 652,000 plus/year for a number of years (WMB pers. comm. 2011). These rates of harvest clearly have had no adverse impact on the viability of the Tasmanian wallaby population which has undergone no long-term decline over this period and particularly so over the past decade as demonstrated in Figure 1. Both species demonstrate a steady longer term upward trend in mean densities.

The WTO has in place mechanisms to ensure that if wallaby densities fall below very conservatively set trigger points, exports will cease. The trigger point mechanisms are laid out in Section 6.1. They are designed to ensure the trade facilitated by export does not contribute to a trade that will be detrimental to wallaby populations.

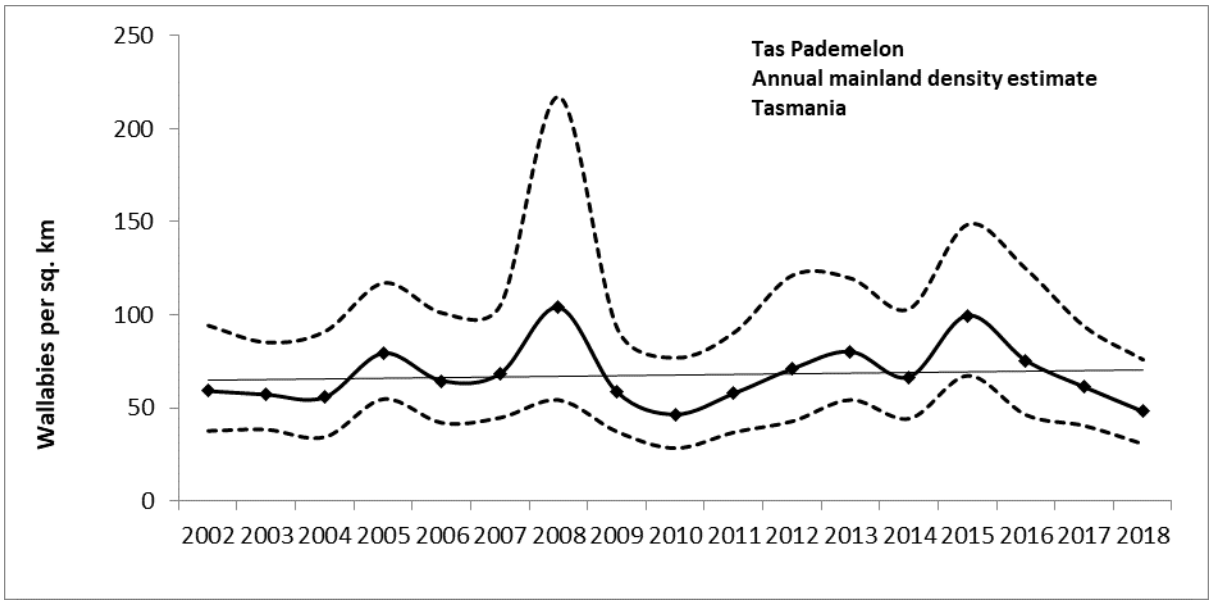

Figure 1: Population trends for Rufus wallabies (Pademelon) in Tasmania for the period 2002-2015. Solid line represents the mean count and dotted lines represent the standard error.

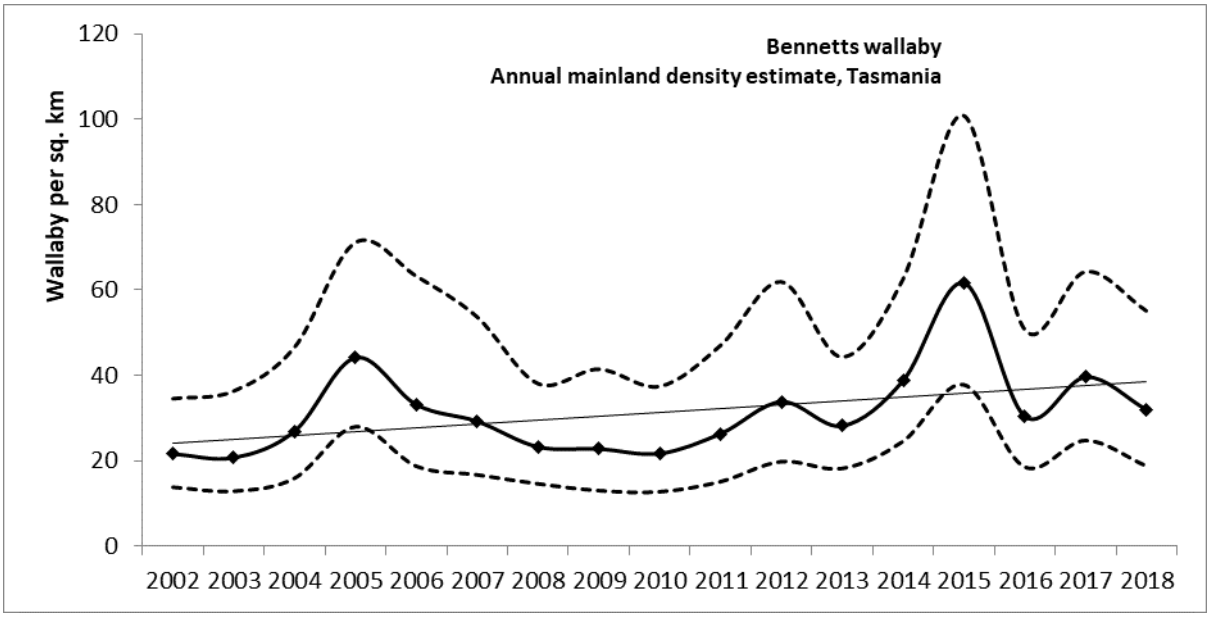

Figure 1: Population trends for Bennett wallabies in Tasmania for the period 2002-2015. Solid line represents the mean count and dotted lines represent the standard error.

5. Monitoring and assessment

5.1 Monitoring of Wallaby Populations.

Monitoring of trends in populations of wallaby in Tasmania is undertaken through a system of standardised spotlight survey counts performed annually by DPIPWE. The standardised surveys are carried out in accordance with the method set out in the *Tasmanian Spotlight Survey Manual* (Hocking and Driessen 1992; Appendix 4) and have been undertaken annually since 1975. The survey methodology was modified in 2002 to include line transect sampling in an effort to improve survey precision and assist in minimising observer variation and seasonal differences.

Line transect sampling involves an observer moving along a transect line; in this case the survey route, recording perpendicular distances to detected objects. Objects away from the line may often go undetected, but those on or near the line are assumed to be seen with certainty. The sample of detection distances allows a detection function to be modelled and the proportion of objects detected in a strip transect (= detection probability) to be estimated. An estimate of wallaby density in the vicinity of transect lines can then be calculated.

There are currently 173 standard 10 km spotlight survey routes in Tasmania. In order to allow for long term trends to be examined without bias from the introduction of new survey routes, only those 132 routes surveyed since 1985 are used in examining historical trends prior to 2002 (42 prior to 1985). Given the smaller sample size, results from estimates of historical data may not be directly comparable to the 2002 data onwards, however it does give a very good indication of trends in wallaby populations over time.

Data is collected and reported on a regional basis. Tasmania is divided into 5 regions, one of which is the far South West of the state in which no commercial harvesting currently takes place. The standard spotlight survey routes are surveyed in November-January each year. The survey year is determined by the timing of the first survey (e.g. for surveys undertaken in November 2007 and January 2008, the survey year would be 2007).

The results obtained by this method should be regarded as a repeatable *index* of population density rather than an estimate of total population size. Reviews of survey method, such as frequency of monitoring and monitoring protocols, may be conducted in the future.

Prior to the change in methodology, survey results were recorded as the average number of wallabies seen per 10 km transect. DPIPWE is aiming to shortly develop conversion factors that will allow density figures to be estimated for earlier years. DPIPWE has not converted the 1985 – 2001 survey data to a density index and all data in Figure 1 are recorded as the average number of wallabies seen per 10 km transect in order to enable comparison between years.

The results of the spotlight surveys will be used to assess changes in density of wallaby species and will be presented in the Annual Report to the Commonwealth (see section 10). The trends in density will be used to assess the impact of harvesting on wallaby populations against Trigger Point 1 and the annual report will recommend if exports are to continue.

As with all scientific data, these density figures contain an element of uncertainty. For this reason, these densities cannot be easily extrapolated into estimates of absolute population size. However, such estimates of absolute population size are not essential for the management of the commercial harvest under this WTO, as the total quota of exportable skins has been set at a figure well below what would normally be considered a sustainable take.

The long term trends in the data collected in these surveys as shown in Figure 1 indicate a stable long term population even in the face of the existing commercial harvest, recreational kill and damage mitigation cull. This population stability is particularly apparent over the past decade and even prior to that any variation could not be considered more than would occur due to normal population fluctuation in response to seasonal changes.

5.2 Monitoring the take.

5.2.1 Existing Controls.

Under the Meat Hygiene Act, licensed wallaby meat processors in Tasmania can only purchase wallaby from harvesters licensed by the Wildlife Management Branch (WMB). All wallaby meat processors in Tasmania are required by DPIPWE to report to FSB, on the number of wallaby they process.

All skin and meat exports must be accompanied by permits issued by the Australian Government Department of the Environment and Energy (DEE).

5.2.2 Verification.

Table 1 charts the extensive licensing, reporting and verification controls in the supply chain.

Supply Verification Chart			
Supply Link	**Permits Required**	**Reporting Required**	**Verification available**
Private property	Crop Protection Permit		
Licensed harvesters	WMB Commercial Wallaby licence	Monthly return to WMB	
	FSB accreditation		annual reassessment against Welfare Code
Licensed meat premises	FSB licence	returns to FSB	} }

	WMB Skin Dealers License.	monthly returns to WMB	} collate } to } ensure all
Lenah Game Meats	WMB Skin Dealers License.	monthly returns to WMB Monthly royalty payments to WMB annual report on Trigger Points (monitoring results) due by end of April	} data } matches
Export	DEE permit	DEE export permit acquittals	

Table 1: Supply chain controls for the export of wallaby from Tasmania

*5.2.2.1***:** *Verification of source of product***.**
Licensed dealers are required by WMB to report monthly who they sell their product to and in what numbers. An example of the reporting form is at Appendix 3. WMB will also require LGM to provide monthly reports detailing the source and numbers of wallaby purchased.

Wallaby exports out of Tasmania require the issuing of an export permit from the WMB which verifies that they were obtained from appropriately licensed sources and royalties paid.

FSB audits licensed premises to ensure all wallabies supplied are sourced only from accredited harvesters.

*5.2.2.2***:** *Verification of numbers exported***.**
All exports are accompanied by permits issued by DEE detailing the product in each consignment. Total exports can be cross checked against numbers reported to WMB as purchased by LGM and retained for trading.

6. Management Strategies

Mechanisms for trigger points to regulate exports will be in place to ensure this is a sustainable trade. It needs to be noted that these trigger points are highly conservative in terms of any effect on the population they reflect. In addition they initiate a complete stop to regional collection for export, not simply a slowing of the level of collection. They ensure that any export activity will not of itself impose a threat to wallaby populations.

6.1 Trigger Points.

6.1.1 Trigger Point One (TP1).

Wallaby populations in Tasmania have been monitored since 1985 (refer to Appendix 4 for a description of the monitoring method). During the latter part of this period, the population has been relatively stable. In recent years a density index with a standard error has been derived for each of the four regions in which wallaby are commercially harvested. Note that wallaby are also monitored in the South West but no commercial harvesting takes place in this region due to its isolation.

Trigger points for each region and each species, based on the density index supplied by WMB, have been set and will be fixed for the life of this WTO should it be approved (see Table 2). Trigger points are set at 40% below the average density index for the years 2014-18 for each

region. WMB will supply annual density index figures to LGM by end of the March following the survey year.

Region	2014	2015	2016	2017	2018	Av	Trigger point (40% below average)
Central	42.5	45.7	10.54	25.5	20.0	28.85	17.31
Flinders Island	83.7	45.4	121.5	120.0	64.6	87.04	52.22
King Island	13.4	18.9	8.2	10.0	12.4	12.58	7.55
Northeast	109.3	119.1	78.9	53.7	60.0	84.2	50.52
Northwest	121.8	157.2	180.0	117.9	80.2	131.42	78.85
Southeast	37.2	76.7	33.1	48.1	32.5	45.52	27.31

Table 2: Density Index Figures for Rufus Wallabies

Region	2014	2015	2016	2017	2018	Av	Trigger point (33% below average)
Central	78.2	56.5	29.6	51.7	46.9	52.52	31.55
Flinders Island	40.7	65.8	241.3	220.0	191.3	182.18	109.3
King Island	167.3	111.7	87.0	68.6	77.0	122.78	73.67
Northeast	39.8	42.6	33.1	21.9	32.0	33.95	20.37
Northwest	25.3	38.8	39.1	46.7	26.9	35.36	21.22
Southeast	41.0	n/a	19.8	38.2	22.1	30.27	18.16

Table 2: Density Index Figures for Bennet Wallabies

A reduction in density in any region to a density below the trigger point will trigger a stop to harvest for export of that specie in that region for the remainder of that year, effective from 30 April. The export of wallaby from those regions where the density index exceeds the trigger point will still be permitted. Export from the other regions (those not closed) can only occur if LGM has procedures in place that will ensure that the wallaby specie harvested from the closed region will not be exported. LGM must include an outline of these procedures in its annual report (Section 10).

Exports from a closed region can only recommence following completion of the next year's survey and then only if the results of that survey show a density index that exceeds the trigger point for the species concerned.

Below shows a worked example of how this would apply:

In 2018 the density in the Central region for bennetts wallaby was 46.9. The long run average shown above is 52.58. The trigger point for this region is 31.55. The density index is above the trigger point listed in Table 2, the trigger point is not exceeded and exports can continue.

These trigger point densities still reflect an abundant species.

6.1.2 Trigger Point Two (TP2).

7. LGM will monitor the total number of wallaby they process. If this number reaches 200,000, LGM will immediately notify DEWHA and no further animals will be harvested for export for the balance of that year. This can be cross checked by WMB from the monthly reports of wallaby processed submitted by LGM.

8. Compliance

Wallaby management in Tasmania is administered by the WMB, under the *Nature Conservation Act 2002* and the *Wildlife Regulations 1999*. Under Schedule 4 of the *Wildlife Regulations 1999*, wallabies are classified as Partly Protected Wildlife throughout Tasmania. As such, they may be taken under the authority of a permit issued under Regulation 13 of the *Wildlife Regulations 1999* on properties where they are causing crop damage. Permits may specify conditions with which the holder of the permit must comply.

In order for commercial harvesting of wallabies to be carried out, the commercial shooter must hold a Commercial Wallaby Hunting Licence, which allows the harvesting of wallabies for commercial purposes on lands used for primary production.

Commercial wallaby hunters are permitted to sell wallaby carcasses only to licensed meat processors or their agents.

Permits are required from both DPIPWE and DEE to export any wallaby product. These permits are issued only when the WMB is satisfied that the wallaby products were legally taken, processed and royalties paid.

WMB has a team of six full-time compliance officers whose responsibility is the enforcement of the *Nature Conservation Act 2002* and regulations as well as associated legislation such as the *Animal Welfare Act 1993.*

8. Animal Welfare

The prevention of cruelty to animals, including wallabies, and the promotion of animal welfare are provided for by the *Animal Welfare Act 1993*. Section 8 of this Act makes it an offence to inflict unreasonable or unjustifiable pain or suffering to an animal.

The *Animal Welfare Act 1993* also provides for the development of Animal Welfare Standards. An *Animal Welfare Standard for the Hunting of Wallabies in Tasmania* has been developed and approved under section 44 of the *Animal Welfare Act 1993*. A copy of the welfare standard is shown in Appendix 2. This standard defines what is considered current best practice in the hunting of wallabies under Tasmanian conditions. In addition FSB require

all animals entering the commercial trade to be brain shot. This is audited regularly at both the processing premises and harvest sites.

It is a condition of a Commercial Wallaby Hunting licence issued by WMB that wallabies are taken in accordance with the requirements of the *Animal Welfare Standard for the Hunting of Wallabies in Tasmania*. An example of a Commercial Wallaby Hunting Licence is shown in Appendix 1.

The use of supplied for meat processing.

All shotguns and/or dogs is not permitted by DPIPWE in harvesting animals to be

holders of Commercial Wallaby Hunting licences must be appropriately trained and accredited. Persons harvesting for meat must be accredited in accordance with the provisions of the *Meat Hygiene Act 1986* and the Australian Standard for the Hygienic Production of Game Meat for Human Consumption. All accreditation will include training in the requirements of the *Animal Welfare Standard for the Hunting of Wallabies in Tasmania* and other relevant permit conditions, as well as a field-based assessment of competence in shooting. Shooting assessments are done in the field by a Certified Auditor. Accredited shooters within the game meat industry are reassessed at yearly intervals by the FSB as part of the auditing of Licensed Game Meat Premises. This reassessment includes their ability to adhere to the *Animal Welfare Standard for the Hunting of Wallabies in Tasmania.*

All meat processing premises are audited on a regular basis (usually quarterly) by FSB. Part of this audit procedure is to ensure compliance with the animal welfare standards.

The extent of compliance with the requirements of the *Animal Welfare Standard for the Hunting of Wallabies in Tasmania* and permit conditions relating to shooting requirements is determined through annual in field audits of all harvesters and is currently at or near 100% (Neville Price FSB pers. comm.).

Any meat processor or harvester found to be in breach of these controls will suffer disciplinary action, including potential loss of licence as regulated by DPIPWE, thus eliminating them as a potential skin supplier under this WTO.

8.1 Non-target considerations.

The argument is often raised in objection to kangaroo harvesting that removing dominant males and females upsets the social balance within a mob of kangaroos, thus having detrimental welfare effects on non-target animals. This WTO makes no comment on the validity of this criticism; it merely notes that wallabies are less gregarious than the larger macropod species. Social relationships within groups of wallaby are highly unstable, the only enduring relationship being between a female and her unweaned progeny (Calaby 1983; Johnson & Rose, 1995, Morton, S.R. and Burton, T.C. 1973). Studies of movement indicate that individuals are relatively sedentary, occupying small home ranges that overlap broadly with other individuals (Catt 1977; Mooney & Johnson 1979). This indicates that harvesting will have minimal impact on any social structures within a wallaby population.

In addition, the identification of wallabies in the field is well covered in the accreditation process for commercial shooters; hence the likelihood of harvesters shooting non-target species (e.g. forester kangaroos) is extremely low.

Key controls:

All harvesters are re-assessed under actual field operating conditions every year to ensure compliance with the Code.

All meat processors are audited regularly and assessment of compliance with the Animal Welfare Standard is part of the audit procedure.

9. Over-ride Provision:

This WTO shall be invalidated in the case of DEWHA approving a Wildlife Trade Management Plan under section 303FO of the EPBC Act submitted by DPIPWE covering wallaby in Tasmania as a whole.

10. Reports

Following the collation and analysis of survey data by WMB by the end of March, LGM will submit to DEWHA by 30 April, an annual report on the following:

- The wallaby density index reported by WMB for the previous year with its position against TP1; and
- Total number of wallaby exported for the previous calendar year
- Total number of wallaby harvested for the previous calendar year.

This report will detail if, given assessments against the trigger points, wallaby harvested in the current year will be eligible for export. If any of the regional density indices have fallen below their respective trigger points then, as set out in subsection 6.1.1, LGM will ensure that exports do not occur from animals harvested in that region. LGM should outline the procedures it has put in place to ensure that skins harvested from the closed region will not be exported.

11. Summary

This WTO:

- Acknowledges that some 900,000-1,000,000 wallaby are currently culled in Tasmania every year and much of the product is wasted.
- Acknowledges that this level of harvest has occurred for an extended time and appears to have no effect on populations.
- Proposes that the product from up to 200,000 wallaby per fiscal year be exportable.
- Puts in place mechanisms to stop exports if wallaby densities decline below conservative levels or if wallaby processed by LGM reach 200,000 wallaby per calendar year.
- Documents the extensive licensing, reporting and monitoring controls in place to ensure compliance and establish an auditable supply chain.

This WTO is non-detrimental to the Tasmanian wallaby population since it simply puts in place a mechanism to enable a small percentage of an existing sustainable cull to be exported rather than wasted.

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