



Minister for Planning

Ref: BMIN007174
File: 10/005477-01

Cr Glen Milne
Mayor
Mildura Rural City Council
PO Box 105
MILDURA VIC 3502

Dear Cr Milne *Glen,*

MILDURA PLANNING SCHEME AMENDMENT C65

I am writing to advise your council that I have decided to prepare Amendment C65 to the Mildura Planning Scheme and to exercise the power under section 20(4) of the *Planning and Environment Act 1987* to exempt myself from notice and adopt and approve the amendment.

The amendment will implement the recommendations of the Mildura Planning Taskforce Final Report, December 2009. It applies to all land zoned Farming Zone within the Rural City of Mildura and provides transitional arrangements for a limited number of landowners. I have attached a copy of the report for your information. I would like to thank you and your staff for your involvement in the Taskforce processes.

Specifically the amendment will control the use and development of land in the Farming Zone, which is within a gazetted irrigation district in the Rural City of Mildura through the revised incorporated document; *Mildura Older Irrigation Area Incorporated Document, February 2010*.

The Mildura older irrigation area (MOIA) presents a unique range of circumstances that require quite targeted responses and planning controls. These controls need to provide clear and consistent outcomes for the farming enterprises in the MOIA which have proven to be resilient, innovative and adaptive in the current challenging circumstances.

I have approved the amendment as it is one of State and regional significance. It will provide a mechanism to protect irrigated horticulture in the Rural City of Mildura, facilitate growth and the expansion of horticultural businesses and help ensure land values reflect the horticultural value of the land. This is consistent with State planning policy and is in the public interest.

I would encourage you to continue the work commenced with the Regional Urban Development program which is a partnership between Council and the Department which will identify urban land supply and demand in Mildura.

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The management of urban settlement patterns should be addressed in a strategic manner and a sound evidence base will assist in developing a housing strategy for the Shire. I believe that no further transitional arrangements should take place until a comprehensive housing strategy is completed.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Justin Madden', written over the typed name below.

JUSTIN MADDEN MLC
Minister for Planning

Encl.



MILDURA PLANNING TASKFORCE

Final Report

December 2009

Table of Contents

1.0	EXECUTIVE SUMMARY	5
1.1	Message from the Chair	5
1.2	Mildura Planning Taskforce	5
1.3	Terms of reference	6
1.4	Process	7
1.5	Background to this report	7
1.6	MRCC preferred option over C58	9
1.7	Conclusion	12
1.8	Recommendations to the Minister for Planning	15
2.0	OVERVIEW OF RURAL CITY OF MILDURA	21
2.1	Location	21
2.2	Climate	21
2.3	Population	22
2.4	Urban settlement	22
	2.4.1 Residential growth	23
	2.4.2 Rural residential development	24
2.5	Utility infrastructure	24
	2.5.1 Urban infrastructure	24
	2.5.2 Irrigation infrastructure	24
2.6	Economy	25
2.7	Key industry sectors	27
2.8	Production landscape	31
	2.8.1 Mildura older irrigated area (MOIA)	32
	2.8.2 New irrigated area [NIA]	34
	2.8.3 Dryland farming (grains)	36
	2.8.4 Soil in the Mildura region	36
	2.9 Drought impact	37
2.10	Water availability and trade	38
2.11	Business size	39
2.12	Farm performance	40
2.13	Off-farm income / part-time farming	43
2.14	Small block irrigator exit grants	43
3.0	RURAL LAND USE ISSUES	44
3.1	Rural living	44
3.2	Distribution and characteristics of lots with dwellings	45
3.3	Data comparison 2007-2009	46
3.4	Planning and building approvals	48
3.5	Impact on urban growth	49
3.6	Land values and rate revenue	50
4.0	DRIVERS OF RURAL LAND USE CHANGE	51
4.1	Primary drivers	51
	4.1.1 Water	51
	4.1.2 Commodities and competition	52
	4.1.3 Infrastructure	53
	4.1.4 Business size	53
	4.1.5 Climate change	54

4.2	Other drivers	54
4.2.1	Alternative energy	54
4.2.2	Biodiversity	54
4.2.3	Biosecurity	55
4.2.4	Land as an asset	55
4.2.5	Land use conflicts	55
4.2.6	Manufacturing	56
4.2.7	People and community	56
4.2.8	Transport	56
5.0	RURAL LAND USE IN MILDURA – CONCLUSION	57
5.1	Value of agriculture in the municipality	57
5.2	Continuity of horticulture	57
5.3	Family farms.....	58
5.4	Farm size in the MOIA.....	58
5.5	The fate of small farms in MOIA.....	59
5.6	Catering for the demand for rural living	59
5.7	Irrigation infrastructure	59
6.0	REFERENCES	60
7.0	APPENDIX	62
7.1	Mildura Planning Taskforce Terms of Reference	62
7.2	Mildura Rural City Council – Preferred position	65
	Maps	

1.0 Executive Summary

1.1 Message from the Chair

Agriculture, particularly horticulture and the associated manufacturing, packaging and processing of local produce, underpins the Mildura economy despite the prevailing conditions of drought, low water allocation and commodity price fluctuations. It is vital that land used for irrigated horticulture is protected from further fragmentation and land-use conflicts in order to maintain and support the continued economic prosperity of the municipality.

The taskforce considers that the future for land within the Farming Zone in the Rural City of Mildura lies in the continuation of agriculture. In particular, agriculture in the Mildura older irrigation area (MOIA) and in the new irrigation area (NIA) will continue to be based on irrigated horticulture and will remain a significant area of horticultural production within Victoria.

The MOIA represents a unique range of circumstances that requires quite targeted responses and planning controls. These controls need to provide clear and consistent outcomes for farming enterprises in the MOIA which have proven to be resilient, innovative and adaptive in the current challenging circumstances.

1.2 Mildura Planning Taskforce

The Mildura Planning Taskforce consists of representatives from the Department of Planning and Community Development, Regional Development Victoria, Department of Primary Industries, Department of Sustainability and Environment, Mallee Catchment Management Authority, Lower Murray Water and Mildura Rural City Council and is chaired by Independent Chair Mr Duncan Malcolm.

The taskforce was established by the Minister for Planning in August 2009 following the introduction of Planning Scheme Amendment C58 to the Mildura Planning Scheme in May 2009. The minister prepared this amendment under section 20(4) of the *Planning and Environment Act 1987* to implement the MOIA rural strategy (RMCG 2008).

The amendment was introduced to address the considerable pressure from potential new dwellings and land fragmentation from small lot subdivisions in the MOIA. The implementation of the then current planning controls had the potential to undermine the state importance of the MOIA for horticultural production.

1.3 Terms of reference

The purpose of the taskforce is to identify the longer term strategic future of land used for irrigated horticultural in the Rural City of Mildura, including the MOIA (the older pump districts of Mildura, Merbein and Red Cliffs) and the NIA (private diverters in Nangiloc, Colignan, Lake Cullulleraine and Lindsay Point). This includes resolving issues associated with the established pattern of land subdivision in relation to irrigated horticulture, in light of the MOIA rural strategy (RMCG 2008) and related Amendment C58 to the Mildura Planning Scheme.

The work of the taskforce will address the following key land use and associated issues.

Farming and related agricultural and rural land uses

- Look in greater detail at the operation of the existing Farming Zone, existing and proposed patterns of farm operation and production, thresholds for farm operations and the implications of the fragmentation of parcels of land on soil/land capability.
- Assess the existing irrigation infrastructure and the proposed irrigation infrastructure over the next 10, 20 and 30 years, the Commonwealth purchases of water licences and associated spatial impacts.

Urban settlement

Examine existing and proposed residential and urban uses, and preferred urban settlement patterns having regard to the State Planning Policy Framework (SPPF) and Ministerial Direction No.6, and consideration of urban settlement and sustainable urban form. This work will be incorporated into the broader Murray River settlement project, which is under way and linked to statutory and inter-state obligations.

Social issues

Assess the farm population demographic profile, adjustment in the horticultural sector (including work undertaken by Mallee Catchment Management Authority on drought impacts), and the social and cultural dynamics of the existing Mildura farming community. Consider the implications of rural and urban land use in this context.

Economic Issues

Assess the direct economic implications of existing and proposed agricultural and rural land uses in the horticultural sector.

1.4 Process

Since the taskforce was established in August 2009, it has held monthly meetings and formed a panel to interview 25 members of the community who had written to the Minister for Planning with concerns about the introduction of Amendment C58.

In forming its final recommendations the taskforce has been guided by the five land use planning principles established by the Future Farms Rural Planning Group in the *Interim Findings and Future Directions Report (2009)*. The five principles are as follows:

1. Promote evidence-based rural and regional planning to support decision making.
2. Maintain, protect and enhance natural assets.
3. Facilitate and plan for rural agricultural adjustment.
4. Respond to the relationship between climate change risks and rural community safety.
5. Ensure adequate infrastructure to support agricultural investment.

1.5 Background to this report

In November 2005 Mildura Rural City Council (MRCC) adopted the Mildura Rural Areas Strategy (MRAS) following discussions with the (now) Department of Planning and Community Development about the correct interpretation of the new rural zones with respect to the MOIA.

In December 2005 council requested authorisation for Planning Scheme Amendment C30. Amendment C30 would revise the Local Planning Policy Framework and would have introduced the Farming Zone in response to recommendations of the MRAS, however it would make no changes to the scheduled 10-hectare minimum for subdivision or dwellings for the MOIA.

Between January and June 2006 council prepared two further reports; the Economic Sustainability Study (ESS) (with Wentworth Shire Council in New South Wales) for the Sunraysia horticultural areas, and the Horticultural Sustainability Planning Options report (HSPO). Among the recommendations of the EES was a planning scheme amendment to enable the excision of dwellings from lots with a minimum size of at least four hectares. Accordingly, council requested the Minister for Planning consider such an amendment.

In July 2006 the Minister for Planning advised that the HSPO and EES did not provide a sufficient strategic basis for the proposed amendment and provided an alternative approach, which included the following three actions:

- direct translation of the new Farming Zone via, Ministerial amendment 20(4)
- authorisation for MRCC to exhibit Amendment C30 (local policy only)
- commencement of a study by MRCC (with financial assistance from Department of Primary Industries [DPI]) to investigate options for the MOIA.

In August 2006 council agreed to this approach and received authorisation for Amendment C30 to be exhibited. Then in September 2006 Amendment C37 was introduced to the Mildura Planning Scheme comprising a direct translation of all land from the Rural Zone into the Farming Zone.

The exhibition period for Amendment C30 was completed in February 2007, but, due to the commencement of the study to investigate options for the MOIA in 2007, was not forwarded to the Minister for Planning for approval until July 2008.

A steering committee comprising representatives of council, DPCD and DPI was established to oversee the study. Consultants RMCG and Parsons Brinckerhoff were engaged to undertake the study.

In April 2008, council received the final report of the MOIA rural strategy (RMCG), which presented a number of options for the MOIA. The strategy recommended Option B for adoption. Option B included the following recommendations for land-use:

- only lots between 4000 m² and 1 hectare have an entitlement to apply for a permit for a dwelling
- all existing dwellings can be excised regardless of lot size
- no further subdivision via a boundary realignment.

However, at this meeting council passed an alternative motion to commence a further study: The Mildura older irrigation area: study into land values, (SGS 2008). This study concluded:

option B will provide superior regional economic returns than reversion to the [then] current Mildura Planning Scheme.

This report was adopted by council in October 2008 and was provided to the Minister for Planning in consideration of Amendment C30.

In May 2009 the Minister for Planning refused Amendment C30 and introduced Amendment C58 to the Mildura Planning Scheme under section 20(4) of the *Planning and Environment Act 1987* to implement the MOIA rural strategy (RMCG 2008). The amendment prohibited all new dwellings and any further subdivision of land within the MOIA, with the exception of excisions of existing dwellings from lots with an area of four hectares or greater subject to specific requirements.

1.6 MRCC preferred option over C58

Following the introduction of Amendment C58 council commissioned planning consultant Mr John Keaney in June 2009 to investigate and to facilitate confirmation of council's preferred way forward. At the ordinary council meeting on the 27 August 2009 council adopted the following recommendations in relation to council's preferred option over C58:

1. council adopts the briefing paper *MOIA Study and Amendment C58 August 2009 (refer appendix)*.
2. council responds to the letter from the Minister for Planning of 28 May 2009 by advising of its preferred option.

The briefing paper *MOIA Study and Amendment C58 August 2009* adopted the following land use principles in support of the proposed modifications to Amendment C58.

a) Local traditions and expectations

- Farming families will live on the land in the family home.
- Farming families will pass on the land and the family home to family members.
- Farming families will retire on the land in the family home.
- Farm consolidation is assisted if land is priced at its agricultural value rather than being distorted by its housing value.
- Local and regional financiers confirm that the existence of a dwelling permit is a significant factor in the value of the land.

b) Boundary re-alignments

- Boundary realignments should not be permitted as they typically generate rural residential sized lots which are not encouraged and which are adequately catered for by the excision and dwelling entitlements.
- Boundary realignments could only be considered if farm expansion is the outcome.

- There is agreement that there is no point in creating further new vacant house lots.
- There is agreement not to take account of very small and unusable lots (channel reserves; old roads etc.) in house entitlement considerations.

c) Excisions

- Excisions must deliver a better agricultural outcome on at least one of the new lots.
- Excisions must not create a house entitlement where none presently exists.
- So as to limit excision potential in the future, excisions should only be from dwellings that existed on the approval date of Amendment C58 (29 May 2009).
- There is support for the lowering of the excision size from the previous 10 ha.
- So as to limit the excision potential in the future, excisions should only be allowed once off any lot.

d) Dwellings

- There is a need for flexibility to apply for permits at the 'small lot' end.
- There is also a need for greater flexibility to apply for permits at the 'larger lot' end.
- There is agreement that in between these two ranges, houses will be prohibited.

e) Rural hamlets

- There is a pressing need to provide some rural living opportunities around the rural hamlets such as Cardross, Koorlong and Cabarita.
- There is support for increased dwelling potential around smaller villages.

In acknowledgement of the above issues, and in recognition of the existing settlement pattern in the MOIA, council's preferred option was forwarded to the Minister for Planning for consideration. The Minister for Planning has referred the preferred option to the taskforce for comment. The preferred option includes:

Subdivision: excision and boundary realignments

- Every lot of at least 1 hectare that has an existing dwelling is entitled to apply to excise that dwelling.
- Boundary realignments are prohibited other than to transfer or consolidate farming land.

Dwellings

- Every lot between 3000 m² and 1.2 ha has an entitlement to apply for a permit for a dwelling.
- Every lot of at least 10 ha (including those that were achieved via consolidation of adjoining lots unencumbered by a Section 173 Agreement ensuring no further dwellings will be constructed), has an entitlement to apply for a dwelling permit.
- Lots between 1.2 ha and 10 ha have no entitlement to a dwelling.

Council considers that this preferred option strikes a reasonable balance between limiting the potential for dwellings in the MOIA and encouraging expansion of horticulture in the region, by breaking the nexus between the dwelling and the land. The option also provides a mechanism to allow farming families to exit with dignity, as well as providing opportunities to facilitate farm restructure.

If council had continued to approve permits for all dwelling applications in the MOIA it is estimated that there was the potential for an additional 3076 dwellings and 1076 excisions. The preferred option put forward by council would reduce this to potentially 587 additional dwellings on lots less than 2 hectares, although up to 2215 excisions could be achieved in the MOIA as contemplated by the MOIA rural strategy (RMCG 2008).

1.7 Conclusion

The taskforce believes that maintaining and supporting horticulture is vital for the continued economic prosperity of the municipality. This approach supports the key strategic elements, the long term vision and strategic objectives established by the MOIA rural strategy (RMCG 2008) as follows.

Strategic elements

- Horticulture underpins the economy of the Rural City of Mildura growing products for national consumption and export.
- Horticulture also underpins local manufacturing, transport and processing and provides significant employment.
- Horticulture and the horticultural landscape is a significant element in the identity, image and liveability of the Rural City of Mildura.
- There is a significant level of existing rural residential development within the horticultural areas of the MOIA.

MOIA vision

- Seeks to protect the land for horticulture.
- Accommodates growth in planned estates around existing towns and hamlets.
- Acknowledges the existing rural residential development.
- Contributes to the ongoing economic prosperity and quality lifestyle of Mildura.

Strategic objectives

- Protect and enhance the horticultural values of the area.
 - Provide for the growth and expansion of existing horticultural businesses or the introduction of new horticultural activities.
 - Provide for a diversity of horticultural businesses.
 - Protect the viability of the irrigation network by encouraging and supporting a vibrant horticultural industry.
 - Protect existing horticultural operations from urban encroachment and rural lifestyle development.
-

- Have regard to the 2030 growth boundary and discourage fragmentation of land for future potential residential development.
- Have regard to the existing rural residential development.
- Protect the amenity of the area afforded by horticulture.
- Provide for horticultural-based tourism.

Business types

The MOIA rural strategy (RMCG 2008) also developed the following planning objectives in relation to the horticulture industry and the current and future characteristics of business types within the MOIA.

Table 1: Land use planning objectives by business type

Business type	Land use planning objective
Growing businesses – large-scale, full-time businesses looking to grow and consolidate their operations in the MOIA.	To protect the land for horticulture and to create a planning environment that will facilitate future growth with minimal non-horticultural constraints.
Transition businesses – medium-scale, full-time businesses including some looking to grow and consolidate their operations in the MOIA and others seeking to exit the industry.	To protect the land for horticulture, and create a planning environment that will facilitate growth or transfer of the business into the growing businesses group with minimal non-horticultural constraints.
Small businesses – small, niche or part-time businesses, including farming for lifestyle and businesses growing specialty products. Many in this group will not be looking to grow or expand the business.	To protect the land for horticulture and maintain land in land parcels in appropriate locations to facilitate future urban development.

Source: MOIA rural strategy (RMCG 2008) p.vii

The MOIA rural strategy (RMCG 2008) recognised that land types in the MOIA are suited to a range of horticultural products that are dependent on access to irrigation water. The future of the irrigation network, particularly modernisation and upgrade will be dependent on the presence of horticultural businesses. The planning system should protect opportunities for horticultural business by:

- maintaining land in parcels with productive and management potential
- minimising land lost to building development
- separating existing houses from productive land
- minimising inflation of land values above the productive value of the land.

The taskforce supports council's preferred option as one that supports the current and future characteristics of business types in the MOIA and protects opportunities for growing, transitional or small businesses.

Rural living

The MOIA rural strategy (RMCG 2008) acknowledged that the legacy of the subdivision and settlement pattern of the MOIA is a significant level of ad hoc rural living. Rural living in this form is contrary to the vision of the MOIA and the planning system, particularly the purpose of the Farming Zone.

The taskforce agrees that further development of this type should be minimised and rural living opportunities should be provided in planned estates around rural hamlets and towns. It is recognised though that some land in the MOIA, although zoned for agriculture purposes, is and will be used for rural living.

1.8 Recommendations to the Minister for Planning

The Mildura Planning Taskforce concludes that council's preferred option is generally consistent with the vision and land use planning outcomes for the long term future as established by the MOIA rural strategy (RMCG 2008).

Key directions for rural land use across the Mildura area – delivering the vision

The current and planned future for the MOIA within the broader Mildura and Victoria-wide context is for the land to be retained for agriculture. This position is supported by the taskforce members and reaffirms the future of the MOIA as a significant horticultural area. Agriculture, and particularly horticulture and the manufacturing, packaging and processing of local produce, underpins the economy of Mildura.

Consistent application of policy is required

While council has strategies and policies to provide a clear and strong position on land use and development, it has been established that these have not been applied consistently across the region.

The longer term sustainability of the region depends on a range of statutory and non-statutory mechanisms to assist in maintaining irrigated horticulture which will allow for industry restructure where and when required.

Land use planning outcomes to be achieved:

- Land is used primarily for agriculture.
- Land is valued at its agricultural value.
- Land is unencumbered by unwanted infrastructure.
- Farms are reconfigured and increased in scale to capture the benefits of a modernised and reconfigured irrigation system.
- Land is retained in parcels of a size suitable for farm business expansion.
- Further escalation of right-to-farm issues is minimised.
- Those wishing to exit horticulture are enabled to do so, recognising that the farm business is also the home, but this should not occur at the expense of horticulture.
- The continuation of ad hoc rural lifestyle development is prevented.

Key recommendations of the taskforce

1. That the Farming Zone is the most appropriate zone for the MOIA and NIA, and that the primary purpose of these areas is to provide for the use of land for agriculture.
2. That the long term vision and strategic objectives referred to at 1.7 be supported and re-affirmed and that they be given effect by revising the incorporated document 'Mildura Older Irrigation Area Incorporated Document' at clause 52.03 of the Mildura Planning Scheme.
3. That the preferred option of council is supported with modifications or conditions (refer 3.1–3.7 of these recommendations) to ensure the land use planning outcomes identified in the MOIA rural strategy (RMCG 2008) are achieved. These are to be given effect by revising the incorporated document 'Mildura Older Irrigation Area Incorporated Document' at clause 52.03 of the Mildura Planning Scheme as follows.

3.1 Subdivision: excision

Proposed: every lot of at least 1 ha that has a dwelling is entitled to apply to excise that dwelling.

Condition

- The dwelling must have existed on the 29 May 2009.*
- The lot created for an existing dwelling must have a minimum area of 0.4 ha and a maximum area of 1.0 ha.*
- A legal agreement must be entered into between MRCC, the landowner and others as required, to ensure that the newly created lots
 - cannot be further subdivided
 - cannot be further developed for a dwelling, unless the balance of the lot is at least 10 ha.Any variation to this agreement requires approval from both MRCC and the Minister for Planning.*
- Dwellings must be set back 5 metres from any new boundaries (not including outbuildings) to minimise amenity and environmental impacts to or from adjoining agricultural land.*
- The dwelling to be excised must be a class 1A dwelling as defined under the current Building Code of Australia.*

Outcome: the total number of excisions could create an additional 2215 lots (but with no potential for further subdivision) which is consistent with the MOIA rural strategy (RMCG 2008). This provides an exit strategy for farmers who can remain in their home and encourages farm expansion by allowing the balance of the lot to be sold at an agricultural land value that is not distorted by a dwelling potential.

3.2 Subdivision: boundary realignments

Proposed: boundary re-alignments are prohibited other than to transfer or consolidate farming land (may include an existing dwelling).

Condition

- i. The subdivision is the re-subdivision of existing lots and the number of lots is not increased.*
- ii. The lots must be adjoining, including via a vinculum.*
- iii. Conditions 3.1 i to v to apply.*

Outcome: to encourage and allow adjoining farmers, who legitimately wish to trade land, to expand or contract their farms.

3.3 Dwellings: 3000 m² to 1.2 ha

Proposed: every lot between 3000 m² and 1.2 ha has an entitlement to apply for a permit for a dwelling.

Condition

- i. The lot must have existed at the date of gazettal of this amendment.*
- ii. A sunset clause is included so that applications for a permit for a dwelling can only be made up until 31 December 2012.*
- iii. Conditions 3.1 iv to apply.*

Outcome: the total potential new dwelling applications based on this option are 482. This will also provide a limited supply of rural residential land until the completion of a housing strategy, including the identification of opportunities to rezone land around hamlets for rural residential purposes.

3.4 Dwellings: lots of at least 10 ha

Proposed: every 'individual' lot of at least 10 ha that existed on 29 May 2009 has an entitlement to apply for a dwelling permit.

Condition

Condition 3.1 iv to apply.

Outcome: the total potential new dwelling applications based on this option are 105. This will provide opportunities for new farming enterprises to commence.

3.5 Dwellings: other lots of at least 10 ha

Proposed: every lot of at least 10 ha (including those that were achieved via consolidation of adjoining lots) that is unencumbered by a Section 173 Agreement ensuring no further dwellings will be constructed, has an entitlement to apply for a dwelling permit.

Condition

Conditions 3.1 iii, iv and v to apply.

Outcome: the total number of potential new dwelling applications based on this option is unclear. This option will encourage farm consolidation beyond a size that the MOIA rural strategy (RMCG 2008) indicated can support horticultural activity (with off-farm income).

3.6 Dwellings: lots of at least 20 ha

Proposed: Lots of at least 20 ha do not require a planning permit for the use of the land for a dwelling.

Outcome: the numbers of dwellings are unclear, but it is likely to be minimal as the total number of vacant lots from 10–40 ha is 105. This option is consistent with the MOIA rural strategy (RMCG 2008) which found that the minimum size required for a family horticultural business (without off farm income) is estimated to be above 20 ha.

3.7 Dwellings: between 1.2 ha and 10 ha

Proposed: lots between 1.2 ha and 10 ha have no entitlement to a dwelling.

Outcome: this is by far the largest pool of undeveloped lots in MOIA (approximately 1400). The removal of an entitlement to a dwelling from this category will assist the MOIA vision of expanded horticulture by removing any dwelling potential from the value of the land.

4. That the Minister for Planning prepare an amendment to the Mildura Planning Scheme under section 20(4) of the *Planning and Environment Act 1987* to implement (3) of the recommendations. Such an amendment is subject to complying with the criteria for an amendment under 20(4) of the Act, including consultation.
 5. That the Department of Planning and Community Development no longer be required to act as a referral authority under section 55 of the *Planning and Environment Act 1987* and that this requirement is removed from the revised incorporated document 'Mildura Older Irrigation Area Incorporated Document'.
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6. That an application requirement is included in the revised 'Mildura Older Irrigation Incorporated Document' requiring that in the event that potentially contaminated land is to be used for a sensitive use, including residential, the responsible authority must be satisfied that the environmental conditions of the land are or will be suitable for that use.
 7. That disused channel reserves, other small utility lots and lots created via a vinculum (except adjoining or abutting lots) within the MOIA and NIA not be used for the purposes of a dwelling or for calculating dwelling entitlements and that this principle be given effect by revising the incorporated document 'Mildura Older Irrigation Area Incorporated Document' at clause 52.03 of the Mildura Planning Scheme.
 8. That MRCC, undertake as part of the current review of the Mildura Planning Scheme the following.
 - a. Review and update as required the Local Planning Policy Framework including: the vision and strategic objectives for agriculture in the MOIA, the review of the local planning policy at clause 22.06 and the inclusion of relevant reference documents.
 - b. Identify and correct zoning anomalies or inconsistencies in the Farming Zone within the MOIA, particularly in the area between Mildura and Irymple which has been subjected to an historic ad hoc subdivision and rezoning regime.
 - c. Investigate with the Department of Sustainability and Environment and other key stakeholders, appropriate planning tools such as a restructure overlay to enact the principle that disused channel reserves and small utility lots not be used for the purpose of a dwelling.
 - d. Investigate and provide recommendations to determine appropriate future land use options for land within the Farming Zone that forms an abuttal with the Murray River and associated floodplain and wetlands.
 - e. Council prepare a check list to assist in determining whether a dwelling is a class 1A building as defined under the current Building Code of Australia.
 9. That MRCC, commence the preparation of a housing strategy, with support from DPCD, to guide future housing and settlement needs for the municipality beyond 2030, including:
 - the consideration of rural residential opportunities around existing hamlets
 - a review of the extent and performance of the Rural Conservation Zone and Low Density Residential Zone in the municipality
-

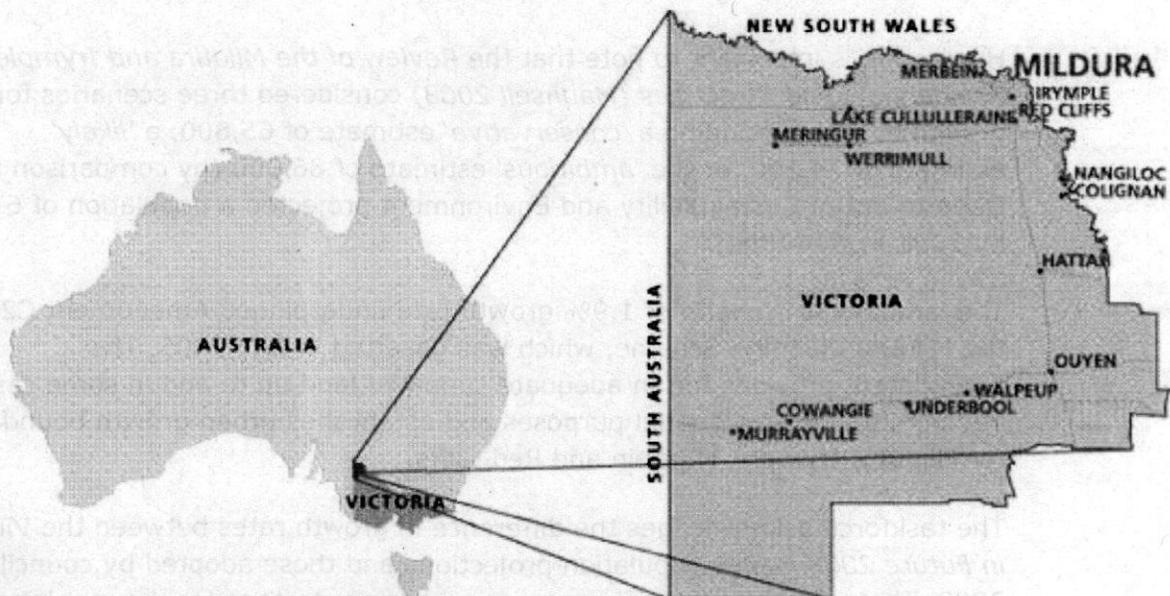
- a review of all previous residential land use strategies as required.
10. That MRCC, undertake as part of future strategic work, a study for the NIA to determine appropriate future land use options for this area including the consideration of appropriate land use planning outcomes for subdivision and dwellings. Until this strategic work is completed it is recommended that the schedule to the Farming Zone for the NIA is retained in accordance with Amendment C58.

2.0 Overview of Rural City of Mildura

2.1 Location

The municipality is situated in Victoria's north-west on the Murray River, which forms the border with New South Wales. The municipality covers around 2.208 million hectares or 10% of the state's area, 56% of the municipality is private land almost all of which is used for agriculture that includes grain farms and intensive horticulture. By area, around 98% of private land is used for grain farms and 2% for intensive irrigated horticulture. The remaining area is public land used for biodiversity conservation and recreation (Sunraysia Environmental 2005).

Figure 1: Location of Rural City of Mildura



Source: Mildura Rural City Council (website)

2.2 Climate

The municipality is located within the Mallee; the hottest and driest area in Victoria, owing to its inland location, with an average rainfall of approximately 292 mm/yr. Temperatures in summer are generally very hot, the average maxima in January and February are around 32 °C. In the winter, maximum temperatures average 16 °C but minima average 4 °C and frosts are common.

2.3 Population

The Rural City of Mildura has grown significantly from previous census periods dating back to the 1980s, from 38,344 in 1981 to 53,122 in 2008. The population growth rate in 2007-08 was 1.1% (AEC 2009). The *Victoria in Future 2008 Mallee* population projections estimates that there will be an additional 2,172 residents by 2026. At the same time, the population of Wentworth Shire Council which is situated across the river from Mildura has remained relatively constant and in 2008 totalled 7,159 (AEC 2009).

Table 2: Population projections: Mildura Rural City Council-2006 to 2061

LGA	2006	2011	2016	2021	2026
Mildura Rural City Council	51,824	53,351	54,135	54,820	55,523

Source: Department of Planning and Community Development: *Victoria in Future 2008: Mallee*

However it is important to note that the *Review of the Mildura and Irymple Residential Land Strategies (Maunsell 2003)* considered three scenarios for growth by 2031 including a 'conservative' estimate of 65,800, a 'likely' estimate of 74,300, or the 'ambitious' estimate of 86,000 (by comparison the Department of Sustainability and Environment projected a population of 67,056 by 2031 at that time).

The 'ambitious' scenario of 1.9% growth rate underpinned Amendment C28 to the Mildura Planning Scheme, which was gazetted in July 2005. The amendment provides for an adequate supply of land up to and in some cases beyond 2030 for residential purposes and establishes urban growth boundaries for Mildura, Irymple, Merbein and Red Cliffs.

The taskforce acknowledges the difference in growth rates between the *Victoria in Future 2008 Mallee* population projections and those adopted by council in 2003. The recommendation to prepare a housing strategy for the municipality will require an update and review of the actual growth rates achieved since the introduction of Amendment C28.

2.4 Urban settlement

The municipality includes Mildura city as well as a number of other communities within close proximity to the city including Irymple, Red Cliffs and Merbein. There are also a number of hamlets in close proximity to Mildura, Red Cliffs or Merbein including Birdwoodton/Cabarita, Cardross, Koorlong and Nichols Point.

In addition the NIA has a number of small communities including Nangiloc and Colignan to the east of Mildura and Cullulleraine, Meringur and Werrimull to the west. Further inland in the dryland farming areas are the communities of Ouyen, Underbool, Walpeup, Patchewollock, Murrayville and Cowangie.

Table 3: Population of towns and hamlets in the MOIA and NIA

Towns	Mildura Older Irrigation Areas		New Irrigation Areas		
	Population	Hamlets	Population	Hamlets	Population
Mildura	28,743	Birdwoodton*	971	Nangiloc	400
Irymple	5,740	Cardross	739	Colignan	204
Red Cliffs	2,736	Koorlong	957	Cullulleraine	100#
Merbein	1,974	Nichols Point	837		

Source: ABS Census 2006. # Cullulleraine Structure Plan MRCC (2006): * includes Cabarita

2.4.1 Residential growth

The *Review of the Mildura and Irymple Residential Land Strategies (Maunsell 2003)* was implemented via Planning Scheme Amendment C28 in July 2005. In that review, the three main development fronts for Mildura to the year 2030 have been clearly defined, along with residential growth boundaries.

The growth boundaries in Mildura, Mildura South and Irymple were established based on an 'ambitious' scenario or growth rate of 1.9% which would allow up to 420 dwellings per year at a rate of approximately 40 ha per year. It was anticipated that approximately 85% of these new dwellings would be constructed in the existing and expanded urban areas of Mildura, Mildura South and Irymple. Merbein, Red Cliffs and Ouyen are considered to have an adequate supply of zoned land to cater for residential growth in the medium-to-long term.

The NSW Department of Planning has released for public comment the draft Murray Regional Strategy which states that the Lower Murray subregion, including Wentworth Shire Council is projected to have a small decline in population over the period to 2036 with demand for around 400 new dwellings as household sizes fall and different types of housing are needed.

In 2006 the total number of occupied private dwellings was 18482 in the Rural City of Mildura and 2466 in the Wentworth Shire Council (AEC 2009).

2.4.2 Rural residential development

The *Mildura City Council Rural Residential Review (Maunsell 2003)*, presents the basis for council's strategy for rural residential development around Mildura. Council supports rural residential development as a part of the settlement strategy of the Mildura area. In this municipality rural residential development is considered to be dwellings on lots of less than 2 ha. This study concluded that it is reasonable to expect and plan for a demand of fifty rural residential lots per year.

In addition to fulfilling the development potential of existing rural living areas at Merbein, Lake Hawthorn, Linden Close/Cowra Ave, Flora Ave, Kings Billabong, Koorlong and Red Cliffs, the strategy recommended that an additional 29.2 ha should be rezoned at Lake Hawthorn (Mildura Feedlots) and 63.1 ha at Nichols Point to provide for at least the next ten years demand for rural residential development. Amendment C28 which was gazetted in July 2005 implemented the recommendations of this study.

Since 2005 there have been a number of applications for subdivision granted in Nichols Point and Riverside Avenue but construction of these subdivisions has yet to commence.

2.5 Utility infrastructure

2.5.1 Urban infrastructure

The Mildura region has suitable existing utility infrastructure to support continued population and business growth into the future. Furthermore, extensive planning and analysis is currently being undertaken by many authorities to ensure that the provision of utility infrastructure keeps pace with development. For example in Nichols Point a grinder pump sewerage system is being developed to cater for the land in the Low Density Residential Zone.

Lower Murray Water (LMW) provides various urban and rural water and waste water services and stormwater and septic wastewater systems are provided by council.

2.5.2 Irrigation infrastructure

At the meeting of COAG on 3 July 2008, the Commonwealth Government agreed in principle to contribute \$103 million for the Sunraysia Modernisation Project (SMP), subject to due diligence. The SMP is an irrigation infrastructure upgrade program that will modernise the irrigation supply infrastructure in the Merbein, Mildura and Red Cliffs irrigation districts to provide a year-round supply to irrigators. Lower Murray Water has recently submitted its business case to the federal government as part of the due diligence process.

The SMP will deliver better quality water for irrigation and domestic and stock customers. The SMP involves the comprehensive upgrading or replacement of the major components of the pumping and delivery systems under a three-stage development plan. The quality of water and reliability of supply will be substantially enhanced.

2.6 Economy

The Mildura region (including Wentworth Shire Council in New South Wales) has a \$2.8 billion economy that has shown positive growth over recent years. Significant agricultural and horticultural sectors generate economic activity in other sectors such as manufacturing, wholesale trade, transport and storage (AEC 2009).

A number of studies since 2005 have detailed the total value of agricultural commodity production in the municipality. The MOIA rural strategy (RMCG 2008) stated:

the MOIA is significant for its contribution to the liveability and amenity of Mildura. Agriculture, and in particular horticulture and the associated manufacturing, packaging and processing of local produce, underpins the economy of Mildura and is an important contributor to the state and national economies. In 2001 the total value of agricultural commodities produced in the Mildura Rural City was \$526 million and \$197 million of this figure was produced in the MOIA.

The Future Farms Rural Planning Group has collated data for the value of agricultural commodity production for Victoria including the Rural City of Mildura which is detailed in Table 4 below. The local government areas (LGA) include Mildura Part A and Part B. Part A includes the MOIA and Part B includes the NIA and dryland farming areas of the municipality.

Table 4: Value of agricultural commodity production (VACP)

LGA	2001	2002	2003	2004	2005	2006	2007	2008
Mildura (RC) Part A*	197	200	134	175	150	179	129	168
Mildura (RC) Part B*	329	329	220	287	247	291	209	273
Total (\$ million)	526	529	354	463	397	470	338	441

Source: DPCD 2009 regional policy unit. * ABS statistical local area

The value of agricultural commodity production between 2001 and 2008 has declined by 16.2%; this reflects the impact of prolonged drought, low water allocations and the decline of commodity prices, particularly in the wine grape sector.

The Mildura Region Economic Profile (AEC 2009) provides the following information on the Mildura region for industry, business and employment sectors.

Top 5 industry sectors in the municipality in terms of gross regional product in 2007-8

- **Agriculture, forestry and fishing* (\$345 million)** *Note: forestry and fisheries are negligible in MRCC.
- **Manufacturing (\$229 million)**
- **Property and business services (\$175 million)**
- **Retail trade (\$143 million)**
- **Wholesale trade (\$137 million)**

Top 5 business sectors in the municipality by industry

- **Agriculture, forestry and fishing (1,641 business, 30.7% of total business)**
- **Property and business services (762 businesses, 14.3% of total business)**
- **Construction (648 businesses, 12.1% of total business)**
- **Cultural and recreational services (528 businesses, 9.9% of total business)**
- **Retail trade (492 businesses, 9.2% of total business)**

Top 5 key employment sectors in the Mildura region (including Wentworth)

- **Retail trade (3975 employees, 16.2% of total employment)**
- **Agriculture, forestry and fishing (3718 employees, 15.1% of total employment)**
- **Manufacturing (2651 employees, 10.8% of total employment)**
- **Health and community services (2453 employees, 10% of total employment)**
- **Education (1865 employees, 7.6% of total employment).**

The Mildura region's lead position in agriculture and food manufacturing is clear, with approximately 3-5% more employment in agriculture and a striking 43 % more employment in food manufacturing than the state averages (AEC 2009).

The taskforce has identified that there are variations in economic data for determining the value of agriculture to the municipality due to the methods of collating data.

- The MREP states that the value of the gross regional product for the municipality for agriculture, forestry and fisheries in 2007-08 was \$345 million.
- The value of agricultural commodity production identified in Table 4 was \$338 million in 2007 and \$441 million in 2008.

These variations are considered reasonable and clearly demonstrate that agriculture is the main contributor driving the economy of the municipality.

2.7 Key industry sectors

The Mildura region (including the LGA's of Mildura and Wentworth) has been a major agricultural and horticultural centre since the 1880's. This continues today as agriculture, horticulture and fruit and vegetable processing continue to grow and significantly contribute to the economy and character of this region.

The Mildura Region Economic Profile (AEC 2009) identifies the key industry sectors as agriculture, manufacturing, transport, logistics and warehousing, mining and other emerging industries. The profile provides the following information on each sector:

Agriculture: agriculture is the dominant industry in the municipality with around 30.7% of businesses falling within the agriculture, forestry and fishing sector. Agriculture is also the biggest employer with 15% of employment directly in the agriculture, forestry and fishing sector. This does not include the additional employment associated with manufacturing, food processing and the agricultural services

Agricultural production in the Mildura region includes wine and wine grapes, table grapes, dried grapes, citrus crops, vegetables, olives and olive oil, nut crops, livestock (sheep), honey, wheat, barley and canola.

The municipality is part of the Murray Darling region which extends from the South Australian border to just past Swan Hill and includes the MOIA, NIA, Robinvale, Balranald, Swan Hill and Koondrook. The Murray Darling region produces 15% of Australia's red wine grape crush and 25% of Australia's white wine grape crush.

The region produces a significant amount of Australia's fruit, vegetables and nuts, including 98% of all dried fruit, 24% of all citrus (Mildura and Wentworth LGA's) and 74% of table grapes (Mildura and Robinvale).

While not as significant as other crops, the Mildura region produces a large amount of vegetables every year, many of which go to domestic consumption including lettuces and several varieties of melon

The Mildura region is a nationally significant nut growing region. The olive and olive oil industry has expanded significantly in recent years with the main production areas situated around Robinvale and Boundary Bend.

Manufacturing: the Mildura region has been actively diversifying and developing additional value to its core strengths through numerous manufacturing sectors. This activity in advanced manufacturing has brought significant value to the region. Manufacturing accounts for 2.6% of businesses by sector with 10.8% of employment directly related to manufacturing. Manufacturing includes food and beverage, wine, fruit and vegetable processing, dried grapes, machinery and equipment and natural tartaric acid which are mainly agricultural related activities.

The Murray Darling region boasts nearly 40 wine producers, ranging from boutique to large scale wineries. They have the capacity to crush between 5 and 120,000 tonnes of wine grapes each annually. The region has the capacity to produce over 400,000 tonnes of wine grapes per annum which accounts for approximately 20% of the national crush from more than 40 different varieties. The mainstream varieties are Chardonnay, Shiraz, Cabernet Sauvignon and Merlot with alternative and emerging varieties planted and increasing each year including Pinot Grigio, Pinot Noir and Tempranillo.

One of the largest wineries in the Mildura region is the Lindemans Karadoc facility which was established in 1973. The site includes wine production, packaging and a national distribution centre for domestic wine; as well as a popular cellar door. Lindemans Karadoc is one of the top three employers in the Sunraysia region with around 250 permanent employees plus casual contractors during vintage and peak production periods.

With an abundance of fruit and vegetable production, value-adding processing is a well established industry in the Mildura region. Carrot juice is a major export for the Mildura region which is a key ingredient into many Japanese dishes and other Asian cuisines. As agricultural production continues to grow, the fruit and vegetable processing sector is likely to grow as well.

Mildura is home to Australia's largest orange packer and exporter, Mildura Fruit Company (MFC). MFC markets a full range of citrus fruits around the world and sources quality citrus from approximately 130 citrus growers along the Murray and Darling Rivers including the Mildura region.

With 98% (or 17,000 tonnes) of Australia's dried grapes produced in the Mildura region it is not surprising that the region is home to Sunbeam, Australia's largest dried fruit company. Sunbeam, which also includes the Angas Park brand, services the export, retail and food services markets. Sunbeam employs 160 staff within Sunraysia and produces over 20,000 tonnes of dried grapes and dried tree fruit annually.

An additional sector that has tremendous synergies with the food industry is Mildura's machinery and equipment manufacturing sector, which provides a range of specialised equipment for these operations. Having numerous companies nearby that share so many synergies becomes an incentive for additional companies to move to the area.

Transport, logistics and warehousing: the Mildura region is strategically located at the junction of Victoria, New South Wales and South Australia. It is linked nationally and to the rest of the world through major road, rail and air infrastructure.

With the expansion of agricultural production and the manufacture of all kinds of, so does the transportation and distribution industry and networks that take these products to market. Currently, it is estimated that 2431 people work in this field.

There are over 237 transport and storage companies in the Mildura region, some of the largest transport operators are Pickering Transport Group, Piscioneri Transport Services, Wakefield Transport and GTS Freight Management.

The Mildura Airport is Victoria's largest and busiest regional airport, servicing over 180,000 airline passengers per year from around 6800 regular passenger transport aircraft movements. There are a further 6200 general aviation aircraft movements which include a regular air freight service, charter, flight training, air ambulance, and refuelling and stopover visits by military aircraft.

The Mildura region is currently serviced by the Yelta (Mildura) rail line, which connects Mildura to Melbourne and Geelong via Ballarat. There is an Intermodal Transport Hub operated by Wakefield Transport at Merbein for containerised products. A \$73 million upgrade to the Mildura line has improved track structure and new-gauge convertible sleepers have been installed to create a faster, more reliable rail link.

Tourism in the Mildura region: tourism is a major and vibrant industry in Mildura, generating more than \$210 million expenditure each year and underpinning around 2100 full time jobs across a number of industry sectors including retail trade, accommodation, cafes and restaurants (AEC 2009).

The region is best known for its Mediterranean style climate; its location on the Murray River; its proximity to the world heritage listed Mungo National Park; and as the home of Stefano's restaurant. There is a large variety of retail outlets, restaurants, hotels and clubs, and over 300 events and festivals relating to sports and the arts conducted each year.

For the year ending December 2008, Mildura attracted some 500,000 visitors (domestic, international and day trippers) to the region who spent 1.3 million visitor nights in the area, down 21% on the previous year. Domestic overnight travel represents the largest visitor sector. For the year ended December 2008 Mildura received 392,000 domestic overnight visitors, down 16% on the previous year.

Mining resources: the Murray Basin has an abundance of mineral sands resources and is seen as the next big mineral sands producing region in Australia. Major mineral sands companies have begun to extract these vast mineral resources which will further expand and diversify the region's economy. The mining sector has almost doubled over the last four years, due to the increases in mineral sands and bentonite mining and salt extraction.

Iluka Resources Limited is the world's largest producer of zircon and the second largest producer of titanium minerals with annual sales in excess of \$1 billion. The Murray Basin Stage 2 Project comprises two areas of mineralisation; the Kulwin deposit about 28 km east of Ouyen and the combined deposits of Wornack, Rownack and Pirro about 20km south-east of Ouyen.

Bemax has two significant deposits in the Murray Basin, Ginkgo and Snapper, both of which are located between Wentworth and Broken Hill. The current focus is the development of the Snapper mine. The Ginkgo mine contains 5.8 million tonnes of heavy mineral, with an excellent suite of products including Zircon. The Snapper mine, which will be mined in conjunction with the Ginkgo mine, is an even richer mine containing an overall higher tonnage and greater percentages of both Rutile and Zircon. The Ginkgo mine is located 220 km from Broken Hill.

Arumpo Bentonite Pty Ltd's deposit is the largest bentonite deposit in Australia. With indicated reserves in excess of 70 million tonnes and renowned for its purity, the deposit is located 95 km north-east of Mildura. Bentonite is absorbent clay which is naturally formed by the decomposition of volcanic ash and has swelling properties of 5 to 6 times its original volume in the presence of water.

Emerging Industries: there are several emerging industries in the Mildura region, including boat building, recycling, renewable energy, packaging, and aquaculture.

2.8 Production landscape

Agricultural production in the Rural City of Mildura consists of dryland farming and irrigated horticultural in the following areas (refer appendix map 1):

Irrigated horticulture

- 13,810 hectares of cropped land in the MOIA (Sunrise 21 2008).
- 14,475 hectares of cropped land in the NIA (Sunrise 21 2008).

Dryland farming

- 1,260,000 hectares in the Millewa and the area along the Calder Highway and the Mallee Highway between Murrayville and Kulwin (Sunraysia Environmental 2005).

In Victoria irrigated horticulture developed in the Lower Murray Darling basin in 1887 in Mildura when the first irrigation colony was established to supply the older irrigation district of Mildura (the First Mildura Irrigation Trust). This was followed by Merbein in 1909 and Red Cliffs in the 1920's.

The MOIA is unique within Victoria due to the historic development of its irrigation districts, which are based on the design of irrigation colonies established by the Chaffey brother's in California. This design used the concept of a block large enough to support a family or a 'living area'. In 1887, during the establishment of the Mildura irrigation district, a living area was considered to be 4 ha, but by 1919 during the establishment of Red Cliffs and expansion of Merbein, it was considered to be 6.5 ha. In the 1940's when Robinvale was established it was 10 ha (RMCG 2008).

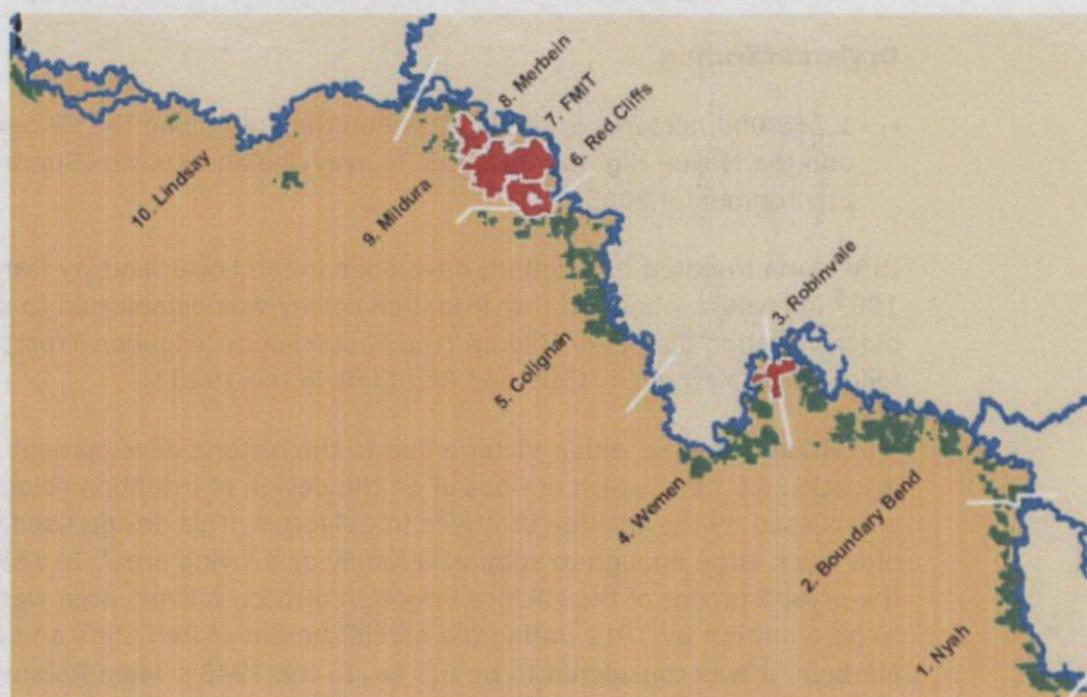
Since then it has expanded along the Murray River from the South Australian border to Nyah in the Rural City of Swan Hill and along the Darling River from Pooncarie to Wentworth in New South Wales to cover approximately 78,200 ha of land. This figure includes private diverters with properties that have access to Murray River frontage (Sunrise 21).

Horticultural in the Rural City of Mildura now accounts for 36% of irrigated horticultural in the Lower Murray Darling basin. The irrigated areas in the Victorian Mallee increased by 17,000 ha or 42% between 1997 and 2006 (Table 4), with the vast bulk of new irrigation development occurring in Boundary Bend, Wemen, Nangiloc and Colignan. During this time the MOIA has remained stagnant (SGS 2008).

Table 4: Victorian Mallee irrigation development from 1997 to 2006

	Hectares		% of 1997
Irrigated crops in 1997 (1996-97 season)	40,190		
Retired between 1997 and 2006		- 1,140	- 3%
New areas between 1997 and 2006		+ 18,175	+ 45%
Irrigated crops in 2006 (2005-06 season)	57,225		

Source: Victorian Mallee 2006 crop report (Sunrise 21 2008) Retired = change in land use that precludes irrigated horticulture (e.g. urban subdivision, dam or building construction)

Figure 2: Victorian Mallee

Source: Victorian Mallee 2006 crop report (Sunrise 21 2008)

2.8.1 Mildura older irrigated area (MOIA)

The MOIA consists of approximately 17,700 ha of land within the irrigation districts of Mildura, Merbein and Red Cliffs of which approximately 16,175 ha are able to be irrigated. These districts have a strong farming history particularly in the production of table grapes, dried grapes, wine grapes and citrus.

Table 6: Area of horticultural in MOIA

District	District area, ha	
	Area	Irrigable
Merbein	4,200	3,554
Mildura	7,900	7,578
Red Cliffs	5,600	5,043
Total	17,700	16,175

Source: Lower Murray Water

There are approximately 1,728 farm businesses ranging from small part time operations through to large family businesses (Sunrise 21 2008). The combined area of the MOIA represents 49% of the total area cropped in the municipality in 2005-06.

Table 7: Horticultural properties in Mildura older irrigation areas

Irrigation district	Approximate no. of properties	Total (ha) (cropped 2005-06)	Average property size (ha)
Red Cliffs	532	4,540	8.5
Mildura (FMIT)	842	6,170	7.3
Merbein	354	3,100	8.8
Total	1,728	13,810	8.0

Source: Victorian Mallee 2006 crop report (Sunrise 21 2008)

The following is an extract from the Victorian Mallee 2006 Crop Report prepared by Sunrise 21 for the Mallee Catchment Management Authority (MCMA) and amended in March 2008. The report presents information with respect to irrigated crops for the MOIA.

Merbein irrigation district

- The irrigated area decreased by 30 hectares, (a 1% decrease) from 1997 to 2006.
- Grapevines remained the dominant crop type from 1997 to 2006.
- Grapevines were predominantly grown for dried fruit production from 1997 to 2006.
- Furrow remained the dominant irrigation method from 1997 to 2006.
- Crops are predominantly in the high salinity impact zone, HIZ.

Mildura irrigation district

- The irrigated area decreased by 310 hectares (a 5% decrease) from 1997 to 2006.
- Grapevines remained the dominant crop type from 1997 to 2006.
- Grapevines were predominantly grown for wine production from 1997 to 2006.
- The dominant irrigation method changed from furrow in 1997 to overhead in 2006.
- Crops remained predominantly in the high salinity impact zone, HIZ, from 1997 to 2006.

Red Cliffs irrigation district

- The irrigated area increased by 90 hectares, (a 2% increase) between 1997 to 2006.
- Grapevines remained the dominant crop type from 1997 to 2006.
- Grapevines were predominantly grown for wine production from 1997 to 2006.
- The dominant irrigation method changed from furrow in 1997 to overhead in 2006.
- Crops have remained predominantly in the high salinity impact zone, HIZ, from 1997 to 2006.

The report indicates that the irrigation district of Red Cliffs has seen positive growth between 1997 and 2006 and also investment and upgrades in on-farm irrigation infrastructure. This contrasts with the Mildura irrigation district which has seen the largest decrease in the irrigated area predominately due to the expansion of the urban area for residential development in Mildura, Mildura South and Irymple. The Merbein irrigation area has remained stagnant in terms of growth and investment in upgrading on-farm irrigation infrastructure. The impact of the drought on the districts is discussed below at 2.9.

2.8.2 New irrigated area [NIA]

The NIA was established from 1975 onwards and consists of approximately 14,475 ha of land at Nangiloc, Colignan, Mildura, Lindsay Point and Cullulleraine with irrigation water provided through private diversion from the Murray River.

Table 8: Horticultural properties in new irrigation areas

Irrigation district	Approximate no. of properties	Total (ha) (cropped 2005-06)	Average property size (ha)
Colignan river reach	155	10,430	67.3
Mildura river reach	143	1,725	12.1
Lindsay river reach	19	2,320	122.1
Total	317	14,475	n/a

Source: Victorian Mallee 2006 crop report (Sunrise 21 2008)

The following is an extract from the Victorian Mallee 2006 Crop Report prepared by Sunrise 21 for the Mallee Catchment Management Authority (MCMA) and amended in March 2008. The report presents information with respect to irrigated crops in the NIA districts.

Colignan River Reach (Colignan to Yatpool)

- The irrigated area increased by 3320 hectares, a 47% increase from 1997 to 2006.
- Grapevines remained the dominant crop type from 1997 to 2006.
- The dominant irrigation method changed from overhead in 1997 to drip in 2006.
- Grapevines were predominantly grown for wine production from 1997 to 2006.
- Crops have remained predominantly in the low salinity impact zone, LIZ 4 from 1997 to 2006.

Mildura River Reach (Mildura to Darling junction)

- The irrigated area increased by 310 hectares, a 22% increase from 1997 to 2006.
- Grapevines remained the dominant crop type from 1997 to 2006.
- The dominant irrigation method changed from furrow in 1997 to drip in 2006.
- Grapevines were predominantly grown for wine production from 1997 to 2006.
- Crops remained predominantly in the high salinity impact zone, HIZ, from 1997 to 2006.

Lindsay River Reach (Darling Junction to SA Border)

- The irrigated area increased by 515 hectares, a 29% increase from 1997 to 2006.
- Nut trees remained the dominant crop type from 1997 to 2006.
- Low level remained the dominant irrigation method from 1997 to 2006.
- Grapevines were predominantly grown for wine production from 1997 to 2006.
- Crops are predominantly in the lowest salinity impact zone, LIZ 1.

The NIA has seen consistent growth between 1997 and 2006 in conjunction with investment in upgrading of on-farm infrastructure. There is currently no information that indicates the decrease in land used for irrigated horticulture in the NIA due to the impact of the drought.

Anecdotally taskforce members are aware that there has been a decrease in the area of land irrigated, for example Great Southern at Lake Cullulleraine which is approximately 200-250 ha has been 'let go' but this may be offset by some proposed larger scale farming enterprises that are currently looking to establish or expand over the next 12 months.

2.8.3 Dryland farming (grains)

The grain industry in the Mildura region is well established and makes up part of the agricultural tradition of the region. The grain crop in the Rural City of Mildura consists mainly of wheat, barley, oats and canola with a production value of \$210 million in 2005⁴. There are about 500 dryland farms in the Rural City of Mildura with an average size of 2500 hectares.

2.8.4 Soil in the Mildura region

Sunraysia Environmental (2005) analysed and reported on the suitability of soil for horticultural crops within each of the irrigation districts. Soil suitability was classified into four classes according to the physical and chemical attributes of the soil.

The majority of land in the irrigated areas of Mildura is of Class 1 or 2 meaning it is highly suitable for production of a range of horticultural crop types. There are few areas of Class 3 and Class 4 land located in small patches (less than the size of an allotment) scattered throughout the districts. These areas of lower soil suitability are too small to be considered separately in land use planning. (refer appendix maps 2a-2d). Soil type is therefore not a restriction on productive capacity.

2.9 Drought impact

Drought impact reports in the MOIA were commissioned in 2007-2008 and 2008-2009 by the MCMA and built on the Victorian Mallee 2006 crop report (Sunrise 21 2008). The *2008-09 Drought impact: irrigation status report for the Sunraysia pumped irrigation districts* (Sunrise 21 2009) identified those areas that were not being irrigated at the date of the MOIA was surveyed and compares this with the 2007-2008 status. Areas recognised as 'not irrigated' may have had this status due to the impact of drought, commodity prices or farm management issues such as replanting.

The report indicates that the cropped area of the MOIA has decreased from 13,810 hectares in 2005-06 to 9,900 hectares in 2008-09, a 28.3% decrease (refer Table 9).

Table 9: Change in area of land not irrigated in MOIA 2007-2009

Irrigation district	Total (ha) (cropped 2005-06)	2007-2008 not irrigated		2008-2009 not irrigated	
		(ha)	%	(ha)	%
Red Cliffs	4,540	728	16%	1,106	24%
Mildura (FMIT)	6,170	1,435	23%	1,750	28%
Merbein	3,100	813	26%	1,054	34%
Total	13,810	2,976	-	3,910	-

Source: 2008-09 Drought impact irrigation status report for the Sunraysia pumped irrigation districts (Sunrise 21 2009)

In addition the report concluded the following on each of the irrigation districts:

Merbein irrigation district

- 9% (269 hectares) of the district has remained not irrigated since 2005-06.
- Not irrigated crops are predominantly grapevines; 646 hectares (61% of the 2008-09 not irrigated area).
- Not irrigated crops are predominantly furrow irrigated; 541 hectares (51% of the 2008-09 not irrigated area).

Mildura irrigation district

- 9% (535 hectares) of the district has remained not irrigated since 2005-06.
- Not irrigated crops are predominantly grapevines; 966 hectares (55% of the 2008-09 not irrigated area).

- Not irrigated crops are predominantly furrow irrigated; 867 hectares (50% of the 2008-09 not irrigated area).

Red Cliffs irrigation district

- 7% (317 hectares) of the district has remained not irrigated since 2005-06.
- Not irrigated crops are predominantly grapevines; 652 hectares (59% of the 2008-09 not irrigated area).
- Not irrigated crops are predominantly overhead irrigation; 438 hectares (40% of the 2008-09 not irrigated area).

It is clear that fundamental changes are occurring in irrigated horticulture due to the prevailing conditions of drought, uncertainty in relation to water allocations and the continued fluctuations in commodity prices. These factors will continue to drive farm restructure in both the MOIA and NIA.

2.10 Water availability and trade

The Victoria Water Register in the report for water trade in Victoria 2008/09 states:

The 2008-09 water year was another difficult year for irrigators in Victoria. Record low allocations were made to water shares in northern Victoria, including 0% allocations in the Broken, Campaspe, Loddon and Bullarook systems and 33% and 35% allocations in the Goulburn and Murray systems respectively.

Carryover was an important tool, with water shareholders bringing 251 GL into 2008-09 from the previous year. There was also more water available to northern Victorian irrigators from interstate, where higher allocations resulted in a higher volume of allocation water available in the water market.

The report also indicates that in relation to allocation by trading zone that:

There has been a large volume of allocation transferred into Victorian Sunraysia, with Lower Murray Water (LMW) importing a net 180 GL. This is an increase from 120 GL imported by Lower Murray Water during 2007-08. More than half the volume of allocation transferred to LMW areas during the year was purchased from interstate.

Lower Murray Water's customers in the Merbein, Red Cliffs and Mildura irrigation districts received a final seasonal allocation of 43% in 2007-08 and 35% in 2008-09. The 2009 season commenced again with zero allocations and at the time of writing is currently at 57% allocation.

The MOIA Study into land values (SGS 2008) stated that:

in response to these low allocations, some farmers have traded all their water off-farm and abandoned their properties.

In the main, farmers are choosing one or a mixture of the following options across their plantings:

- no irrigation at all
- reduction in irrigation to part of the property
- productive irrigation (i.e. plantings irrigated to produce a crop with a combination of allocated, carry-over or purchased water).

The uncertainties around the long term availability of water will continue to be the most significant issue for irrigated horticulture into the future. However it is evident the water market has been utilised effectively in the region as indicated by the volumes of water traded into the district from the other regions in Victoria and interstate.

2.11 Business size

The MOIA rural strategy (RMCG 2008) analysed business size in the MOIA and concluded:

Farms continue to grow in size as commercial farms look to achieve economies of scale to combat the declining terms of trade. This trend has been observed across all agricultural sectors and in the MOIA, has seen the average property size increase from the original subdivisions of 4 and 6.5 ha to an average today of 9 to 10ha

It is considered that farm businesses need to generate an income of at least \$300,000 to enable a farm with average cost control to provide sufficient profit to support a family and provide sufficient funds for redevelopment and growth for establishing the next generation. The minimum area required therefore for a family horticultural business (without other income) is estimated to be above 20ha, although it may be lower for table grapes.

An analysis of the size of horticultural businesses in the MOIA was undertaken using rates data from Council (refer Table 10). This indicates that a large proportion of businesses in the MOIA are not of sufficient size to be considered an independently commercial enterprise and many will have some form of off-farm income.

Large businesses, those greater than 20ha in size are small in number, just 6% of total businesses, but manage about 25% of the land area and produce 33% of the gross value of agricultural production. Further analysis of these businesses using data from Sunrise 21 indicates that these figures underestimate the significance of this group. Analysing property size by business name and common surname showed that the proportion of the irrigated area owned by businesses greater than 20 ha may be as high as 50%.

This reflects the common practice of extended families owning separate businesses but farming them as one unit. While these businesses have been impacted by the recent circumstances, they have had the benefit of larger scale and access to capital to survive the downturn. The consultation revealed that growers in this group are looking to grow the business into the future to remain viable and to provide for future generations to be part of the farm business.

Table 10: Breakdown of farm businesses by business size (MRCC & Sunrise 21)

Business size	Number of businesses	Proportion of total businesses	Proportion of irrigated area	Proportion of gross value of agricultural production
<5ha	820	47%	14%	9%
5 – 9ha	710	40%	44%	42%
10 – 20ha	120	7%	16%	16%
>20ha	110	6%	26%	33%
Total	1,760	100%	100%	100%

Source: Table 4-2 MOIA rural strategy (RMCG 2008)

It is anticipated that farming enterprises in the MOIA and NIA will need to continue to grow in order to keep up with the declining terms of trade. Generational change and farm succession planning will also continue to be a challenge for farming families in the MOIA.

2.12 Farm performance

The report *Mildura Wentworth – a case study of horticultural farm performance: March 2007* by The Australian Bureau of Agricultural Resource Economics (ABARE), classified farms into one of three groups; wine grape growers, other grapes growers (including producers of both table grapes and dried fruit), and citrus growers.

It concluded that:

on average growers in each of the three groups recorded positive cash income in 2005-06. The strongest financial performance was posted by growers in the 'other grape' category. They recorded a healthy farm business profit and a high rate of return. This is in contrast to growers in the wine grape and citrus groups who recorded average farm cash incomes of around \$70,000, small but positive farm business profits, and rates of return of around 3%.

However, the average debt carried by farms in these two groups (wine grape and citrus) was substantial – more than \$300 000 for wine grape growers and around \$430,000 for citrus growers. The average equity ratio for these two groups is 73% and 81% respectively and interest payments account for a substantial proportion of cash costs.

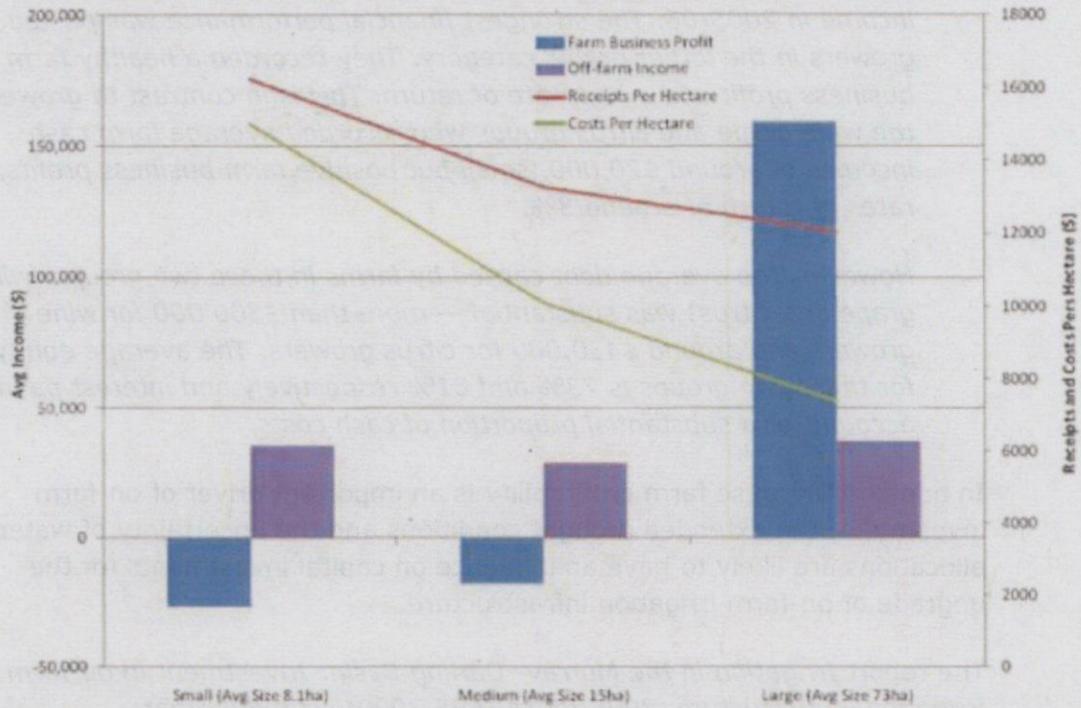
In addition, because farm profitability is an important driver of on-farm investment, the extended drought conditions and the uncertainty of water allocations are likely to have an influence on capital investments for the upgrade of on-farm irrigation infrastructure.

The report *Irrigation in the Murray- Darling Basin: Investment in on-farm irrigation infrastructure, 2006-07 (ABARE 2009)* estimated that:

29% of horticulture farms made net additions to total capital in 2006-07. Acquisitions of land (4%), plant and equipment (3%) and permanent water entitlements (23%) accounted for the majority of additions to capital. A further 4% of horticulture farms had net disposals of capital in 2006-07, primarily from sales of land and permanent water entitlements.

The MOIA Study into land values [SGS 2008] Fig. 15 charts the 'on' and 'off-farm' profits by farm size based on the ABARE report.

Figure 15: On-farm profitability, off-farm income, cash receipts and costs per hectare, Mildura-Wentworth viticulture industry 2006



Source: MOIA study into land values [SGS 2008] p36

The report shows how the difference between farm receipts and costs grows as farms move from small to large area sizes as indicated in Table 11.

Table 11: Lot size and farm performance

	Difference in Receipts and Costs
Small (Average Size 8.1ha)	\$1,236 per ha
Medium (Average Size 15ha)	\$3,190 per ha
Large (Average Size 73ha)	\$4,694 per ha

Source: Fig 29 MOIA study into land values (SGS 2008)

The MOIA study into land values (SGS 2008) then 'conservatively applied the difference between the small and medium rate to all lots consolidated into larger farms, as a measure of productivity enhancement and concluded that "to convert this productivity enhancement per ha to an initial stimulus into the regional economy we have used known relationships between horticultural profitability, value added and output, i.e. via the ABS National Accounts. The end result when applied over the base consolidation level, i.e. 56ha p.a, is ~ \$700,000/annum (\$5,147 per acre/annum)'.

2.13 Off-farm income / part-time farming

The MOIA study into land values (SGS 2008) stated that:

there is a trend toward part-time farming and hobby farming in the pump districts, as the business community expands in Mildura. As a result, many MOIA growers now have access to off-farm income. Small and medium-sized farms heavily rely on off-farm income to boost household income, and larger farms have about a 50:50 ratio of on to off-farm income.

Off-farm income will continue to be an important supplement to income for farm households in the wine grape and, to a lesser extent, citrus producing groups in the Mildura–Wentworth region. The average off-farm income earned by wine grape growers was almost \$40, 000.

2.14 Small block irrigator exit grants

The Rural Financial Counselling Annual Report 2008-09 details the client activity associated with the release of this grant by Department of the Environment, Water, Heritage and the Arts (DEWHA) for small block irrigators affected by drought and climate change in the Murray-Darling Basin while remaining on their farms. Initially applicants were required to hold less than 15 hectares of farming land and have a minimum of 10 megalitres of water, but this was later increased to 40 hectares.

The Annual Report stated that:

there was significant interest in the grant with 129 expressions of interest received by the RFCS and eventually 82 applications were lodged with Centrelink. Of the 82, 15 (18%) were declined. A number of applicants were disqualified as they did not meet the farmer test; that is they have off-farm income and do not spend a significant amount of time on the farm.

3.0 Rural land use issues

The purpose of the taskforce is to identify the longer-term strategic future of horticultural land in the Rural City of Mildura. The taskforce has reviewed and updated data to gain an understanding of the distribution and pattern of lots in the MOIA with or without a dwelling.

3.1 Rural living

Within the municipality most rural land, that is, land outside the township boundaries, is zoned Farming Zone with the exception of small estates in the MOIA zoned Low Density Residential Zone including Riverside Avenue, Koorlong, Kings Billabong and Nichols Point. Prior to the implementation of C58, land within the MOIA has been in high demand for dwellings for a rural residential purpose and this has resulted in fragmentation from subdivision to create rural residential lots.

The MOIA rural strategy (RMCG 2008) concluded that:

of the 16,000 hectares that is zoned Farming there were in 2007 approximately 3551 dwellings on a range of lots size, this equates on average to a density of one dwelling per 4.5 hectares.

Table 12 provides an update of the 2007 data from the MOIA rural strategy (RMCG 2008) and quantifies the total number of lots in the MOIA and the number of lots with or without an existing dwelling for each irrigation district (utilising the current cadastre and 2009 aerial photography). The majority of lots less than 2 ha, which are generally not associated with horticulture, are located in the Mildura and Red Cliffs district with a smaller number in Merbein. The proportion of lots that have a dwelling in each irrigation district equates to 64% in Mildura, 59% in Merbein and 50% in Red Cliffs.

The Department of Sustainability and Environment has confirmed approximately 302 of the lots are disused channel reserves and would be too small or inappropriately shaped to accommodate a dwelling and are generally without road frontage.

Table 12: Lot distribution with or without a dwelling by irrigation district

Lot size (ha)	Merbein			Mildura (FMIT)			Red Cliffs		
	Lots w dwelling	Lots w/o dwelling	% Lots w dwelling	Lots w dwelling	Lots w/o dwelling	% Lots w dwelling	Lots w/ dwelling	Lots w/o dwelling	% Lots w dwelling
0 - 0.39	239	228	51%	755	191	80%	333	421	44%
0.4 - 0.99	129	62	68%	340	124	73%	186	147	56%
1 - 1.99	51	42	55%	115	69	63%	78	85	48%
2 - 3.99	30	24	56%	313	221	59%	65	89	42%
4 - 9.99	197	114	63%	354	421	46%	336	260	56%
10 - 40	64	21	75%	43	45	49%	21	16	57%
40 +	0	0	0%	2	0	0%	0	0	0%
Total	710	491	59%	1,922	1,071	64%	1,019	1,018	50%

Source: DPCD 2009: regional policy unit

3.2 Distribution and characteristics of lots with dwellings

Spatially the distribution characteristics of lots with a dwelling, that are not associated with horticulture, within the MOIA can to some extent be categorised as follows.

3. Lower density 'strips' of dwellings on small lots (<1 ha) with road frontage dispersed among horticultural properties in the Farming Zone. These are a result of recent or historic boundary realignments.
4. Clusters of dwellings (on lots <1 ha) in the Farming Zone subdivided from the 1890s onwards that were referred to as 'common or rack' land and did not have a water right. This common or rack land is generally situated on the high ground which the gravity fed channel system could not supply and was used for drying racks, pickers huts etc. Examples of this can be found in each of the irrigation districts and vacant lots still exist in these areas and are seen as development opportunities for rural residential development.

5. Clusters of dwellings (on lots <1 ha) in the Farming Zone that are located in high amenity areas including along Cureton Avenue, between Mildura and Red Cliffs or McEdwards Street between Merbein and Cabarita. These lots all overlook the Murray River floodplain and are a result of the historic demand for rural residential lots with high amenity values. This demand is expected to continue and is also driving requests for the consideration of rezoning to the Low Density Residential Zone in these areas.
6. High density strips of dwellings (on lots <2 ha) between Mildura and Irymple and Fifteenth Street and Cureton Avenue which have developed as a result of subdivisions commencing when this area was part of the Mildura Shire Council or more recent subdivisions. Due to the proximity to Mildura and Irymple this area is highly compromised and continues to be popular for rural residential development. This is also an area that has been identified by council as having potential for urban expansion post 2030.

The overall random nature of the distribution pattern of lots with dwellings <2 ha indicates that the application of a more appropriate rural zone to reflect that the land is used for a purpose other than farming is not practical. The taskforce supports that land in the MOIA should continue to be used for irrigated horticulture to support the economy of Mildura; therefore the Farming Zone is considered the most appropriate zone.

It has also been recognised and evidenced during the taskforce panel interviews that there are some zoning anomalies in the MOIA, particularly in the area between Mildura and Irymple that are a result of historic subdivision or rezoning in this area. There is an opportunity for council to address these anomalies when reviewing the Mildura Planning Scheme which is required to be completed by June 2010.

3.3 Data comparison 2007-2009

The data in the MOIA rural strategy (RMCG 2008) was collated in 2007 and was based on data from as early as 2001. This data has been updated by the DPCD regional policy unit to provide a comparison with the current number of lots in each district and the lots with or without a dwelling (refer Tables 12, 13 and 14).

The MOIA rural strategy (RMCG 2008) identified 3165 lots less than 2 ha in size, 2185 had a dwelling and 980 were vacant. The most recent data now indicates there are a total of 3595 lots in the MOIA less than 2 ha, 2226 lots had a dwelling and 1369 are vacant. The total number of lots in the MOIA has increased by 269, with an additional 169 vacant lots and 100 dwellings of which 41 are on lots less than 2 ha.

The increase in the number of vacant lots and dwellings is in part, evidence of the policy position of council that despite policy and zone guidelines, every application for a dwelling and generally all applications for subdivision in the Farming Zone obtained a planning permit.

Table 13: Comparison of data for lots 2007 to 2009

Lot size (ha)	Number of lots		Number of lots with an existing dwelling		Number of vacant lots	
	2007*	2009#	2007*	2009#	2007*	2009#
<2ha	3,165	3,595	2,185	2,226	980	1,369
2 to 4 ha	610	742	290	408	320	334
4 to 10 ha	1,947	1,682	941	887	1,006	795
10 to 40 ha	240	210	135	128	105	82
40+		2		2		
Total	5,962	6,231	3,551	3,651	2,411	2,580

Source: * Refer MOIA rural strategy (RMCG 2008) page 15 and # DPCD regional policy unit 2009

The MOIA rural strategy (RMCG 2008) did not analyse the number of lots less than 2 ha with or without a dwelling. Table 14 provides this further breakdown and as previously stated it is anticipated that 302 of the lots are potentially disused channel reserves or utility lots that would be too small or inappropriately shaped to accommodate a dwelling and are generally without road frontage.

Table 14: Number of lots in the MOIA <2ha

Lot size (ha)	Number of lots 2009	Number of lots with an existing dwelling 2009	Number of vacant lots 2009
0 - 0.399	2,167	1,327	840
0.4 - 0.99	988	655	333
1 - 1.99	440	244	196
Total	3,595	2,226	1,369

Source: DPCD regional policy unit 2009

3.4 Planning and building approvals

The following tables have been sourced from previous studies mentioned in this report and have then been updated with more recent data provided by MRCC.

Planning approvals: a total of 254 planning permits were approved between 2004 and 2008 for the use and development of land for a dwelling in the MOIA, an increase of approximately 10 per annum. Between 2004 and 2007, 91 permits or 46% were issued on lots less than 4 hectares.

Table 15: Dwelling (planning) approvals in MOIA 2004 to 2009

Year	Dwelling permit approvals
2004	39 (16 on land less than 4ha)
2005	47 (18 on land less than 4ha)
2006	48 (20 on land less than 4ha)
2007	61 (37 on land less than 4ha)
2008	59 (not available <4ha)
2009*	20 (not available <4ha)
Total	274

Source: Mildura Rural City Council (2009), MOIA study into land values (RMCG 2008) p15. Permits issued from 1 January 2009 – 29 May 2009 are reduced due to gazettal of Amendment C58.

The distribution of planning permit approvals (Table 16) indicates approximately two thirds of the demand for rural residential lots are within the Mildura irrigation district, with the Red Cliffs and Merbein irrigation districts catering for the remaining third.

Table 16: Dwelling (planning) approvals in MOIA 2007-8 to 2008-9 for MRCC

Year determined	Dwelling Permits (Planning)			
	Mildura (FMIT)	Merbein	Red Cliffs	Total
2007-2008	42	10	5	57
2008-2009	28	12	14	54
Total	70	22	19	111

Source: Mildura Rural City Council 2009

Building approvals: the distribution of building permit approvals for dwellings in the MOIA is indicated in Table 17, the number of permits issued in Merbein and Red Cliffs is approximately a third of the number issued in Mildura.

Since 2004 over a 1000 building permits have been issued each year for all property development in the municipality, including 423 building permits issued in 2006-07 for dwellings. In 2008-09 the number decreased to 242, of these 14 were issued in the MOIA.

Table 17: Dwelling (building) approvals 2007-8 to 2008-9 for MOIA

Year determined	Dwelling Permits (Building)			
	Mildura (FMIT)	Merbein	Red Cliffs	Total
2007-2008	22	7	6	35
2008-2009	8	3	3	14
Total	30	10	9	49

Source: Mildura Rural City Council 2009

A comparison of planning permits and building permits issued between 2007 and 2009 indicates approximately 44% of planning permits progress to the building permit stage. Council has confirmed that 37 of the 49 building permits have been issued with a certificate of occupancy.

Council's preferred option is for every lot between 0.3 and 1.2 hectares (approximately 482 lots) and every lot greater than 10 hectares (approximately 105 lots) to have an entitlement to apply for a permit for a dwelling. This would result in the potential for an additional 587 dwellings in the Farming Zone. Based on the building permit data provided by council, dwelling entitlements in this range would provide a supply of lots for rural residential purposes for up to 10 years.

3.5 Impact on urban growth

Both the townships of Red Cliffs and Merbein have an adequate supply of land zoned Residential 1 Zone and Low Density Residential Zone for the medium-to-long term and in the township of Red Cliffs approximately 12 building permits are approved per annum.

Mildura Rural City Council has recently completed the Red Cliffs Residential Development Plan for land zoned Residential 1 Zone and is also preparing a development contributions plan to provide infrastructure to service this land.

How the growth of residential and low density residential estates in the towns of Red Cliffs and Merbein would be affected by continued ad hoc rural residential development in the Farming Zone has not been assessed. The building and planning approval data show evidence of its contribution to a slower growth rate or take up of land in these communities, which would also delay the collection of development contribution funds.

3.6 Land values and rate revenue

Both the MOIA rural strategy (RMCG 2008) and the MOIA study into land values (SGS 2008) recognised that council had been approving new dwellings on all lots within the MOIA for many years despite the provisions of the planning scheme including its local policy. As a consequence, there is an expectation that landowners have an automatic right to build a new dwelling on these lots, including *first home buyers, extended family members, and those seeking to build a dream home* and this perception has been reflected in land sales.

The MOIA study into land values (SGS 2008) stated that:

the estimated the impact on the rate base as negative \$1,155,480 or 3.3% (of 2008-2009 rates income) if the (then) current agricultural land policy was implemented and dwellings on lots up to 10 hectares were refused. In 2009 there are 2498 (2378 in 2007) vacant lots up to 10 hectares and 82 (101 in 2007) vacant lots between 10 and 40 ha. Given the small number of lots over 10 ha, the negative impact on the rate base should not be significantly different to the scenario if council had implemented the (then) existing policy.

although the price declines would be significant if dwellings were prohibited, it anticipated that buyers for vacant lots were likely to be local farmers looking to expand the farm and acquisition cost reductions would be experienced on the opposite side of the transaction. At a regional level, one landowner's loss will be another's gain.

MRCC has advised that Amendment C58 resulted in 1040 supplementary valuations with the total fall in Capital Improved Value of \$58,141,000 and a loss in revenue for financial year 2009-10 of approximately \$325,000. The effect of Amendment C58 on property values varied across the MOIA with lots close to Mildura down \$90,000 -\$120,000 and lots further out reducing \$50,000 -\$80,000. Amendment C58 will have an ongoing effect and cause an increase in the rate burden on the residential, commercial and dryland farming sectors in the future.

4.0 Drivers of rural land use change

The drivers of rural land use change in the Rural City of Mildura are consistent with those identified by the Future Farms Rural Planning Group which are applicable across Victoria. These include environmental, farm business, economic, infrastructure and landscape drivers.

4.1 Primary drivers

The following drivers are considered critical to the future of irrigated horticulture in the Rural City of Mildura.

4.1.1 Water

Access to suitable quality and quantities of water is affecting the security and long-term viability of agricultural production. Temporary and permanent water trading is changing the distribution of water and affecting whether industries can remain productive or need to consider adapting their practices and approach to water use. The following key federal and state strategies and plans will continue to influence how water is managed in relation to irrigated horticulture.

Northern Region Sustainable Water Strategy: The Strategy promotes key agricultural, environmental and urban values through:

- recognising and protecting existing water entitlements to provide greater certainty
- enhancing markets, carryover and reserve policies to increase the ability of people to manage their own risk
- using consumptive and environmental water more efficiently to get greater benefits from less water
- delivering benefits from public investment in irrigation modernisation, on-farm programs, river and wetland health programs and environmental water purchase programs.
- **Murray–Darling Basin Authority (MDBA) Plan:** The MDBA has commenced the preparation of the first basin plan for implementation in 2011. The plan will include:
 - limits on the amount of water (both surface water and groundwater) that can be taken from basin water resources on a sustainable basis
 - identification of risks to basin water resources, such as climate change, and strategies to manage those risks

- requirements that state water resource plans will need to comply with if they are to be accredited under this Act
- an environmental watering plan to optimise environmental outcomes for the Basin
- a water quality and salinity management plan
- rules about trading of water rights in relation to Basin water resources.

4.1.2 Commodities and competition

Horticulture underpins the Rural City of Mildura's economy with products for the domestic and export markets subject to the ongoing impacts of market variability. The Mildura Wentworth Case Study of Horticultural Farm Performance (ABARE 2007) concluded the following in relation to commodities and competition and the future likely scenarios for horticulture.

- Over the medium term there are likely to be further increases in competition in global wine, citrus and dried vine fruit markets. The effects of this competition will inevitably be reflected in returns to domestic producers as export prospects will be affected and competition from imports will intensify.
- For Australian producers to maintain or improve their competitive position in these markets, they will need to improve farm productivity to keep pace with, or ahead of, overseas competitors. This may apply to either improvements in the quality of production, or reductions in production costs. Any reduction in production costs will flow through to improved farm financial performance. However, given the scale of their operations any per hectare or per tonne reduction in costs will provide greater benefits to larger growers.

In addition a recent report from the Wine Grape Growers Association has stated:

*that it is widely acknowledged that the Australian wine industry is enduring its toughest period in two decades. All in the industry must recognise that this is our problem and we need to fix it. Comprehensive analysis and consultation suggests **at least 20%** of bearing vines in Australia are surplus to requirements, with few long-term prospects. On cost of production alone, at least 17% of vineyard capacity is uneconomic. The problems are national – although some regions are more adversely affected – and are not restricted to specific varieties or price points.*

4.1.3 Infrastructure

Irrigated horticulture requires an effective and efficient water distribution system that can be integrated with on-farm modernisation, water purchase and works programs to support smart, efficient irrigation enterprises and maximise the community benefits of modernisation.

Horticulture in Mildura was initially based on an on-farm irrigation system consisting of inefficient open furrow or flood irrigation. Irrigation efficiency has improved enormously over the last 20 years. In the 1980s around 75% of the older irrigation districts were still being furrow irrigated, today the proportion is less than 25%. The system of choice now appears to be drip irrigation and to a lesser extent, low level type systems. At the same time on-farm scheduling has become much more sophisticated with use of real-time soil moisture monitoring and a high level of control over irrigation depth and uniformity. Small farms are usually set up for low labour input while large farms will need new technology and better supply so that they can keep expanding.

Since commencing the Sunraysia Modernisation Project, Lower Murray Water has submitted a business case to the Commonwealth to secure \$103 million to upgrade the existing irrigation system in the MOIA. This is the proposed first stage of a three-stage project which will result in the year round delivery of irrigation water to the MOIA. It will provide opportunities to produce annual crops in the winter period when the system was previously shut down for maintenance.

4.1.4 Business size

For irrigated horticulture to achieve the necessary scale for commercial horticulture it must have flexibility to expand at low cost. This means long row length and less fragmentation from housing, roads and other infrastructure.

The MOIA rural strategy (RMCG 2008) analysed business size and concluded:

Farms continue to grow in size as commercial farms look to achieve economies of scale to combat the declining terms of trade. This trend has been observed across all agricultural sectors and in the MOIA, has seen the average property size increase from the original subdivisions of 4 and 6.5 ha to an average today of 9 to 10ha. Large businesses, those greater than 20ha in size are small in number, just 6% of total businesses, but manage about 25% of the land area and produce 33% of the gross value of agricultural production.

Most properties within the MOIA are considered small businesses and without some off-farm income will find it difficult to provide a full time wage. In addition, these businesses have limited capacity to absorb the impacts of market fluctuations and variations in economic conditions. The prevailing conditions of drought, low water allocations and commodity price fluctuations, particularly in the wine industry will result in more rapid farm restructure occurring in the MOIA in the immediate future.

4.1.5 Climate change

In many parts of the state, land use is changing, or will change, as a result of changing climatic conditions. Increased rainfall variability or rises in average temperatures will drive adaptations of traditional farming practices, such as wheat cropping in the Mallee or irrigated horticultural in Mildura, to ensure ongoing viability.

The *Climate Change Victoria: 2008 Summary* [DSE] indicates that by 2070 in Mildura under a higher emissions scenario, both temperature and rainfall in Mildura would resemble those of present day Wilcannia in NSW, approx 5 hours north east of Mildura.

4.2 Other drivers

The following drivers (in no particular order) will continue to influence the future of irrigated horticulture in the Rural City of Mildura.

4.2.1 Alternative energy

New and emerging markets will provide potential to broaden the income stream of farmers. The Rural City of Mildura is considered the premium location in the state for solar energy facilities. In July 2009 planning scheme amendment C53 was gazetted into the Mildura Planning Scheme to facilitate the use and development of a solar energy facility. The 154 megawatt capacity is expected to generate approximately 270 megawatt hours (MWh) of electricity per annum which could power approximately 45,000 households. This renewable energy power source will result in a reduction of approximately 400,000 tonnes of emissions per annum.

4.2.2 Biodiversity

The effects of climate change on biodiversity will occur at many different levels – from individuals to ecosystems. Species may alter distribution, abundance, behaviour and the timing of events such as migration or breeding. As water and other environmental factors create stress on the land, the remaining productive soils may be required to be used intensively to balance the loss of production from other parts of the state.

The Mallee is home to five distinct bioregions, three along the floodplain of the Murray River and two covering the large dryland areas away from the river. A series of major parks cover 1.2 million hectares, which is nearly 40% of the region's area. The region is significant for its unique species, particularly reptiles and birds. A significant number of flora and fauna in the Mallee region are classified as threatened within Victoria.

4.2.3 Biosecurity

There may be increased pressure from competitors, predators, parasites, diseases and disturbances (such as bushfire or drought) creating a need for increased vigilance against greater biosecurity threats.

It will be incumbent on Mildura's industry and community to implement key actions from the Victorian Biosecurity Strategy to deliver biosecurity outcomes across an expanding range of threats. Biosecurity threats that impact on the MOIA and NIA, like Queensland Fruit Fly and Phylloxera, are currently being managed cooperatively by industry and government.

4.2.4 Land as an asset

Long term agricultural investment is determined by the capacity to make a return on the investment and hence by land values.

The MOIA rural strategy (RMCG 2008) concluded that:

land values can be driver of and barrier to land use change. Anecdotally, and supported in the consultation, the value of land within the MOIA in some circumstances was found to be too low to allow enough funds for an exit strategy (such as purchasing a house in town) for those wishing to leave farming. However, it was also noted that the purchase of lifestyle properties and hobby farms has driven land values above productive value restricting farm growth and expansion.

4.2.5 Land use conflicts

Land use conflict will continue to impact on the potential for farmer's enterprises to farm or expand. In the MOIA land use conflict is centred on residential versus productive uses including amenity impacts from spray drift, harvesting, dust and machinery noise. If it continues the ad-hoc residential development in Mildura is likely to cause increased conflict between neighbours and an escalation of 'right to farm' issues. Currently there is no formal system to collate data by council to understand the current level of conflict in the MOIA.

4.2.6 Manufacturing

Agricultural production in the Mildura region will continue to drive the diversification of the manufacturing sector. Horticulture supports a significant agricultural services industry and a food processing, packaging and manufacturing sector that accepts products grown within the city and from the wider region. Much of the employment in Mildura is associated with horticultural servicing and processing of horticultural produce.

4.2.7 People and community

The provision of services and access to remote populations must take into account the impacts of climate change, biodiversity and changing communities and must consider the cost implications to service these remote communities.

The liveability of these areas, while attractive can be challenging, with lack of public transport for the young and elderly to access recreation, health facilities and shopping. As the areas were designed to support farming there is no provision within the current road infrastructure for pedestrians, cyclists and horse riders to use the road network safely. Currently there is no indication of the costs to council to provide services to the rural residential areas of Mildura.

4.2.8 Transport

The Mildura region is supported by key air, road and rail infrastructure. Therefore improvements to road and rail infrastructure may have both positive and negative effects on land use and rural industries. The tri-state location of Mildura is seen as an important factor in the success of the development of this industry sector (AEC 2009). The scope for this sector to continue to expand and develop infrastructure capacity in road, rail and air is critical to the continued growth of the agricultural sector.

5.0 Rural land use in Mildura – conclusion

The Mildura Planning Taskforce has adopted some key assumptions for developing the recommendations to support the long term future of irrigated horticultural in the Rural City of Mildura. This includes assumptions stated in the MOIA study into land values (SGS 2008).

5.1 Value of agriculture in the municipality

Agriculture, and in particular horticulture and the manufacturing, packaging and processing of local produce, will continue to underpin the economy of Mildura and be an important contributor to the state and national economies.

Key assumptions for MOIA and NIA

- The MOIA and NIA will continue to provide a significant contribution to the gross value of agricultural commodities in the municipality.
- The Farming Zone is the most appropriate zone to support horticultural production in the MOIA and NIA.
- Domestic and global markets will continue to influence either negatively or positively the value of production in the MOIA and NIA.
- The impact of climate change will continue to influence the farm operation and the need to adapt to changing conditions.
- Unplanned ad-hoc subdivision and rural residential dwelling development can undermine the ability for irrigated horticulture to continue to support the economy of Mildura.

5.2 Continuity of horticulture

Horticultural development activity may continue in areas outside of the MOIA such as the new irrigation areas of Nangiloc, Colignan, Karadoc and Lake Cullulleraine and in the Swan Hill Rural City Council at Boundary Bend, Wemen and Liparoo as these areas are less constrained and therefore amenable to large scale horticultural production.

Key assumptions for MOIA and NIA

- Development of new irrigated horticulture and the continuation of horticulture in the MOIA and NIA will depend on prices received for product, availability of water and logistics of production packaging and processes.
 - Water trading to areas outside of an irrigation district is capped (currently to 4% + 60GL) any reduction in horticultural activity within the MOIA and NIA is regarded as a reduction in potential regional output.
-

- The implementation of the proposed Sunraysia Modernisation Project will provide a year round supply of irrigation water and opportunities for diversification of crops in the MOIA.

5.3 Family farms

Within the MOIA itself, it is anticipated that farming families will continue to live on the land in the family home reflecting local traditions and culture.

Key assumptions for MOIA

- Farming families will continue to utilise the flexibility of numerous titles to manage the farm business as a single family or group of family members.
- Farming families will pass on the land and the family home to family members.
- Farming families will continue to retire on the land in the family home.
- Farming families will continue to utilise off-farm income to support the farming operation when required.

5.4 Farm size in the MOIA

Within the MOIA itself, the larger and some medium scale operators will continue to seek to expand their land holdings (preferably contiguous).

Key assumptions for MOIA

- Expansion may be hampered by physical barriers associated with residential encroachment (e.g. houses), as well as higher land prices reflecting the implicit dwelling development right that now is inferred.
- Farm consolidation is assisted if land is priced at its agricultural value rather than being distorted by its housing value.
- The difference between farm receipts and costs will continue to grow as farms move from small to larger business holdings.

5.5 The fate of small farms in MOIA

Small horticultural operators in the MOIA wishing to exit the industry will either sell their land and relocate or lease or sell their water rights and remain residents at their current locations.

Key assumptions for MOIA

- Farms from which dwellings are not excised will become increasingly less likely to return to horticulture.
- Exiting farmers will most likely wish to excise their dwellings and sell a significant portion of their land. In both cases, the most likely buyers will be local farmers of medium and large scale.
- The number of farming families and employment will continue to decline as the farming community continues to age and properties increase in size.

5.6 Catering for the demand for rural living

The demand for rural living opportunities in the MOIA will continue.

Key assumptions for MOIA

- This demand will be catered for by the smaller land parcels in and on the periphery of the hamlets and some existing small lots within the MOIA.
- As a result, any constraint to dwelling development on rural land in the MOIA is unlikely to constrain regional construction sector activity.
- While there are some amenity benefits associated with living in the rural lands within the MOIA, there are also disadvantages due to the isolation, i.e. from urban services.

5.7 Irrigation infrastructure

The proposed Sunraysia Modernisation Project will provide an irrigation system able to provide a year round supply of irrigation water.

Key assumptions for MOIA

- The future of the irrigation network, particularly modernisation and upgrade will be dependent on the presence of horticultural businesses.
 - The upgraded irrigation system will provide opportunities for diversification of crop types and an extended growing season.
 - The continuation of on-farm irrigation upgrades and uptake of technology will assist in keeping pace with the declining terms of trade.
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6.0 References

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- Sunrise 21, March 2008, *Victorian Mallee 2006 crop report* prepared for the Mallee Catchment Management Authority.
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Sunrise 21, April 2009, 2008-09 Drought impact: irrigation status report for the Sunraysia pumped irrigation districts prepared for the Mallee Catchment Management Authority.

Purpose

The purpose of the Mildura area (Mallee) planning taskforce is to identify the longer term strategic future of the Mallee and its relationship to irrigated farming and other uses associated with the regional agricultural pattern on land use in the Mallee area.

The taskforce in particular will examine the projected farming and other uses in the Mallee in the context of current environmental, social, economic and environmental property of the Mallee region.

Background

Arrangement 528 to the Mildura Planning scheme was approved by the Minister for Planning on 29 May 2009 to allow and facilitate future agricultural growth and expansion of the horticulture businesses within the Mallee, ensure land values reflect the horticulture value of the land, protect new business within the Mallee and minimise conflict between non-horticultural and agricultural business uses.

Arrangement 528 allows for all land zoned Farming Zone in the Mallee within the Rural City of Mildura. The Mallee is part of the broader Mallee horticultural region that covers the 21,000 ha of the Murray River downstream of the boundary between the South Australian border and along the Murray River from Porepunkah to Wentworth in NSW. The total value of horticultural production produced in the Mallee Rural City was \$250 million and \$137 million of this figure was produced in the Mallee.

It consists of approximately 1,000 horticultural farms, mainly irrigated in the Mallee zone, and covers 3,251 hectares, a large area of land. In addition, there are also some horticultural farms and horticultural activities are scattered throughout the horticulture area.

The area is in high demand for potential new dwellings and local land use from potential subdivisions.

Scope of Work

General task

The taskforce is to review the Mallee land use pattern in the light of the Mildura Old Irrigation Area Rural Strategy for a Rural City 500 and Arrangement 528 and provide a set of recommendations to the Minister for Planning.

7.0 Appendix

7.1 Mildura Planning Taskforce Terms of Reference

Purpose

The purpose of the Mildura older irrigation area (MOIA) planning taskforce is to identify the longer-term strategic future of the MOIA land and its relationship to irrigated farming and resolve issues associated with the established subdivision pattern on land use in the Mildura area.

The taskforce in particular will examine the preferred farming and urban settlement pattern in the context of current and long term social, economic and environmental prosperity of the Mildura region.

Background

Amendment C58 to the Mildura Planning Scheme was approved by the Minister for Planning on 29 May 2009 to protect land for horticulture, facilitate growth and expansion of the horticulture businesses within the MOIA, ensure land values reflect the horticulture value of the land, restrict new dwellings within the MOIA and minimise conflict between non-horticultural and horticultural businesses.

Amendment C58 applies to all land zoned Farming Zone in the MOIA within the Rural City of Mildura. The MOIA is part of the broader Mildura Horticultural Region that covers the areas along the Murray River downstream of Boundary Bend to the South Australian border and along the Darling River from Pooncarie to Wentworth in NSW. In 2001 the total value of agricultural commodities produced in the Mildura Rural City was \$526 million and \$197 million of this figure was produced in the MOIA.

It consists of approximately 16,000 hectares of land, mainly included in the Farming Zone, and contains 3,551 dwellings on a range of lot sizes. Numerous small lots exist within the rural area and residential dwellings are scattered throughout the horticulture area.

The area is in high demand for potential new dwellings and faces land fragmentation from potential subdivision.

Scope of Work

General task

The taskforce is to review the MOIA land use pattern in the light of the Mildura Older Irrigation Area Rural Strategy Final Report April 2008 and Amendment C58 and provide a set of recommendations to the Minister for Planning.

Specific issues

The work of the taskforce will address the following key land use and associated issues.

Farming and related agricultural and rural land uses: looking in greater detail at the operation of the existing Farming Zone, existing and proposed patterns of farm operation and production, thresholds for farm operations and implications of the fragmentation of parcels of land and on soil /land capability. It will assess the existing irrigation infrastructure and the proposed irrigation infrastructure over the next 10, 20 and 30 years, the Commonwealth purchases of water licences and associated spatial impacts.

Urban settlement: this will involve examining existing and proposed residential and urban uses, preferred urban settlement patterns having regard to the State Planning Policy Framework (SPPF) and Ministerial Direction No.6, and consideration of urban settlement and sustainable urban form. This work will be incorporated into the broader Murray River Settlement Project, which is underway and linked to statutory and inter-state obligations.

Social issues: involves assessing the farm population demographic profile, adjustment in the horticultural sector (including work undertaken by Mallee Catchment Management Authority on drought impacts), and the social and cultural dynamics of the existing Mildura farming community and implications of rural and urban land.

Economic Issues: involves assessing the direct economic implications of existing and proposed agricultural and rural land uses in the horticultural sector.

Membership and Operation

The Taskforce will be coordinated by the Department of Planning and Community Development (DPCD) Regional Policy Unit and regional representatives from DPCD and will include representatives from:

- Mildura Rural City Council (MRCC)
- Department of Primary Industries (DPI)
- Department of Sustainability and Environment, Office of Water (DSE)
- Lower Murray Water (LMW)
- Mallee Catchment Management Authority (MCMA)
- Regional Development Victoria (RDV).

An independent, Chair, with a strong background in negotiation and stakeholder resolution skills and preferably with a background in land use or rural land use issues will be appointed by DPCD to Chair the Taskforce.

Reporting and Project timelines

The Taskforce will run over a four month period between August and November 2009, meeting on a monthly basis. The Taskforce will provide a report and recommendations to the Minister for Planning *by no later than December 2009*.

Administrative and associated Research Support

Administrative and associated research support will be provided by the Loddon-Mallee Office and Regional Policy (DPCD).

Other related initiatives

There are a range of other related Federal and State Government initiatives underway that may influence the discussions and recommendations provided by the Taskforce including:

- a. DPI – Future Farms including the partnership project with DPCD - Future Farms Rural Planning Group – www.dpcd.vic.gov.au/futurefarming .
- b. DPCD – Murray River Settlement Project.
- c. Regional Strategic Planning Initiative (RPSI) -
<http://www.business.vic.gov.au/busvicwr/assets/main/lib60018/regional%20strategic%20planning%20initiative%20update%20may%202009.pdf>
- d. Northern Region Sustainable Water Strategy –
<http://www.ourwater.vic.gov.au/programs/sws/northern>
- e. Victorian Climate Change Green Paper
<http://www.climatechange.vic.gov.au/Greenhouse/wcmn302.nsf/LinkView/EF3BD0CABED3B830CA2575BC000E22A2BBA69776518142B6CA2575C400224496>
- f. Sunraysia Modernisation Project
http://www.coag.gov.au/coag_meeting_outcomes/2008-07-03/docs/communique20080703.rtf

7.2 Mildura Rural City Council – Preferred position

BRIEFING PAPER - MOIA STUDY AND AMENDMENT C58

1. Background

The Mildura Older Irrigation Area Rural Strategy (MOIA) was commenced in 2007. The aim was to determine a strategy for the Mildura Older Irrigated Area comprising the older pumped districts of Mildura, Merbein and Red Cliffs. A Steering Committee comprising of representatives of Council, DPCD and DPI was established to oversee the study. Consultants RMCG and Parsons Brinckerhoff were engaged to undertake the study. The study was undertaken in stages as follows:

- Stage 1 Review and analysis
- Stage 2 Consultation and 'Vision'
- Stage 3 Options
- Stage 4 Consultation on Options
- Stage 5 Implement Preferred Option

Mildura Rural City Council received the final report of the MOIA Strategy (April 2008) but the Strategy is yet to be adopted.

2. MOIA Vision

The Strategy includes the following 'vision' for the MOIA area:

- Seeks to protect the land for horticulture
- Accommodates growth in planned estates around existing towns and hamlets
- Acknowledges the existing rural residential development
- Contributes to the ongoing economic prosperity and quality lifestyle of Mildura.

3. MOIA Options

As a result of the Draft Strategy and consequent consultations, seven options were presented in the Final Report. In summary, these options provided:

Option 1 – Amendment C30

- 10 ha minimum subdivision size
- Dwelling permits approved (other than channel reserves etc)
- House excisions from lots a minimum of 10ha
- Subdivision via boundary realignments

Option 2 – Current Policy

- 10 ha minimum subdivision size
- Dwellings strongly discouraged and subject to a permit on lots less than 10ha
- House excisions from lots a minimum of 10ha

Option 3

- No subdivision (other than excisions)
- New dwellings on lots between 0.4 and 1ha created post 1999
- Excisions from lots of a minimum of 4ha

Option 4

- No subdivision
- No new dwellings
- No excisions

Option A

- Subdivision from lots a minimum of 10ha
- New dwellings on all vacant lots (including new lots created via excisions and boundary realignments)
- Excisions from lots a minimum of 4ha

Option B

- No subdivision (other than excisions)
- New dwellings on all lots less than 1ha
- Excisions from all lots

Option X

- No subdivision (other than excisions)
- New dwellings on all lots up to 1ha and a minimum of 10ha (with no new dwellings on vacant remnant lot)
- Excisions lots to be a minimum of 4ha

The preferred option (Option 'B') envisaged by MOIA included:

- More flexible arrangements for excision of existing dwellings down to 1ha.
- Strict limits on new dwellings above 1ha
- *Providing rural living development around small towns and hamlets.*

4. Amendment C58

Amendment C58 was introduced by the Minister for Planning (without notice) on 28 May 2009 and it contains the following provisions:

- A permit may be granted to excise a dwelling on land of at least 4ha.
- A permit may not be granted for a dwelling on any lot less than 40ha
- The minimum lot size for a dwelling has increased from 10ha to 40ha.
- The minimum lot size for a subdivision has increased from 10ha to 40ha.
- A permit may not be granted for a re-subdivision of existing lots (unless both lots are greater than 40ha);

The Minister for Planning wrote to Council on 28 May 2009 advising of the amendment and noting that:

"...I am willing to consider a further amendment to implement the necessary changes to the Local Planning Policy Framework in line with the MOIA Rural Strategy and hope this can be done in a timely manner."

5. Strategic research and consultations

In responding to this advice, and in formulating a timely response to Amendment C58, Council has had regard to the following strategic work in formulating its modified position:

- MOIA Issues Paper
- MOIA Draft Strategy and Options Paper
- MOIA Review of Submissions
- MOIA Rural Strategy Final Report (2008)
- Land Values Final Report (SGS 2009)
- Social & Economic Impact Study (AEC 2009)
- Mildura Planning Scheme Review (2009)
- Mildura Process and Permit Audit (2009)
- Mildura Rural Areas Study Vol 1&2 (2005)
- Mallee CMA Irrigation Status Report (2009)
- Future Farms - DPCD 2009

Council has also consulted with the following groups in formulating its modified position:

- MRCC staff and MRCC Councillors
- MOIA consultants
- DPCD staff including task force officers and the local and regional office
- Sunrise 21
- Local Bank
- Regional Rural Finance
- Rural Counselling Services.

6. Updated Data

Council has used the base date from the MOIA study in framing its response to Amendment C58. However, the MOIA study did not provide a breakdown of lot sizes below 2ha (see pg 27). Council has now undertaken that assessment based on the most recent data provided by Sunrise 21.

Lots Size (ha)	Number of Lots	Number of Dwellings	Vacant Lots
0.00 - 0.39	2133	1637	496
0.40 - 0.99	1012	737	275
1.00 - 2.00	359	234	125
2.00 - 4.00	610	290	320
4.00 - 10.0	1947	941	1006
Above 10	240	135	105

Note:

Lots between 0.3 and .039 without a dwelling - 154

Lots between 1.0 and 1.2ha without a dwelling - 53

7. Rural Principles

Amendment C58 mainly addresses provisions relating to boundary realignments, excisions and dwelling entitlements. In the context of the Minister's letter of 28 May 2009, and in the context of the MOIA Strategy, Mildura Rural City Council adopts the following land use 'principles' in support of modifications to Amendment C58.

Local Traditions

- There is a local tradition and expectation that farming families will live on the land in the family home.
- There is a local tradition and expectation that farming families will pass on the land and the family home to family members.
- There is a local tradition and expectation that farming families will retire on the land in the family home.
- Farm consolidation is assisted if land is priced at its agricultural value rather than being distorted by its housing value.
- Local and regional financiers confirm that the existence of a dwelling *permit* is a significant factor in the value of the land.

Boundary re-alignments

- Boundary realignments should not be permitted as they typically generate rural residential sized lots which are not encouraged and which are adequately catered for by the excision and dwelling entitlements.
- Boundary realignments could only be considered if farm expansion is the outcome
- There is agreement that there is no point in creating further new vacant house lots.
- There is agreement not to take account of very small and unusable lots (channel reserves; old roads etc) in house entitlement considerations.

Excisions

- Excisions must deliver a better agricultural outcome on at least one of the new lots.
- Excisions must not create a house entitlement where none presently exists.
- So as to limit excision potential in the future, excisions should only be from dwellings that existed on the approval date of Amendment C58 (28 May 2009).
- There is support for the lowering of the excision size from the previous 10ha.
- So as to limit the excision potential in the future, excisions should only be allowed once off any lot.

Dwellings

- There is a need for flexibility to apply for permits at the 'small lot' end
- There is also a need for greater flexibility to apply for permits at the 'larger lot' end
- There is agreement that in between these two ranges, houses will be prohibited.

Rural Hamlets

- There is a pressing need to provide some rural living type opportunities around the rural hamlets such as Cardross, Koorlong and Cabarita.
- There is support for increased dwelling potential around smaller villages.

Hardship/transition issues

- There is support for exemptions (for a limited time) to enable discretion to be exercised for genuine cases caught by the introduction of Amendment C58

8. Suggested Option

In acknowledgement of the above issues, and in recognition of the existing settlement pattern in the MOIA, the following option is suggested for further consideration. This option is discussed under the headings of:

- proposed changes to Amendment C58
- justification for the proposed change
- implications of the change.

8.1 Subdivision (Excision)**Proposed changes to Amendment C58**

- *Every lot of at least 1ha which has an existing dwelling is entitled to apply to excise that dwelling.*
- *The dwelling must have existed on 28 May 2009.*
- *The lot created for an existing dwelling must have an area of no more than 1 hectare.*
- *The excision must be conditional upon a legal agreement that the newly created lots cannot be further subdivided.*
- *The excision must be conditional upon a legal agreement that the newly created lots cannot be further developed with a dwelling.*
- *The excised dwelling must be a Class 1 building under the Building Regulations.*
- *The existing dwelling should be setback at least 5 metres from a new side boundary to protect the balance of the land for horticulture and to minimise amenity and environmental impacts.*

Justification:

- The reduction in the lot area from 4ha (in Amendment C58) to 1ha is consistent with Option B of MOIA as it promotes the potential for farm expansion.
- There is no rational basis to limit an excision opportunity to only those blocks of at least 4ha when there are many lots below this size which could also contribute to farm expansion. So long as there is no further opportunity for a dwelling, the size of the 'parent' lot should not be limited if farm expansion is the aim.

Implications:

- The potential number of excisions was anticipated in Option B of MOIA as being an additional 2215 lots (but with no potential for further subdivision).

8.2 Subdivision (Boundary re-alignment)

Proposed changes to Amendment C58

Boundary re-alignments are prohibited other than to transfer and/or consolidate farming land.

Justification:

This is a modification to the provision from Amendment C58.

Without any prospect for a boundary re-alignment, there is no longer any potential for adjoining farmers, who legitimately wish to trade land, to expand or contract their farm.

Implications:

- The total potential new dwellings is unclear

8.3 Dwellings

A number of important changes are suggested to the 'dwelling' provisions of Amendment C58 and each of these are individually discussed and justified.

Proposed change to Amendment C58

Every lot between 3000m² and 1.2ha has an entitlement to apply for a permit for a dwelling.

Justification:

- This is generally consistent with Options 3 and B of MOIA which permitted dwellings on lots less than 1ha on the basis that '*...these subdivisions were approved for residential purposes*' (pg 50).
- In addition, there are many examples of permits issued, especially since 1999, that expressly refer to a 'residential lot' in the preamble or the conditions of the permit.
- The suggested modifications to Amendment C58 are to take account of local circumstances where lots were created prior to 1999 at 3000m² as being capable of containing effluent on site; and those lots up to 1.2ha (3 acres) reflecting a common lot size.

Implications:

- The potential number of dwellings based on MOIA (as updated) would be for approximately 275 new dwellings.
- Extending the MOIA categories up to 1.2ha would add a potential extra 53 dwellings; while extending the MOIA category down to 0.3ha would add a potential extra 154 dwellings.
- The total potential new dwellings based on this option is 482.

Proposed change to Amendment C58

Every lot of at least 10ha that existed on 28 May 2009 has an entitlement to apply for a dwelling permit.

Justification:

- This is consistent with Option X of MOIA and is based on the fact that up until Amendment C58, lots of at least 10ha did not even need a planning permit for a dwelling.
- For reasons of fairness, equity, hardship and natural justice, it is suggested that lots of this size should at least be able to apply for a permit so long as those lots existed on the day that Amendment C58 was introduced.
- This option responds to the former status quo.

Implications:

- The potential new dwellings based on the MOIA analysis would be for approximately 105 new dwellings.

Proposed change to Amendment C58

Every lot of at least 10ha that was achieved via consolidation of adjoining unencumbered by a Section 173 Agreement ensuring no further dwellings will be constructed, has an entitlement to apply for a dwelling permit.

Justification:

- This is based on the fact that up until Amendment C58, lots of at least 10ha did not even need a planning permit for a dwelling.
- For reasons of fairness, equity, hardship and natural justice, it is suggested that lots of this size should at least be able to apply for a permit so long as those lots are achieved via consolidation of adjoining lots which unencumbered by a Section 173 Agreement ensuring no further dwellings will be constructed.
- This option responds to the former status quo.

Implications:

- The total potential new dwellings are unclear.

Proposed change to Amendment C58

Lots between 1.2ha and 10ha have no entitlement to a dwelling.

Justification:

- This is consistent with many of the options of MOIA and accepts that lots in this category have no potential for a dwelling.
- This is by far the largest 'pool' of undeveloped lots in MOIA. The removal of a dwelling potential from this category will assist the MOIA vision of expanded horticulture by removing a 'dwelling potential' from the value of the land.

Implications:

- The number of lots in this category without an existing dwelling, based on the MOIA analysis, is approximately 1400 lots and these will have no potential for a dwelling.

Note for all dwelling options:

- *Lots which were previously a road reserve, part of a channel, a utility lot, or are of a shape that is not capable of supporting a dwelling, or which do not have a frontage to a road, do not have an entitlement to a dwelling.*

8.4 Hardship

Proposed change to Amendment C58

Since the approval of Amendment C58, many hardship cases have been brought to the attention of Council. These include:

- Applications that were legitimately already part of the planning process by way of lodged applications, expenditure of fees and detailed design.
- Proposals that did not even need a planning permit (lots of 10ha or greater) that had obtained a building permit and were ready to proceed.
- Cases for which contracts for building or sale had been entered into including applications to state or federal government by parties seeking grants such as the first home owner grant on the basis of approved (or as of right) planning permits.
- Concerns over the legality of dwellings that might be destroyed by fire, or are now built but find themselves as prohibited thereby relying on the protection of the 'existing use' provisions of planning schemes.

Justification:

- Quite apart from fairness, equity and natural justice issues, some form of transitional provision is completely consistent with all options of MOIA which contained detailed discussion (pg67) on 'Transitional arrangements'.

9. Options

The following table provides a brief summary of C58, all of the MOIA options and the Councils modified option. The Table also attempts to assess the consistency of the options against the Vision in MOIA based on Chapter 8 of the MOIA report and supplemented by the considerations in Chapter 9.5 of the MOIA report on 'Transitional arrangements'.

Option	Key Features	Potential Houses*	Potential Excisions	Consistent with Vision?
C58	No houses	Zero	1076	Unclear
Option 1	Am. C30	2,500	135	No
Option 2	Old MPS	345	135	No
Option 3	Control	275	1076	Yes
Option 4	No houses	Zero	Zero	Yes
Option A	Unlimited	3,400	1076	No
Option B	Limited	275	2215	Yes
Option X	Expanded	515	1076	Yes?
Council	Potential	585 +?	2215	Yes?

*Based on MOIA data and updated Sunrise 21 data.

10. Summary

The main element of Council's modified option and the basis for requesting this option is summarised as follows:

Preferred Option	Change?	Implications	Justification
No boundary realignment except to expand.	Minor	Little	Facilitates expansion
Excisions from lots of at least 1ha.	Major	About 2200 excisions	Option B Facilitates expansion
Dwellings on lots between 3000m ² and 1.2ha.	Major	Up to 480 new dwellings	Modified Option 3 and Option B
Dwellings on lots of 10ha and above that existed on 28 May 2009.	Major	105 dwellings	Section 1 uses on 27 May 2009
Dwellings on lots of 10ha and above that are created via boundary realignments on adjoining unencumbered lots.	Major	Unclear	Section 1 uses on 27 May 2009
Transitional provisions	Major	Unclear	MOIA Short term Hardship

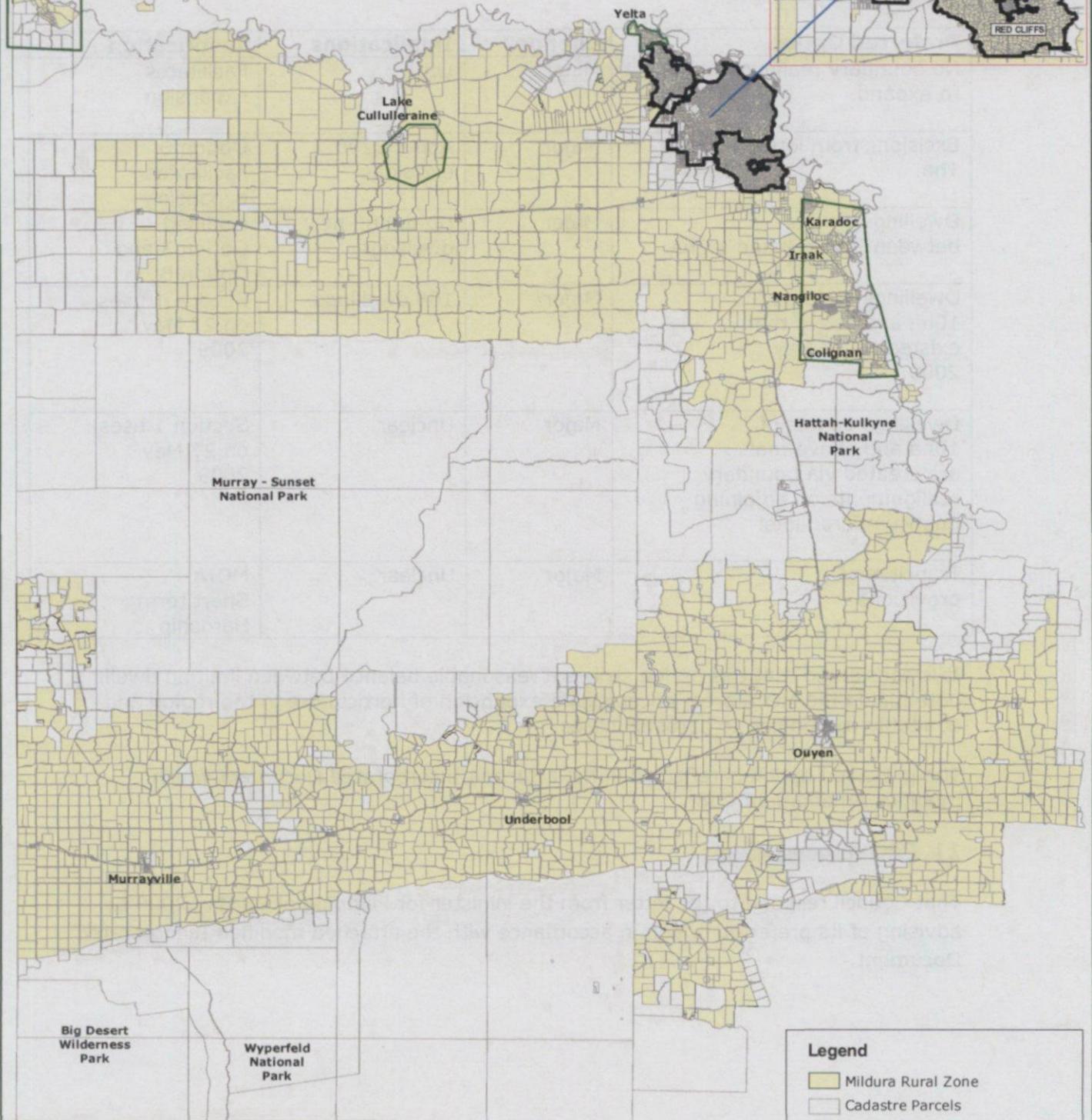
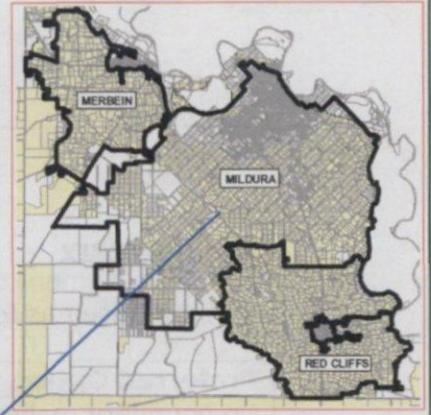
It is considered that this option strikes a reasonable balance between limiting dwelling potential in the MOIA area, encouraging expansion of horticulture in the region and equitably responding to hardship cases.

The preferred option is reflected in the attached Incorporated Document which modifies Amendment C58.

11. Recommendation

That Council respond to the letter from the Minister for Planning of 28 May 2009 by advising of its preferred option in accordance with the attached modified Incorporated Document.

Mildura Rural City Council
Rural Zone
Irrigation District Boundaries
Private Diverters



Legend

- Mildura Rural Zone
- Cadastre Parcels
- Irrigation District Boundaries
- Location of Private Diverters

Information has been sourced from aerial photo interpretations, Vicmap parcel & property data, aerial photos supplied by SunRise 21, and soil survey data interpreted by Sunraysia Environmental.

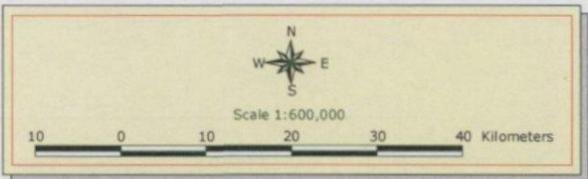
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Prepared on the 30th of November, 2004.
For : Mildura Rural Areas Project

By :



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Mildura Rural City Council Merbein - Soil Suitability

Legend

Soil Suitability

- **Class 1 (suitable for avocado, citrus, almonds, stone fruit, grapes, olives and vegetables)**
 Maximum 60cm of unimpeded potential root depth over powder calcium carbonate.
 Minimum 50cm of unimpeded potential root depth over horizon of calcium carbonate rubble (minimum 40% of horizon to be rubble).
 No structural root or water impedance within 1.5m of surface.
 Low permeability clay deeper than 1.5m below the surface.
 Soil salinity below levels that could cause crop loss.
- **Class 2 (suitable for citrus, almonds, stone fruit, grapes, olives, vegetables and pasture)**
 Unimpeded potential root depth of 40cm to 50cm over powder calcium carbonate.
 Unimpeded potential root depth of 30cm to 45cm over horizon of calcium carbonate rubble (minimum 40% of horizon to be rubble).
 Minimum 50cm over a pan that can be readily ameliorated.
 Low permeability clay deeper than 1.0m below the surface.
 Salinity within the potential rootzone able to be readily leached with the installation of artificial drainage.
- **Class 3 (Marginal - suitable for stone fruit, grapes, olives, vegetables and pasture)**
 Unimpeded potential root depth of greater than 25cm but less than 40cm over powder calcium carbonate.
 Unimpeded potential root depth of 15cm to 25cm over horizon of calcium carbonate rubble (minimum 40% of horizon to be rubble).
 Minimum 20cm over a pan that can be readily ameliorated.
 No impediment to infiltration other than agricultural pans.
 Following amelioration of any pans, permeability and drainage not significantly restricted to 0.6m.
 Low permeability clay deeper than 0.6m below the surface.
 Salinity within the potential rootzone able to be readily leached with the installation of artificial drainage.
- **Class 4 (Unsuitable - recommended for exclusion from development to most horticultural crops)**
 Unimpeded potential root depth of less than 25cm over powder calcium carbonate.
 Unimpeded potential root depth of less than 15cm over horizon of calcium carbonate rubble (minimum 40% of horizon to be rubble).
 Substrates restricted by other than agricultural pans.
 Following amelioration of any pans, permeability and drainage still restricted above 0.6m below the surface.
 Low permeability clay between the surface and 0.6m.
 Salinity within the potential rootzone not able to be readily leached, even with the installation of artificial drainage.

■ No data

— Irrigation district boundary

— Property boundary

— Parcel boundary

■ Crown Land

■ Crown Land

■ Pre-emptive Right

Information has been sourced from aerial photo interpretations, Vicmap parcel & property data, aerial photos supplied by SunRise 21, and soil survey data interpreted by Sunraysia Environmental.

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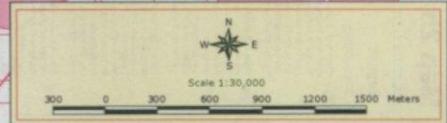
Prepared on the 30th of November, 2004.

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Mildura Rural City Council Mildura - Soil Suitability

Map 2b

Legend

- Soil Suitability**
- Class 1 (suitable for arable, citrus, almonds, olive fruit, grapes, olive seed, seedlings)
Minimum 40cm of unimpeded potential root depth near powder calcium carbonate rubble
(maximum 40% of horizon to be rubble)
No structural rock or water impedance within 1.5m of surface.
Soil salinity hazard level that could cause crop loss.
 - Class 2 (marginal - suitable for olive fruit, grapes, olive, vegetables and seedlings)
Unimpeded potential root depth of 40cm to 25cm near powder calcium carbonate rubble
(maximum 40% of horizon to be rubble)
Minimum 50cm over a pan that can be readily waterlogged.
Soil salinity hazard level that could cause crop loss to be readily backfilled with the installation of artificial drainage.
Following abandonment of any pans, permeability and drainage not significantly restricted to 1.5m.
 - Class 3 (marginal - suitable for olive fruit, grapes, olive, vegetables and seedlings)
Unimpeded potential root depth of greater than 25cm but less than 40cm near powder calcium carbonate rubble
(maximum 40% of horizon to be rubble)
No impediment to surface water flow.
Soil salinity hazard level that could cause crop loss.
 - Class 4 (unsuitable - recommended for pasture from development to seed horticultural crops)
Unimpeded potential root depth of less than 25cm near powder calcium carbonate rubble
(maximum 40% of horizon to be rubble)
Impediment restricted by other than agricultural pans.
Low permeability clay below the surface and 1.5m.
Soil salinity hazard level that could cause crop loss.
 - No data
- Other Features:**
- Irrigation district boundary
 - Property boundary
 - Road boundary
 - Crown Land
 - Green Land
 - Pre-emptive Right

Information has been sourced from aerial photo interpretations, Vicmap property data, aerial photos supplied by Vicmap and the survey data interpreted by Sunraysia Environmental.

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For: Mildura Rural Areas Project

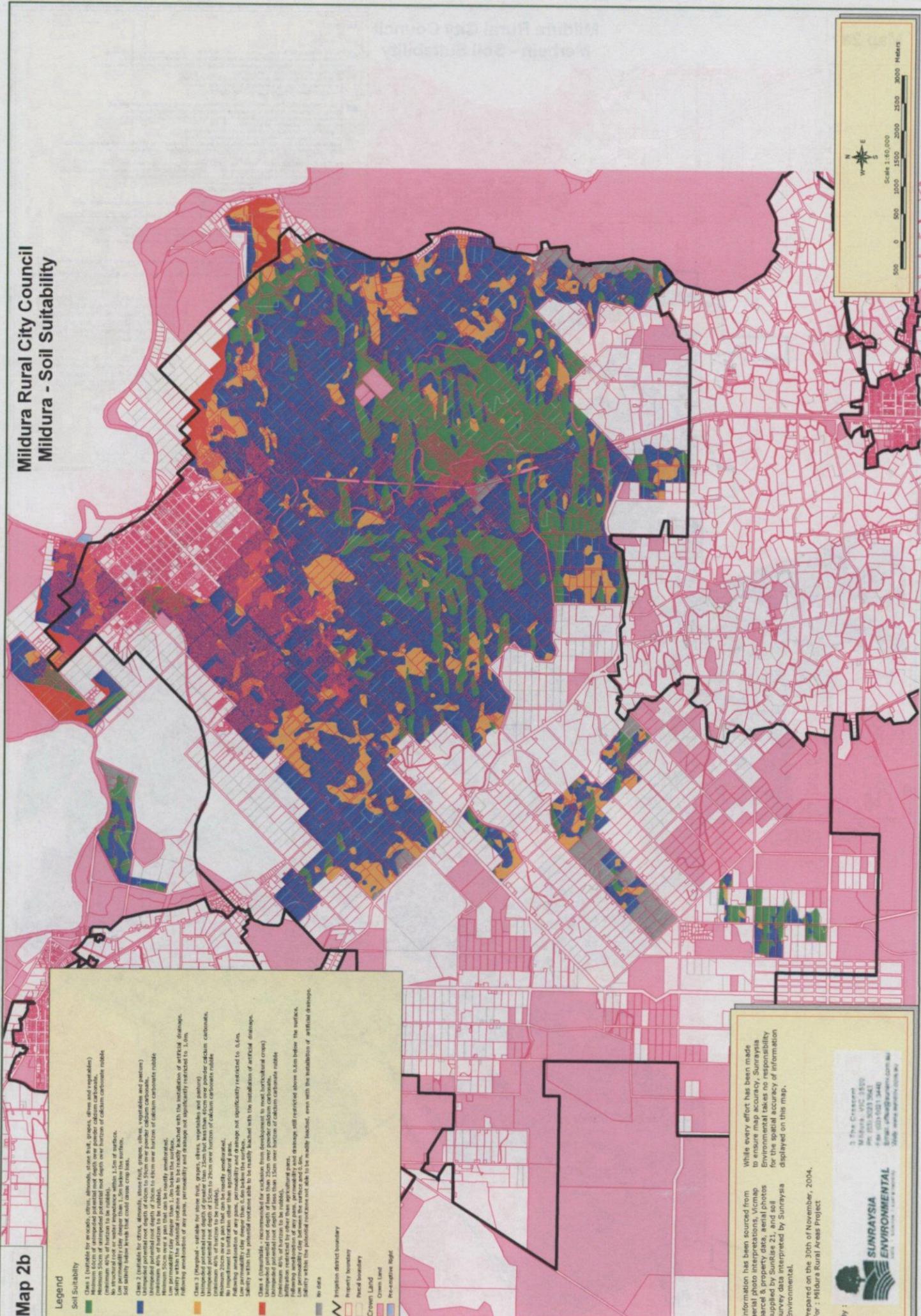
By:

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Mildura - creating a better future

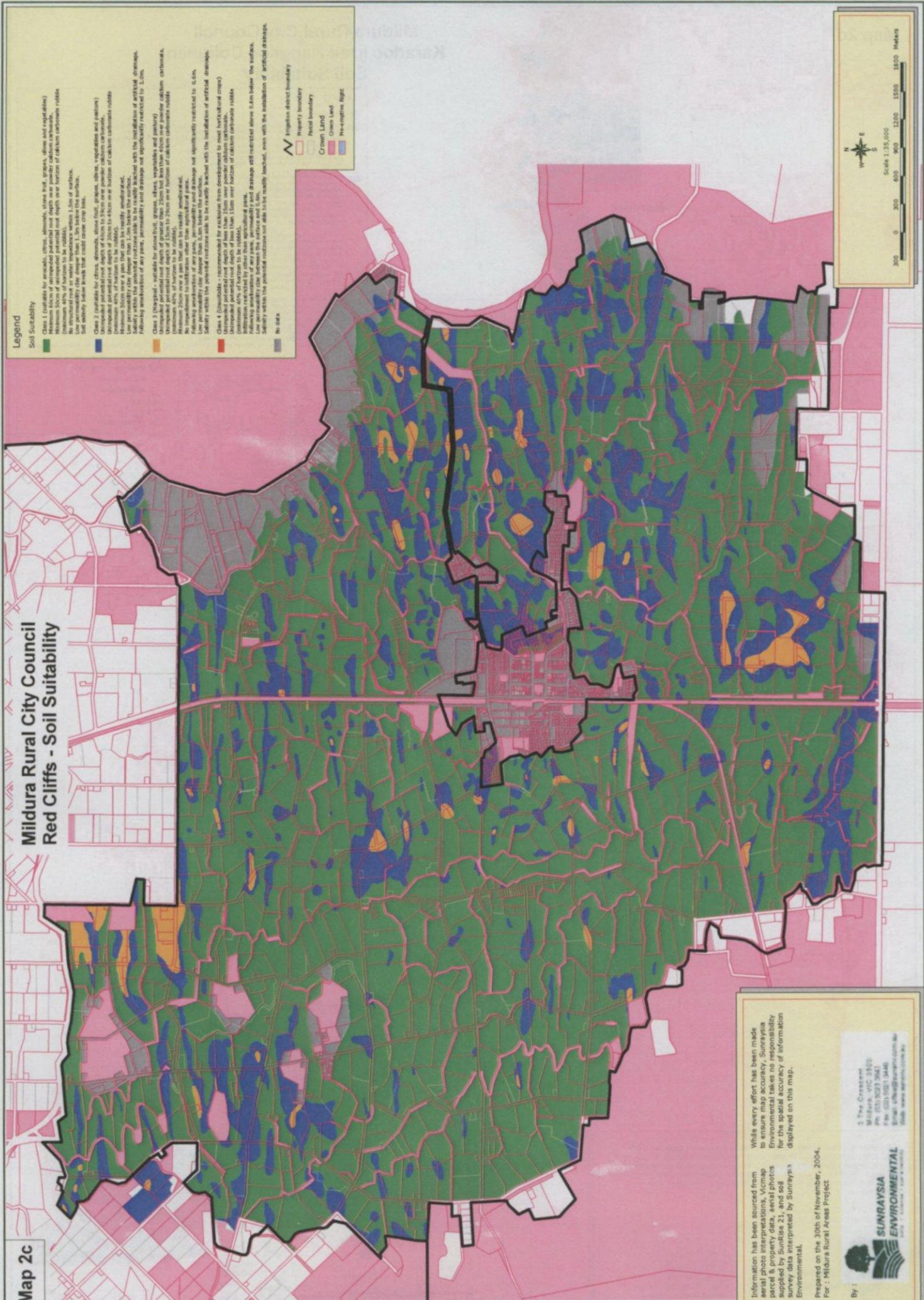
Scale 1:60,000

0 500 1000 1500 2000 2500 3000 Meters

N
W E
S



Mildura Rural City Council Red Cliffs - Soil Suitability



Legend

- Class 1 (suitable for arachids, citrus, almonds, stone fruit, grapes, olive and vegetables)
Minimum 50cm of unimpeded potential root depth over the horizon of calcium carbonate rubble (minimum 40% of horizon to be rubble).
Low permeability clay deeper than 1.5m below the surface.
Soil activity below levels that could cause crop loss.
- Class 2 (suitable for citrus, almonds, stone fruit, grapes, olives, vegetables and pastures)
Unimpeded potential root depth of 30cm to 40cm over horizon of calcium carbonate rubble (minimum 40% of horizon to be rubble).
Low permeability clay deeper than 1.5m below the surface.
Soil activity below levels that could cause crop loss.
- Class 3 (Marginal - suitable for stone fruit, grapes, olives, vegetables and pastures)
Unimpeded potential root depth of 15cm to 20cm over horizon of calcium carbonate rubble (minimum 40% of horizon to be rubble).
No impediment to infiltration other than agricultural pans.
Irrigation application of any pans, grain boundary and drainage not significantly restricted to 0.5m. Suitability within the potential rootzone able to be readily leached with the installation of artificial drainages.
- Class 4 (Unsuitable - recommended for exclusion from development to avoid horticultural crops)
Unimpeded potential root depth of less than 10cm over horizon of calcium carbonate rubble (minimum 40% of horizon to be rubble).
Irrigation restricted by other than agricultural pans.
Low permeability clay between the surface and 0.5m. Suitability within the potential rootzone not able to be readily leached, even with the installation of artificial drainage.
- No data

- Irrigation district boundary
- Property boundary
- Crown Land
- Overland
- Pre-eruptive light

N
W E
S

Scale 1:35,000

300 0 300 600 900 1200 1500 1800 Metres

Information has been sourced from the Department of Environment, Water and Heritage, aerial photos supplied by Sunfire 21, and soil survey data interpreted by Sunraysia Environmental.

Prepared on the 30th of November, 2004.
For : Mildura Rural Areas Project

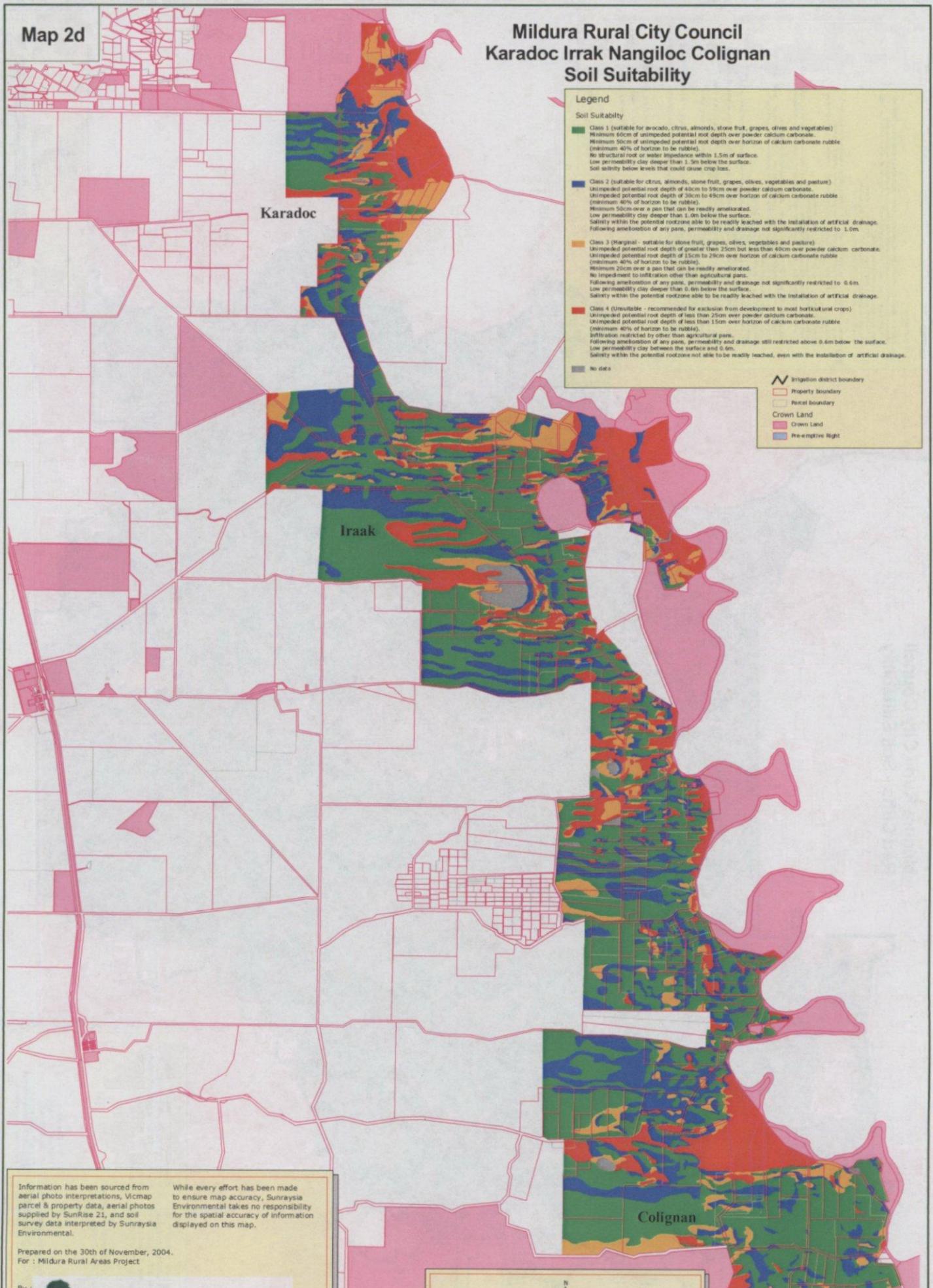
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**SUNRAYSA
ENVIRONMENTAL**
Soil - Air - Water - Land - People

Map 2d

Mildura Rural City Council Karadoc Irrak Nangiloc Colignan Soil Suitability



Legend

Soil Suitability

- Class 1** (suitable for avocado, citrus, almonds, stone fruit, grapes, olives and vegetables)
Minimum 60cm of unimpeded potential root depth over powder calcium carbonate.
Minimum 50cm of unimpeded potential root depth over horizon of calcium carbonate rubble (minimum 40% of horizon to be rubble).
No structural root or water impedance within 1.5m of surface.
Low permeability clay deeper than 1.5m below the surface.
Soil salinity below levels that could cause crop loss.
- Class 2** (suitable for citrus, almonds, stone fruit, grapes, olives, vegetables and pasture)
Unimpeded potential root depth of 40cm to 50cm over powder calcium carbonate.
Unimpeded potential root depth of 30cm to 45cm over horizon of calcium carbonate rubble (minimum 40% of horizon to be rubble).
Minimum 50cm over a pan that can be readily ameliorated.
Low permeability clay deeper than 1.0m below the surface.
Salinity within the potential rootzone able to be readily leached with the installation of artificial drainage.
Following amelioration of any pans, permeability and drainage not significantly restricted to 1.0m.
- Class 3** (Marginal - suitable for stone fruit, grapes, olives, vegetables and pasture)
Unimpeded potential root depth of greater than 25cm but less than 40cm over powder calcium carbonate.
Unimpeded potential root depth of 15cm to 25cm over horizon of calcium carbonate rubble (minimum 40% of horizon to be rubble).
Minimum 20cm over a pan that can be readily ameliorated.
No impediment to infiltration other than agricultural pans.
Following amelioration of any pans, permeability and drainage not significantly restricted to 0.6m.
Low permeability clay deeper than 0.6m below the surface.
Salinity within the potential rootzone able to be readily leached with the installation of artificial drainage.
- Class 4** (Unsuitable - recommended for exclusion from development to most horticultural crops)
Unimpeded potential root depth of less than 25cm over powder calcium carbonate.
Unimpeded potential root depth of less than 15cm over horizon of calcium carbonate rubble (minimum 40% of horizon to be rubble).
Infiltration restricted by other than agricultural pans.
Following amelioration of any pans, permeability and drainage still restricted above 0.6m below the surface.
Low permeability clay between the surface and 0.6m.
Salinity within the potential rootzone not able to be readily leached, even with the installation of artificial drainage.

No data

Other Features:

- Irrigation district boundary
- Property boundary
- Rural boundary
- Crown Land
- Pre-emptive right

Information has been sourced from aerial photo interpretations, Vicmap parcel & property data, aerial photos supplied by SunRise 21, and soil survey data interpreted by Sunraysia Environmental.

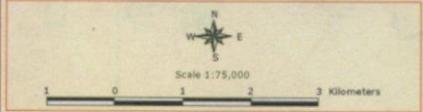
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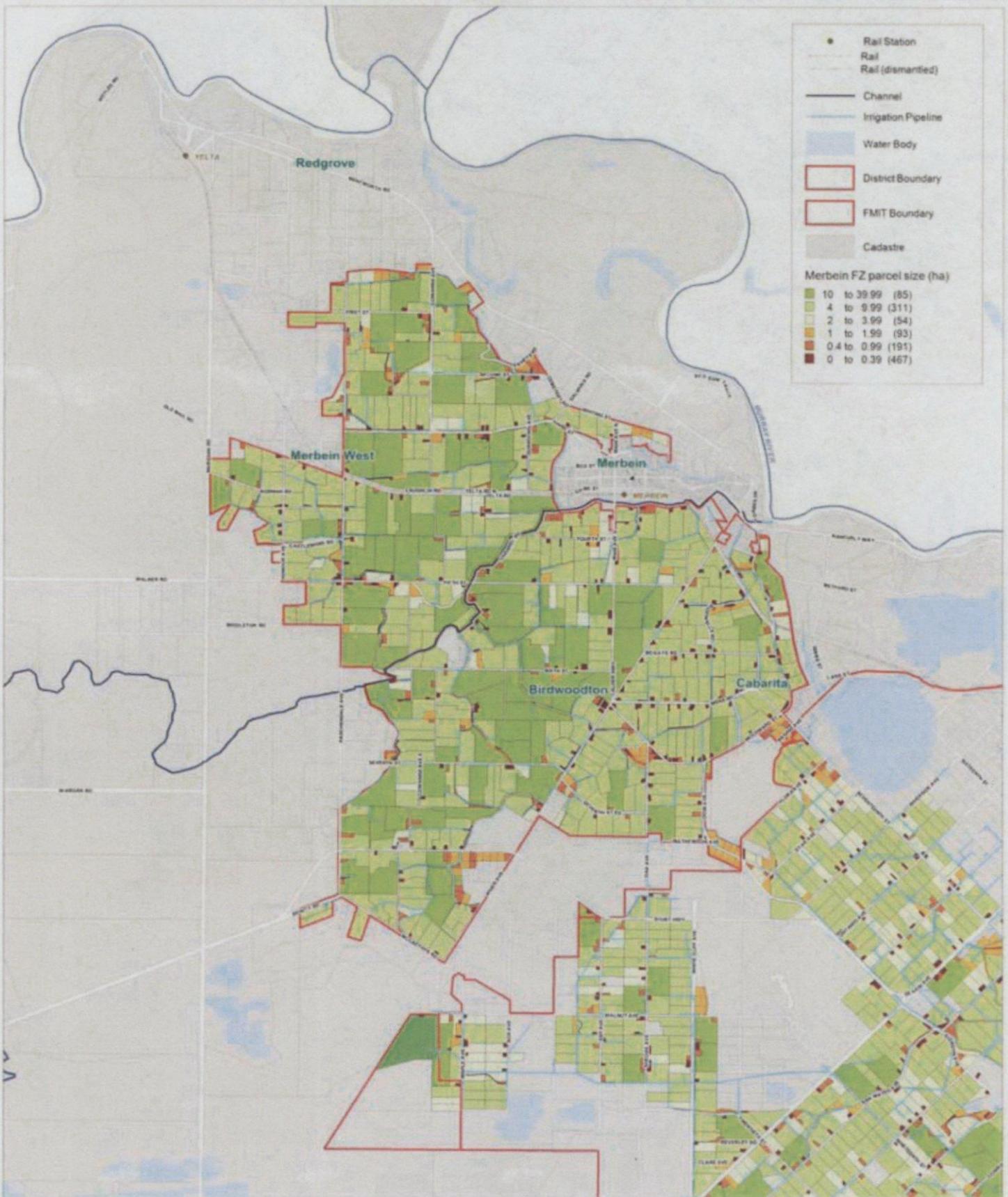
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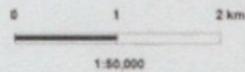
Scale 1:75,000



Merbein District



NORTH



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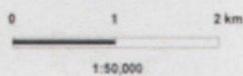
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Planning Policy
Print Date: 26/09/2009
MapRef: 4436 Version: 2
MapRef: 542

Red Cliffs District



NORTH

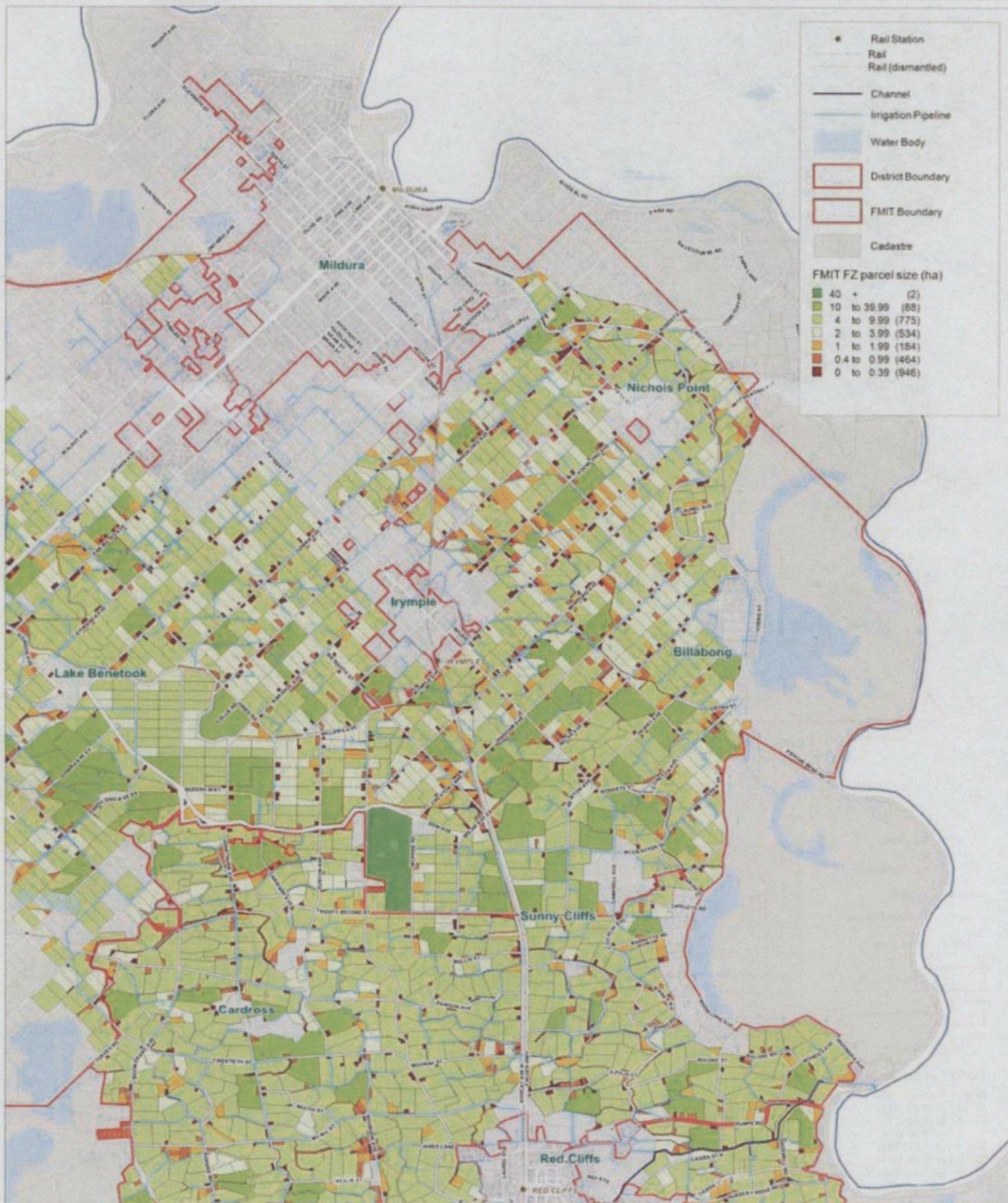


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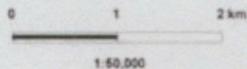
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Planning Policy
 Print Date: 26/08/2009
 MapRef: 4487 Version: 2
 MapSet: 542

FMIT - East



NORTH

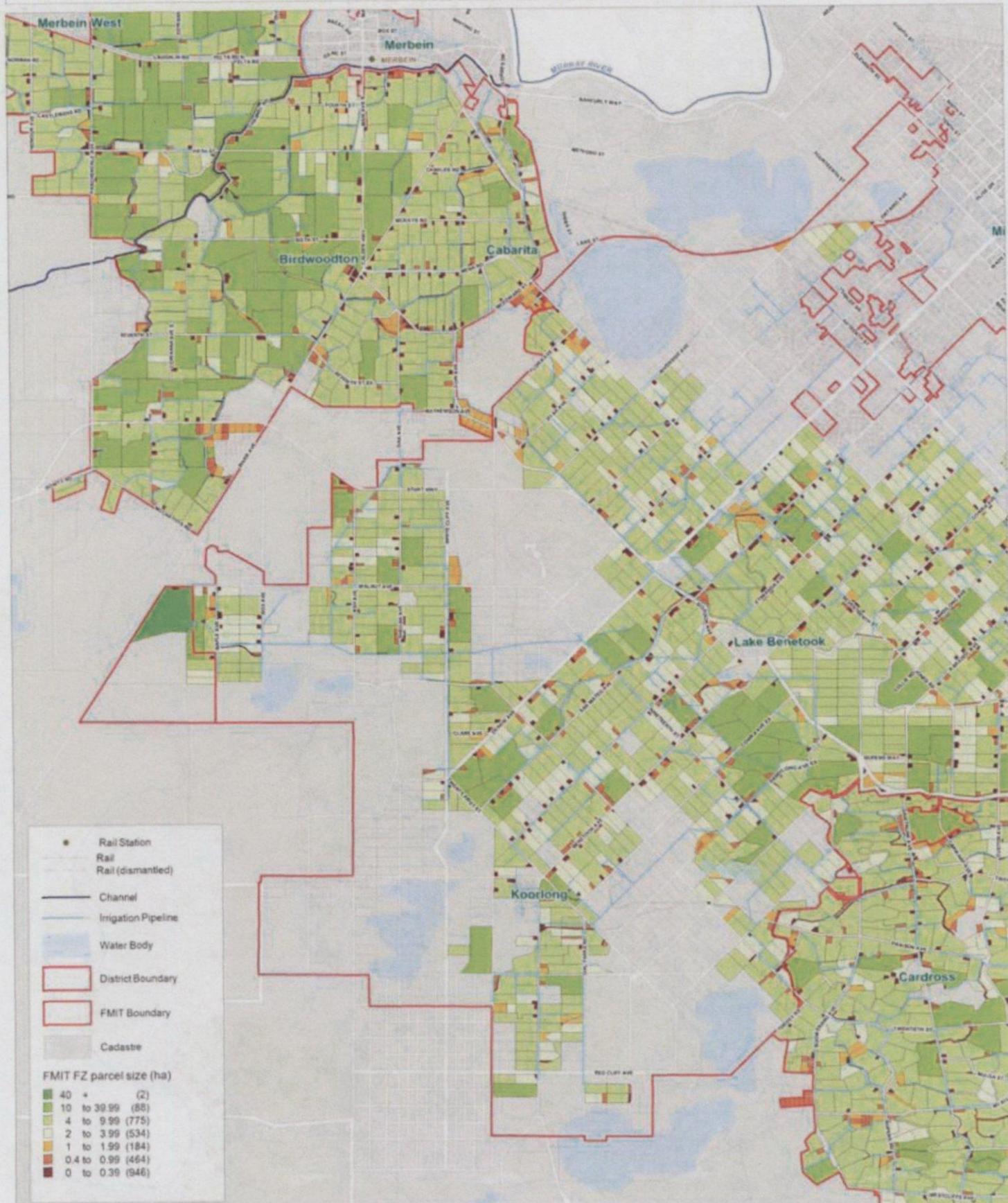


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Original size: A3

Planning Policy
 Print Date 26/08/2009
 MapRef: 4039 Version 2
 MapSet: 542

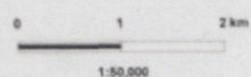
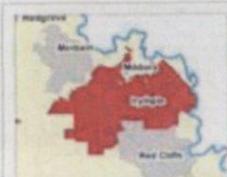
FMIT - West



● Rail Station
 — Rail
 - - - Rail (dismantled)
 — Channel
 — Irrigation Pipeline
 Water Body
 District Boundary
 FMIT Boundary
 Cadastre

FMIT FZ parcel size (ha)

40 +	(2)
10 to 39.99	(88)
4 to 9.99	(775)
2 to 3.99	(534)
1 to 1.99	(184)
0.4 to 0.99	(464)
0 to 0.39	(946)

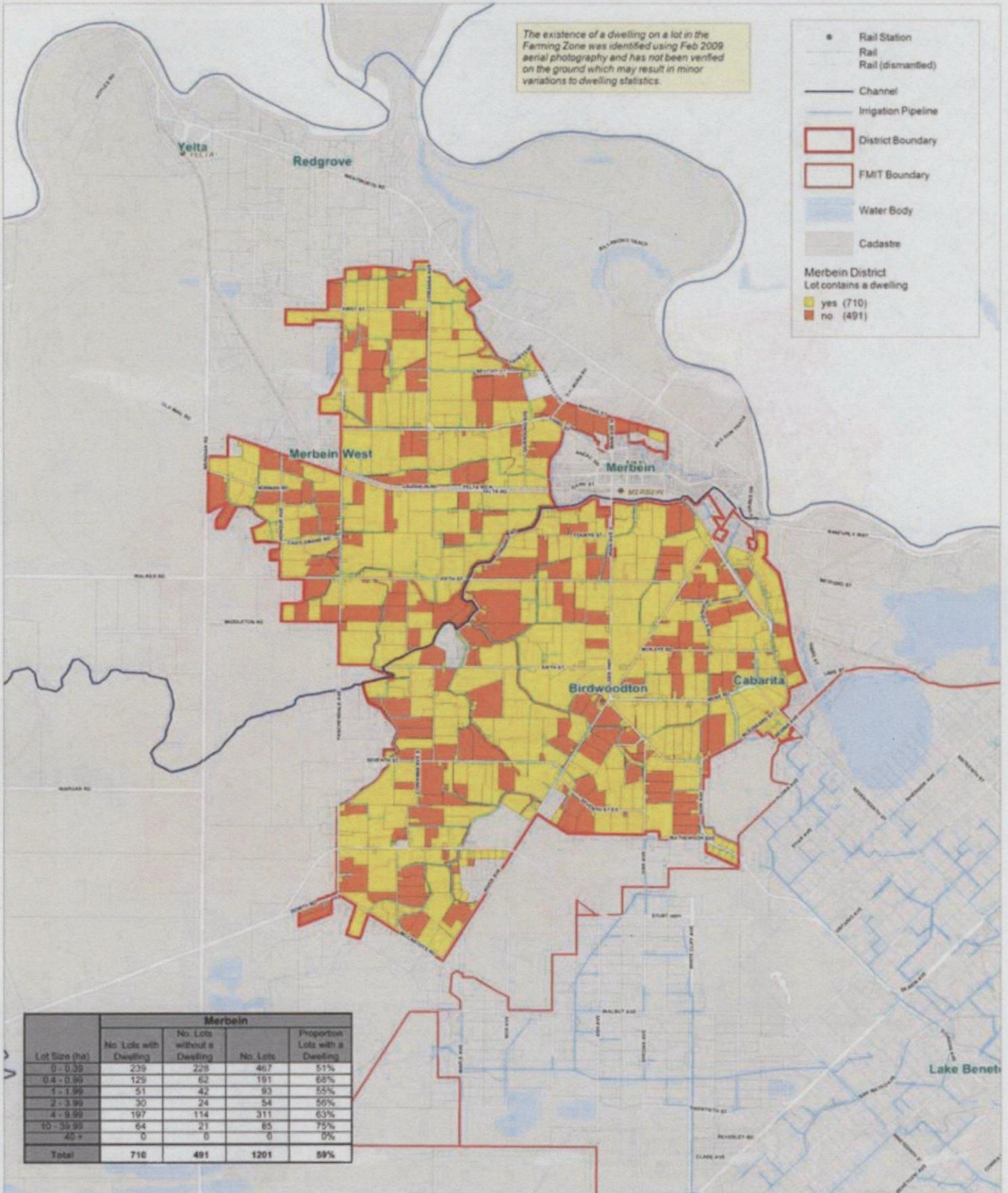


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 Original size: A3
 Planning Policy
 First Date: 26/06/2009
 MapRef: 4480 Version: 2
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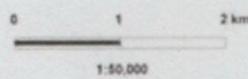
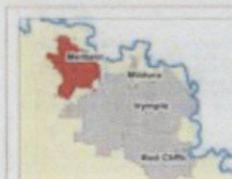
Merbein District Dwelling Status on Lots in the Farming Zone

The existence of a dwelling on a lot in the Farming Zone was identified using Feb 2009 aerial photography and has not been verified on the ground which may result in minor variations to dwelling statistics.

● Rail Station
 — Rail
 — Rail (dismantled)
 — Channel
 — Irrigation Pipeline
 □ District Boundary
 □ FMIT Boundary
 Water Body
 Cadastre
Merbein District
 Lot contains a dwelling
 ■ yes (710)
 ■ no (491)



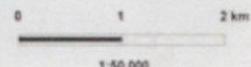
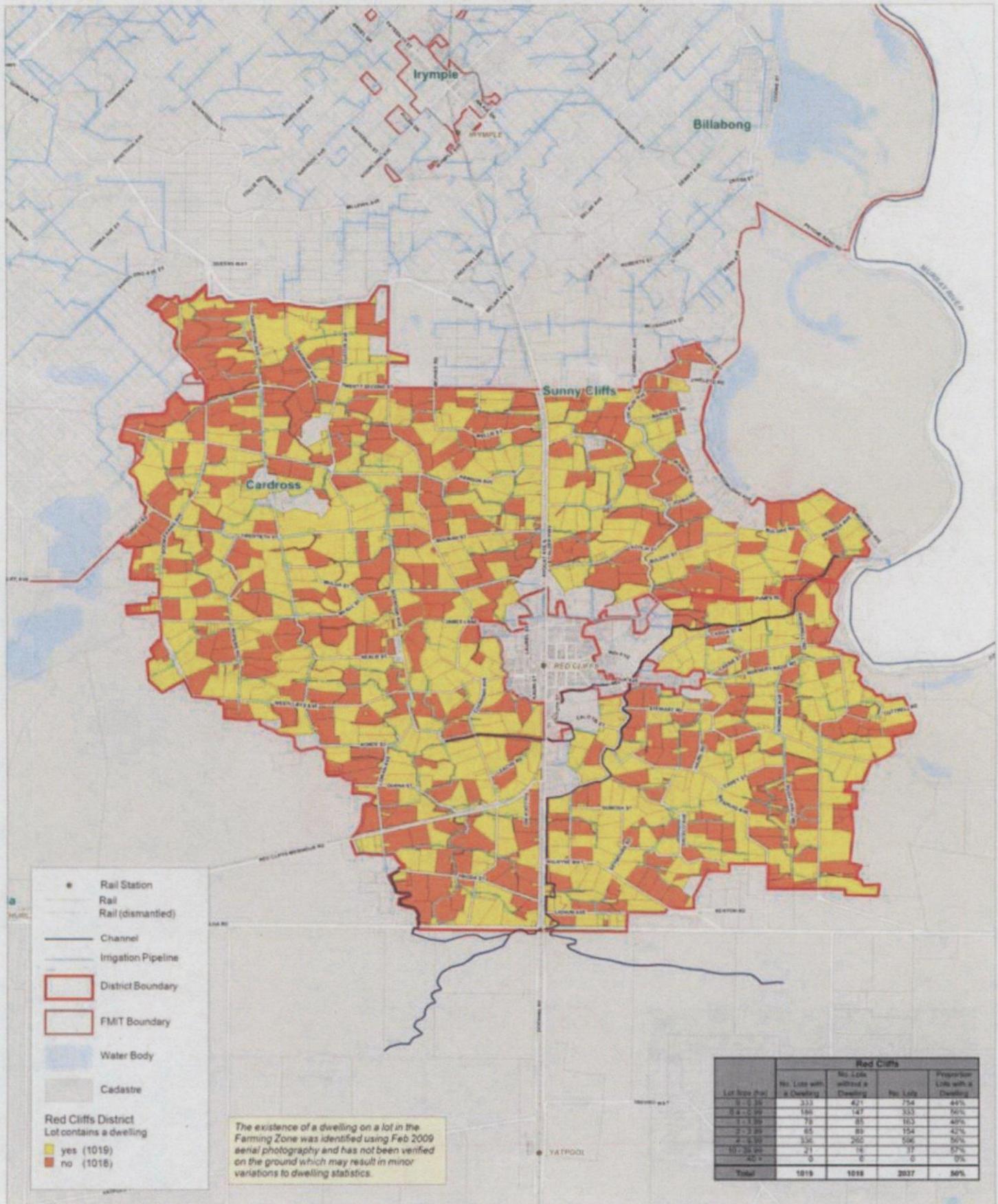
Lot Size (ha)	Merbein			Proportion Lots with a Dwelling
	No. Lots with Dwelling	No. Lots without a Dwelling	No. Lots	
0 - 0.39	239	228	467	51%
0.4 - 0.99	129	62	191	68%
1 - 1.99	51	42	93	55%
2 - 3.99	30	24	54	56%
4 - 9.99	197	114	311	63%
10 - 39.99	64	21	85	75%
40 +	0	0	0	0%
Total	710	491	1201	59%



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Planning Policy
Price Code: 3009/2009
MapRef: 4041 Version: 2
Number: 427

Red Cliffs District Dwelling Status on Lots in the Farming Zone



1:50,000

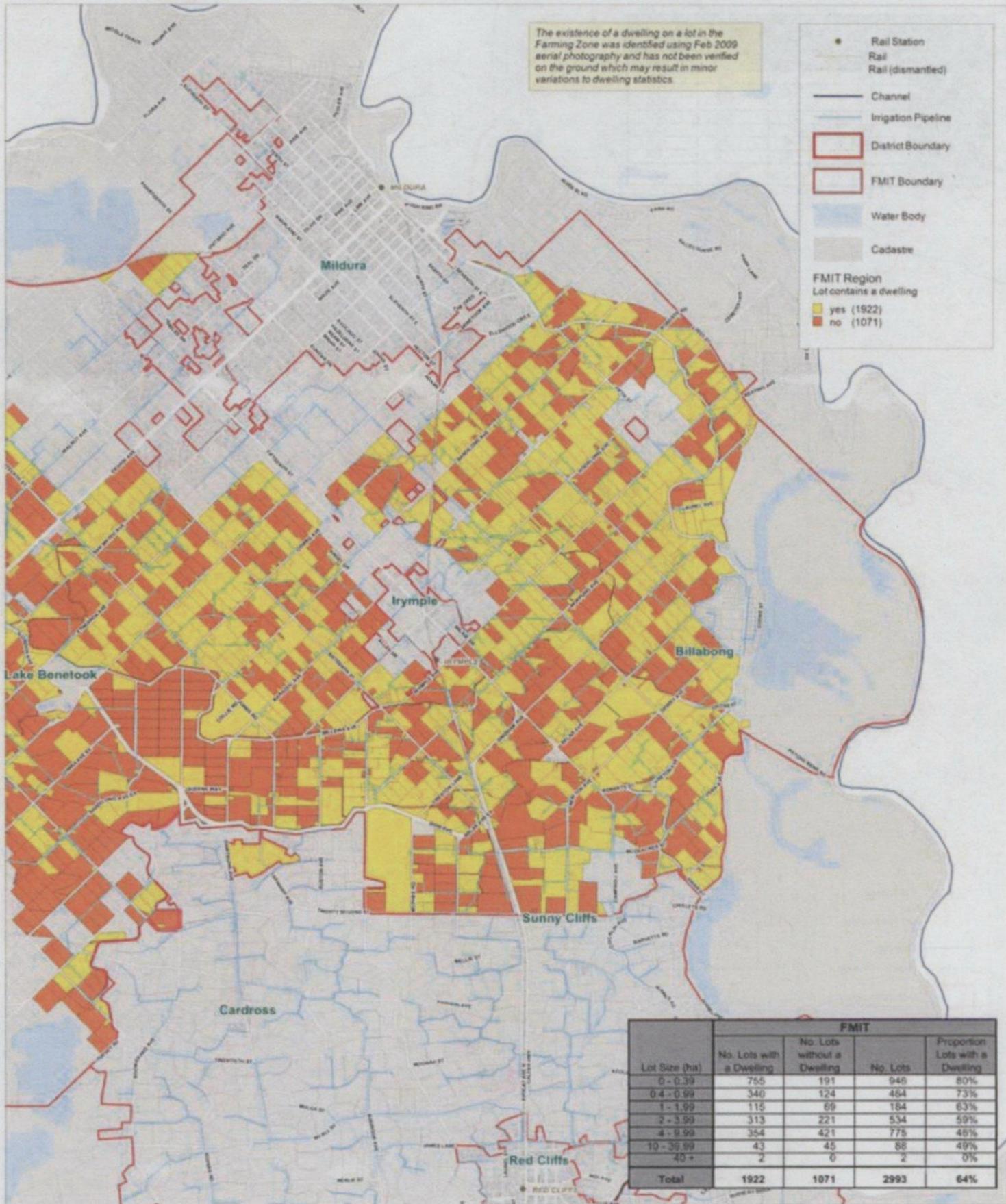
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Original size: A3
 Planning Policy
 First Date: 30/09/2005

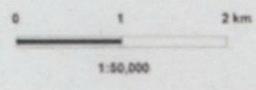
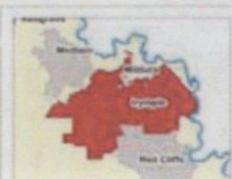
FMIT - East Dwelling Status on Lots in the Farming Zone

The existence of a dwelling on a lot in the Farming Zone was identified using Feb 2009 aerial photography and has not been verified on the ground which may result in minor variations to dwelling statistics.

● Rail Station
— Rail
— Rail (dismantled)
— Channel
— Irrigation Pipeline
 District Boundary
 FMIT Boundary
 Water Body
 Cadastre
FMIT Region
 Lot contains a dwelling
 yes (1922)
 no (1071)



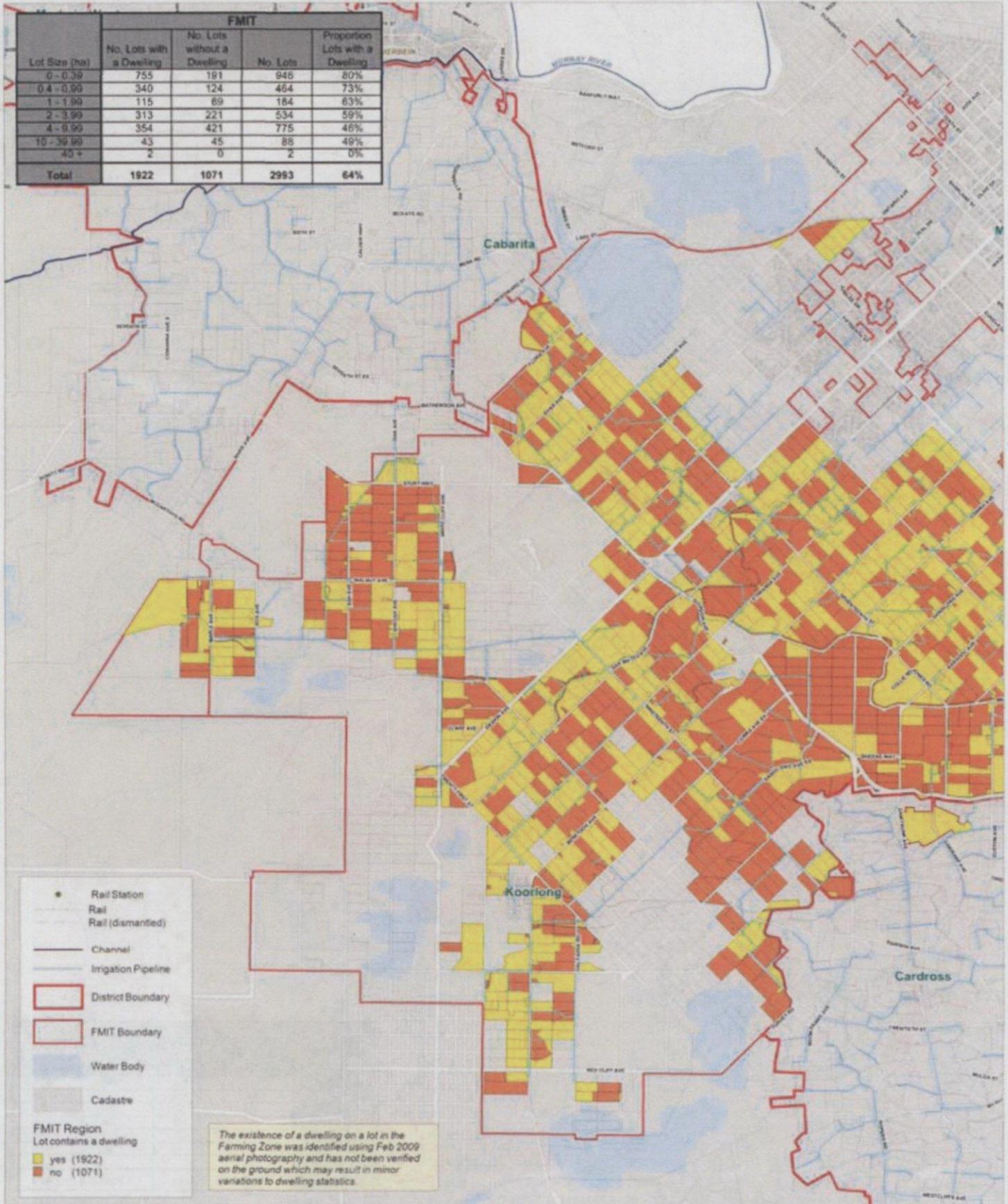
Lot Size (ha)	FMIT			
	No. Lots with a Dwelling	No. Lots without a Dwelling	No. Lots	Proportion Lots with a Dwelling
0 - 0.39	755	191	946	80%
0.4 - 0.99	340	124	464	73%
1 - 1.99	115	69	184	63%
2 - 3.99	313	221	534	59%
4 - 9.99	354	421	775	46%
10 - 39.99	43	45	88	49%
40 +	2	0	2	0%
Total	1922	1071	2993	64%



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Original size: A3

FMIT - West Dwelling Status on Lots in the Farming Zone

Lot Size (ha)	FMIT			
	No. Lots with a Dwelling	No. Lots without a Dwelling	No. Lots	Proportion Lots with a Dwelling
0 - 0.39	755	191	946	80%
0.4 - 0.99	340	124	464	73%
1 - 1.99	115	69	184	63%
2 - 3.99	313	221	534	59%
4 - 9.99	354	421	775	46%
10 - 39.99	43	45	88	49%
40 +	2	0	2	0%
Total	1922	1071	2993	64%

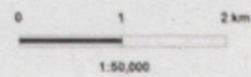
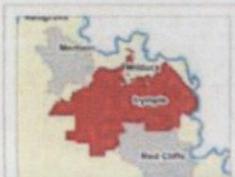


- Rail Station
- Rail
- Rail (dismantled)
- Channel
- Irrigation Pipeline
- District Boundary
- FMIT Boundary
- Water Body
- Cadastre

FMIT Region
Lot contains a dwelling

- yes (1922)
- no (1071)

The existence of a dwelling on a lot in the Farming Zone was identified using Feb 2009 aerial photography and has not been verified on the ground which may result in minor variations to dwelling statistics.

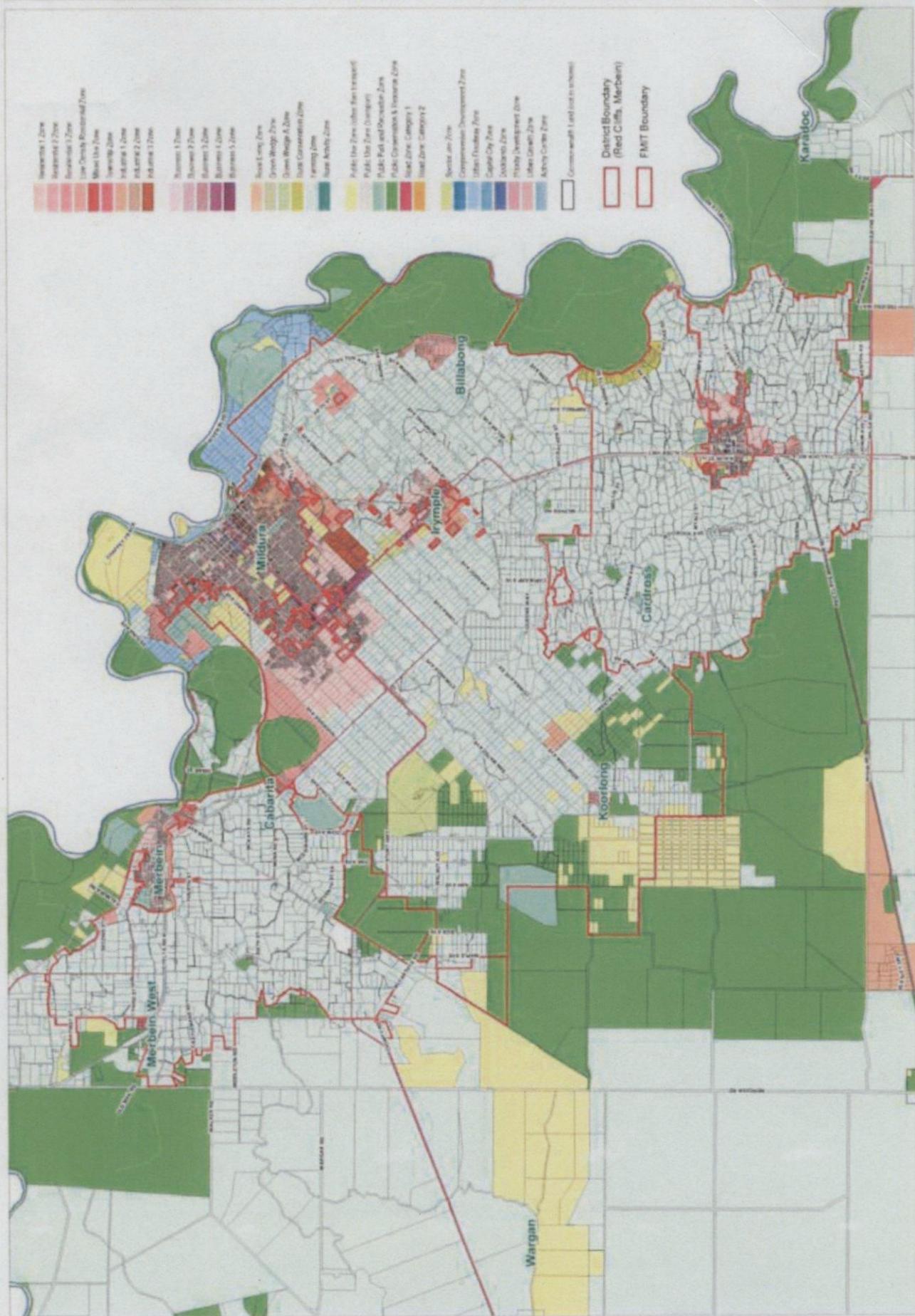


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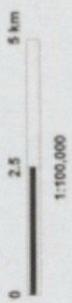
Original size: A3
Planning Policy
Print Date: 30/09/2009
MapRef: 4645 Version: 2
MapScale: 1:50,000



- Investment 1 Zone
- Investment 2 Zone
- Investment 3 Zone
- Low Density Residential Zone
- Mixed Use Zone
- Neighbourhood Zone
- Industrial 1 Zone
- Industrial 2 Zone
- Industrial 3 Zone
- Business 1 Zone
- Business 2 Zone
- Business 3 Zone
- Business 4 Zone
- Business 5 Zone
- Local Living Zone
- Green Wedge A Zone
- Green Wedge B Zone
- Local Conservation Zone
- Farming Zone
- Local Activity Zone
- Public Use Zones (other than Transport)
- Public Use Zone (Transport)
- Public Park and Recreation Zone
- Public Conservation & Historical Zone
- Local Zone Category 1
- Local Zone Category 2
- Special Use Zone
- Comprehensive Development Zone
- Urban Fringe Zone
- Capital City Zone
- Docklands Zone
- Neighbourhood Development Zone
- Urban Growth Zone
- Activity Centre Zone
- Commonwealth Land (not in scheme)
- District Boundary (Red Cliffs, Merbein)
- FMIT Boundary



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1:100,000

MOIA Planning Scheme