



ISSUES, OPPORTUNITIES AND RECOMMENDATIONS (INTERIM REPORT)

Werribee South, City of Wyndham, Victoria

22 September 2023

Prepared for

CITY OF WYNDHAM

Prepared by

LOVELL CHEN

ACKNOWLEDGEMENT OF COUNTRY This report was prepared on the lands of the Wurundjeri people who have been custodians of this land for thousands of years. We acknowledge their stories, connection to land, water and culture which is embedded in Country. We pay our respects to their Elders past and present and acknowledge that this report includes a post-contact history that forms only a small part of the ongoing story. Werribee South is located on the lands of the Bunurong people, who are, and have always been the custodians of this land. We pay our respects to the Elders past and present, and acknowledge the stories, traditions and cultures of all Aboriginal and Torres Strait Islander people.

Quality Assurance Register

The following quality assurance register documents the development and issue of this report prepared by Lovell Chen Pty Ltd in accordance with our quality management system.

Project no.	Issue no.	Description	Issue date	Approval
10055	1	Draft for WCC review	13 September 2023	AM
10055	2	Interim report	22 September 2023	AM

Referencing

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Cover: Bailiff monitoring water allocation, Werribee South, c. 1940 (Source: State Library of Victoria, 'c1940-60 rw005610')

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1.0 INTRODUCTION

This document was prepared by Lovell Chen for Wyndham City Council (WCC). It forms part of the second stage of a municipality-wide Heritage Review – 'Stage 2 Study (Residential Places and Precincts)'.

A priority arising from the first stage of the Heritage Review ('Stage 1 Gap Study' prepared by Context Pty Ltd, now GML) was the identification of residential places and precincts for potential inclusion in the Schedule to WCC's Heritage Overlay (HO). The Stage 1 recommendations were formally adopted by WCC on 29 June 2021.

Places and precincts in Werribee South (also referred to below as the Werribee South Intensive Agriculture Precinct, WSIAP) identified during Stage 1 included 23 privately owned residences and groups of boatsheds at Campbell's Cove and Bailey's Beach.

During the conduct of the present stage of the Heritage Review (referred to here as 'Stage 2 Study, Residential Places and Precincts'), the consultant team (Lovell Chen and Biosis) was advised that members of the Werribee South community were resistant to the inclusion of additional places in the HO, particularly private residences.¹

1.1 Interim recommendations

Interim recommendations in relation to Werribee South included the proposition of serial listing controls, linking places thematically.² The places identified in Stage 1 represent the following themes:

- Irrigation/Closer Settlement
- Post-war migration and market gardens
- Tourism/recreation

1.2 Expanded scope

In May 2023, WCC requested that Lovell Chen explore opportunities to recognise and celebrate the valued aspects/attributes of Werribee South that would not result in the application of statutory heritage controls to the residential properties identified in Stage 1.

In response, Lovell Chen issued a memorandum (22 June 2023) that recommended the adoption of principles from UNESCO's 'Historic Urban Landscapes' model (see also Section 5.0):

From a theoretical perspective, our response to Council's instructions is informed by the Historic Urban Landscape (HUL) model, albeit adapted to the agricultural landscape of Werribee South.

This resistance did not extend to the Campbell's Cove and Bailey's Beach boatsheds, which were assessed during the Heritage Study and recommended for inclusion in the HO. See Volume 3 of the 'Stage 2 Study, Residential Places and Precincts'.

As related to serial listings, *Planning Practice Note 1, Applying the Heritage Overlay* (August 2018), notes, 'Places that share a common history and/or significance, but which do not adjoin each other or form a geographical grouping may be considered for treatment as a single heritage place. Each place that forms part of the group might share a common statement of significance; a single entry in the Heritage Overlay schedule and a single Heritage Overlay number'.

The HUL model of managing historic areas – which was developed by UNESCO and has been trialled in varied settings around the world including the City of Ballarat – is holistic and recognises that historic environments are subject to dynamic forces in the economic, social and cultural spheres, forces that have shaped it historically and continue to do so. UNESCO's approach to managing historic landscapes integrates the goals of heritage conservation and those of social and economic development. This method sees heritage as a social, cultural and economic asset for the development of cities and municipalities and moves beyond the preservation of the physical environment and focuses on the entire human environment with all of its tangible and intangible qualities. Critically, the HUL model seeks to increase the sustainability of planning and design interventions by taking into account the existing environment, intangible heritage, cultural diversity, socio-economic and environmental factors along with local community values.

It is anticipated that the HUL model can be adapted to meet Council's expanded scope as related to Werribee South. It will also afford opportunities to engage the community in the process of analysis and assessment and provide a sound basis to explore alternative approaches to the recognition of significance.³

1.2.1 Methodology

The methodology agreed for the variation, in summary, is as follows:

1 Audit of the Schedule to the Heritage Overlay

Audit of the Schedule to the HO as it relates to Werribee South to establish what properties are included, whether they are extant and what themes they represent.

Comparative analysis

Review how other municipalities and localities have recognised the heritage values of broad-scale farming and irrigation landscapes.

Comparative analysis will include review of Ballarat's experience of HUL.

3 Sequential historic mapping (high-level)

Historical research sufficient to establish major phases in the sequential development of the Werribee South landscape from the early 20th century (noting that analysis of the landscape from a First Nations perspective would need to be addressed through future consultation with Traditional Owners).

We propose to prepare maps of the area to show patterns of settlement, evolving approaches to land use (cropping, farming, market gardening etc) and the scale and provenance of the population (including south European migrants). This would inform analysis of existing built form within the study area.

The objective, consistent with the HUL model, is to build up an understanding of layers of activity, occupation and land use over time. The mapping will also be a tool for engagement with the community. Sources will include land records at PROV and Landata, newspapers, aerial and other photography, and existing secondary sources.

Outcomes will form the basis of histories to be included in the citations (if required), as well as the updated environmental history.

Lovell Chen (Adam Mornement) memorandum to WCC (Kristien Van den Bossche and Felicity Watson), 22 June 2023.

Workshop with Council officers

Workshop. Issues for discussion will include reflection on outcomes of stages 1-4 (above), and discussion of options for next steps.

- Workshop with Werribee South Ratepayer's Association
 Should Council decide to adopt an alternative approach to recognising the heritage of Werribee South, further workshops and engagement with the community will be required in later stages.
- Fieldwork
 Survey to identify extant places and landscape features that relate to key themes/phases identified through the sequential mapping and engagement processes described above.
- Reporting for the implementation of alternative approaches to recognising the heritage of Werribee South

 Recommendations detailing options (including methodologies and tools) for recognising and
- celebrating the heritage of Werribee South that do not involve the application of the HO.

 Recommendations for the Heritage Overlay

Options may include the two serial listings suggested in the Interim Report. Recommendations may not be limited to residential places – i.e. the outcomes of research for Task 3 above (and others) may reveal non-residential places of merit.

1.2.2 Limitations

As noted above, for the purposes of this report – which is exploratory in nature – limited consultation has been undertaken with relevant stakeholders, including Traditional Owners.

Consultation with other internal and external stakeholders was also limited, as outlined at Section 6.0.

Should the recommendations of this report that do not relate to the application of the HO be adopted (see Section 7.2), there will be a requirement for active processes of engagement with the BLCAC and the broader community.

2.0 UNDERSTANDING WERRIBEE SOUTH

The following provides an overview of key features and characteristics of Werribee South. A chronology of the area since the early twentieth century is at Appendix A.

2.1 Overview of the study area

Werribee South, a suburb in the City of Wyndham local government area, is 32 kilometres south-west of Melbourne. It covers an area of 36.9 square kilometres (3,690 hectares). The north-eastern boundary of Werribee South is the Princes Freeway; the east boundary is the suburb of Point Cook; the south-east boundary is Port Phillip Bay; and the west boundary is the Werribee River (Figure 1).

Werribee South is situated to the east of the alluvial delta of the Werribee River. The alluvium of the delta is composed of basalt and sandstone. The delta is generally flat, with a gentle slope towards the coastline. The slope allowed for a gravitational irrigation system to be adopted, with upstream heads of water feeding into the Werribee Diversion Weir (approximately 25 metres above sea level), then through channels to the WSIAP.

Werribee South is one of the most significant market garden regions in Victoria. There are approximately 150 vegetable farms in the WSIAP (the study area), producing c. 10% of the vegetables grown in Victoria, including 86% of the cauliflowers, 63% of the broccoli and 34% of the lettuce. In 2020-21, the total value of agricultural production in the City of Wyndham was \$112 million, with vegetables accounting for 72.2% of the area's total agricultural output in value terms. In 2021/22, the agricultural industry in Wyndham sustained a work force of over 1,140, equating to 1.9% of the agricultural workforce in Victoria.

The water supplier for Werribee South is Southern Rural Water, which manages the Werribee Irrigation District, dams and weirs. Since 2007, recycled water has been made available to farmers from the adjacent Western Treatment Plant. The early twentieth century network of water channels is currently undergoing modernisation to replace above-ground concrete channels with pipelines (Figure 4).⁷

Features within and near to Werribee South include the Werribee Park (Mansion), Werribee Open Range Zoo, the National Equestrian Centre, Werribee Park Golf Club, the Werribee River, Werribee South beach and foreshore, the Federation Trail bicycle path and K Road Cliffs. A general store and post office are located on Duncans Road and the Diggers Road Memorial Hall, built to commemorate service members in World War I, is located at the corner of Diggers Road and Whites Road (discussed further below).

LOVELL CHEN

City of Wyndham, Wyndham City Submission Australian House of Representatives - Standing Committee on Agriculture and Water Resources Inquiry into water use efficiency in Australian agriculture, Submission 44, Commonwealth of Australia, June 2017, p. 2.

City of Wyndham, 'Agriculture', *City of Wyndham Economic Profile*, https://economy.id.com.au/wyndham/value-of-agriculture?IndkeyNieir=23001&sEndYear=2021, accessed 31 August 2023.

City of Wyndham, 'Industry sector analysis - agriculture', *City of Wyndham Economic Profile*,

https://economy.id.com.au/wyndham/industry-sector-analysis?IndkeyNieir=23001&sEndYear=2021, accessed 31 August 2023

Southern Rural Water, *Werribee Irrigation District Modernisation*, https://www.srw.com.au/initiatives/projects/werribee-irrigation-district-modernisation, accessed 31 August 2023.



Figure 1 Werribee South, suburb boundary in red Source: City of Wyndham, 2021

2.2 The landscape: physcial characteristics

Werribee South is a flat landscape dominated by intensive agricultural production. Vegetable production – predominantly brassicas (including cabbages and cauliflowers) and lettuce cultivars – is continuous (Figure 2 and Figure 3).

The water channels that make the landscape viable are now generally underground (Figure 4). Earlier above-ground channels, and associated concrete infrastructure, survive as evidence of past practice (Figure 5). The same applies to Cypress windbreaks, which were once a ubiquitous feature of the landscape but are now in decline and have generally not been replaced (Figure 6).

Built form includes modern large-scale greenhouses and steel-framed enclosures/stores (Figure 7 and Figure 8). Private residences are dispersed throughout, typically being sited close to the roadways. Some are in small groups, for instance, at the intersections of Hacketts and Aviation roads and Cunninghams and Robbs roads. Concentrations of residential development are limited to Wyndham Harbour (Figure 9) and Werribee South Township.

Private residential development demonstrates a wide range of styles, dating from the interwar period to the present (Figure 10, Figure 11, Figure 12 and Figure 13). The adapted railway carriage (now a store) at 500 O'Connor's Road is an apparently unique example of the informal accommodation that was common in the pre-World War II period (see HO70, Table 1).

Outside of Wyndham Harbour and Werribee South Township, public buildings are generally limited to schools (including St Mary's Campus of Mackillop College at the corner of O'Connors and White roads and Warringa Park School at 10 Cayleys Road), the Diggers Road Hall (see HO33, Table 1) and Werribee South General Store (Figure 14). It is understood that there are no churches in Werribee South.



Figure 2 Intensive agricultural production: view from Cunninghams Road Source: Lovell Chen, September 2023



Figure 3 Intensive agricultural production: view from Cuttriss Road Source: Lovell Chen, September 2023



Figure 4 The renewal of the irrigation channels at Werribee South is nearing completion (September 2023): view from Hoppers Lane
Source: Lovell Chen, September 2023



Figure 5 Dis-used water channel and concrete infrastructure: Hoppers Lane Source: Lovell Chen, September 2023



Figure 6 Remnant section of Cypress windbreak Source: Lovell Chen, September 2023



Figure 7 Large-scale greenhouses: view from Hoppers Lane Source: Lovell Chen, September 2023



Figure 8 Large-scale steel-framed structure at 10 Robbs Road Source: Lovell Chen, September 2023



Figure 9 View looking south along Duncan's Road: Wyndham Harbour, developed from the early twenty-first century, is on the right

Source: Lovell Chen, September 2023



Figure 10 Abandoned farmhouse, Aviation Road: not included in the HO and not proposed for inclusion in the HO

Source: Lovell Chen, September 2023



Figure 11 Number 949a Aviation Road (right, HO5) and 949 Aviation Road (not included in the HO, and not proposed for inclusion in the HO)

Source: Lovell Chen, September 2023



Figure 12 No. 780 Duncans Road: not included in the HO and not proposed for inclusion in the HO Source: Lovell Chen, September 2023



Figure 13 No. 745 Duncans Road: not included in the HO and not proposed for inclusion in the HO Source: Lovell Chen, September 2023



Figure 14 Werribee South General Store, 785 Duncans Road: not included in the HO and not proposed for inclusion in the HO Source: Lovell Chen, September 2023

2.3 Community

In 2021, the population of Werribee South was estimated to be 2,392, with the greatest concentrations at Wyndham Harbour and Werribee South Township.⁸ The City of Wyndham as a whole had a population of 308,623 in 2022 and is one of the fastest growing municipalities in Victoria.⁹

The relatively small scale of the Werribee South population, and its collective engagement (historically) in agricultural activities are factors that have promoted a strong sense of communal identity in the area. Families with multi-generational connections to Werribee South are another; there has been a strong representation of families with south European origins in the area since at least the 1920s. (See also outcomes of the workshop with representatives of the Werribee South community at Section 6.0.)

In recent decades there has been a pattern of the Werribee South community coalescing in protest, for instance in opposition to the proposed CSR toxic waste landfill site in the 1990s¹⁰ and a Youth Detention Centre in 2017. The proposed addition of places to the HO through the present 'Stage 2 Study, Residential Places and Precincts' has also galvanised a collective response.

-

Australia Bureau of Statistics, 'Werribee South 2021 Census All persons QuickStats', Australian Bureau of Statistics, 2021, https://www.abs.gov.au/census/find-census-data/quickstats/2021/SAL22751, accessed 31 August 2023.

⁹ City of Wyndham, City of Wyndham Community Profile, https://profile.id.com.au/wyndham, accessed 31 August 2023.

Paul Strangio, *No Toxic Dump! A triumph for grassroots democracy and environmental justice*, Pluto Press Australia, 2001.

3.0 PLANNING AND ENVIRONMENT ACT, 1987 (VICTORIA)

The Wyndham Planning Scheme is established under the Planning and Environment Act, 1987.

3.1.1 Green Wedge Zone

Werribee South is zoned Green Wedge (GWZ)¹¹ and Green Wedge Zone A (GWZA)¹² (see Figure 15).¹³ Exceptions are Wyndham Harbour (Special Use Zone) and Werribee South Township (General Residential). Green wedge land is defined under the *Planning and Environment Act 1987* as land outside an Urban Growth Boundary (UGB). Part 3AA of the *Planning and Environment Act 1987* provides protection for metropolitan green wedge land by establishing procedures for planning scheme amendments affecting that land. Procedures include the application of zones to green wedge land through municipal planning schemes.

As per 'Planning Practice Note PPN62: Green wedge planning provisions':

The Green Wedge Zone recognises and protects non-urban land outside the UGB in the metropolitan area for its agricultural, environmental, historic, landscape or recreational values, or mineral and stone resources.

The zone provides opportunity for all agricultural uses and limits non-rural uses to those that either support agriculture or tourism, or that are essential for urban development but cannot locate in urban areas for amenity and other reasons (such as airports, schools, waste treatment plants, landfills and reservoirs). A dwelling requires a permit and is restricted to one dwelling per lot.

The zone provides a minimum lot size of 40 hectares unless an alternative is specified in a schedule to the zone. The creation of smaller lots is prohibited unless the subdivision is the re-subdivision of existing lots or the creation of a small lot for a utility installation.

The Green Wedge A Zone makes similar provisions, with a minimum lot size of eight hectares (unless an alternative is specified in a schedule to the zone).

Zones adjacent to the Green Wedge Zone at Werribee South include:

- Urban Growth Zone (UGZ) to the north-east in East Werribee;
- Farming Zone to the north-east in Point Cook;
- Commonwealth land to the east (Point Cook Airport); and
- Public Park and Recreation Zone to the west, on the Cocoroc side of the Werribee River in Werribee Regional Park.

The Green Wedge Zone provides for all agricultural uses and limits non-rural uses to those that either support agriculture or tourism, or that are essential for urban development but cannot be located in urban areas for amenity or other reasons.

The Green Wedge A Zone provides for all agricultural uses and limits non-rural uses to those that support agriculture, tourism, schools, major infrastructure and rural living.

Clauses 35.04 and 35.05 of the City of Wyndham Planning Scheme set out schedules for the GWZ and GWZA respectively.

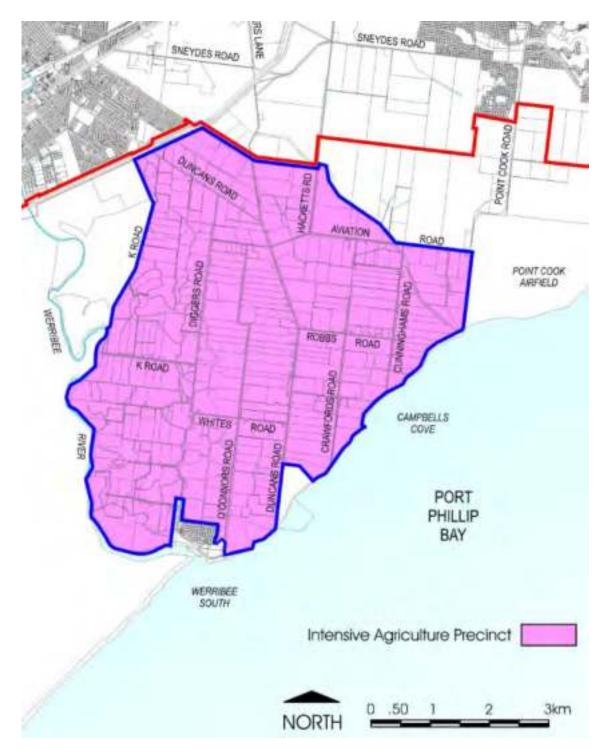


Figure 15 Werribee South Intensive Agriculture Precinct Source: Wyndham Planning Scheme, Clause 35.04

3.1.2 Heritage Overlay

Places in Werribee South that are included in the Schedule to the HO generally pre-date World War II. A high percentage are private residences; public buildings are also represented (Diggers Road Hall, Portelli's shop and the school sites). It is noted that this group lacks coverage of many of the historic themes associated with Werribee South identified in the Thematic Environmental History (see Volume 2). These themes include:

Natural environment (geology)

- The land (nutrient rich)
- Hydrology (river systems)
- Bunurong (Country)

Shaping the environment

- Closer Settlement (1904)
- Transforming land and waterways irrigation (1912 -)
- Migration (including south Europeans)

Managing the environment

- Irrigation concrete channels (1930s -)
- WWII-era defences /RAAF; Women's Land Army
- Post-World War II migration
- Market gardening
- Tourism/recreation

Critically, as discussed below, the existing HO coverage provides limited insight into or understanding of Werribee South's identity as a dynamic agricultural landscape that has been populated for over a century by generations of farming families. Based on feedback provided through consultation with representatives of the Werribee South Ratepayers Association, the existing coverage also fails to resonate with the local community (see Section 6.0).

It is, however, noted that the approach adopted in Werribee South is comparable to the application of the HO in other irrigated landscapes in Victoria, and beyond. That is to say, emphasis is placed on the engineering infrastructure that sustains the irrigation, as well as a small number of – generally isolated – examples of buildings/features that are associated with the establishment phase of the irrigation scheme (see also Section 4.0 and Appendix B).

Existing Heritage Overlay coverage in Werribee South

Under the *Planning and Environment Act* 1987, local government authorities are responsible for protecting places with local heritage significance (i.e. places included in the Schedule to the Heritage Overlay). They are also periodically required to identify 'gaps' in their heritage overlays, making recommendations about what to include, as well as being responsible for issuing planning permits for changes to local heritage places.

There are 136 places on the Schedule to Clause 43.01 Heritage Overlay to the Wyndham Planning Scheme, including 16 places in Werribee South (Table 1, and Figure 16). These are primarily the outcome of the 1997 *City of Wyndham Heritage Study*. ¹⁴

Also included in the Schedule to the HO are places related to the district's irrigation heritage that are located outside of Werribee South (Table 2).

Werribee South Irrigation Settlement (1997 assessment)

One of the recommendations of the 1997 Heritage Study that was not acted upon was the identification of the 'Werribee South Irrigation Settlement' as a place of regional significance. Extracts from the 1997 assessment are as follows:

The Werribee Irrigation Settlement corresponds to the subdivision of the Werribee Park Estate for closer settlement at the turn of the century. It is bounded by: Port Phillip Bay and the Werribee River to the south; K Road in the west; a short section of the Maltby By-Pass to the north; and the south-eastern boundary formed by Harrisons Road, and following the main irrigation channel southeast from Hacketts Road to Cunninghams Road and then to the Bay [...]

While the subdivision of the area occurred in 1904, it was the introduction of the irrigation scheme in 1912 which resulted in a dramatic growth in the area's population. The soldier settlement scheme, and the arrival of Italian migrant families also coincided with the early period of development of small holdings throughout Werribee South. Initially, the area hosted a wider diversity of agricultural activities, including the growing of lucerne, dairying and poultry farming. Gradually, more of the area has been converted to market gardens, which now dominate the rural landscape.

The area today is recognisable as the landscape created by the subdivision for closer settlement, the introduction, and the growth in the prevalence of marketing gardening. It contains many features that demonstrate the transformation of the landscape: the simple timber houses dating from the earlier years of this century, the Soldiers Memorial Hall sited on Diggers Road, early schools and shops, the cypress windbreaks, irrigation channels and Detheridge [sic, Dethridge] water wheels, drains and market gardens. A number of these places have been individually recorded by the study, although a more comprehensive study of the features which contribute to the cultural landscape is warranted.

The Water Tower and office located on Tower Road, Werribee, was built in 1925 as a part of the development of this irrigation scheme. As such it forms a key element that is closely associated with this cultural landscape.

Themes

- 4.2 Boosting Production
- 2.5 Creating smaller rural holdings

History

The irrigation scheme completely changed the landscape from sheep grazing country to intensive agriculture, and created a community of settlers, first under

¹⁴ Context Pty Ltd with Dr Carlotta Kellaway, *Heritage of the City of Wyndham Volume 1: Identifying & Caring for important places*, 1997, City of Wyndham and Australian Heritage Commission.

the closer settlement scheme, and then as the soldier settlement after World War 1. From the 1920s an Italian community had begun to establish here.

Before the irrigation scheme started the development of the Werribee Estate for closer settlement, eight families lived on the land. In 1913, 75 leases were granted, swelling the population to 196. After the First World War, ex-servicemen were given preference in the allocation of land and they therefore comprised most of the new settlers. By 1918 the population was 427, 625 by 1923, 1,122 by 1932, peaking at 1,954 in 1954, and returning to 1930s levels by the early 1980s.

[...] The irrigation scheme was developed by Elwood Mead, an irrigation engineer from the United States brought to Australia by State Rivers and Water Supply Commission [...] His first assignment was the Werribee scheme [...]

Statement of Significance

The Werribee irrigation area is of regional significance as a cultural landscape containing evidence of its transformation through closer and soldier settlement, and the impact of Italian migrant farmers.

Area of Significance

Entire extent of original Werribee Estate subdivision, with the exception of the small area of urban subdivision that had occurred at the southern tip of Werribee South. Key features to retain are: the pattern of the subdivision and lot sizes, the irrigation channels, drains and machinery, the early timber houses, the use of the land for market gardens and small-scale mixed agricultural uses, the places relating to various community services pre-dating World War II.

Preferred method of heritage protection

Register of the National Estate; Planning Scheme; Wyndham Heritage List

Further Investigation?

Further investigation of this area is warranted to fully document and analyse the importance of this cultural landscape. 15

¹⁵ Context Pty Ltd with Dr Carlotta Kellaway, City of Wyndham Heritage Study, 1997, pp. 409-411.

Table 1 Places in Werribee South included in the Schedule to the HO

Description/comment¹⁶ HO/Address Theme HO5, House Weatherboard bungalow, c. **Closer Settlement** 1915, unusual roofline, porch No. 949 Aviation Road later addition. Gable roofed concrete farm building to rear. HO6, Carramar House and Farm House and farm buildings, c. **Closer Settlement** 1920s/1930s. Weatherboard No. 1055 Aviation Road (Lot 1 LP205808) interwar bungalow. Farm



House and farm buildings, c. 1920s/1930s. Weatherboard interwar bungalow. Farm buildings of fibro, concrete and corrugated iron.
Associated with Werribee Shire President Michael A Galvin.

Note: Farm buildings and established garden appear to have been demolished.

HO15, Werribee Park Primary School No. 10 Cayleys Road



School, established 1937.

Note: The extent to which evidence of early/original buildings survive has not been established.

Closer/Soldier Settlement

A key source for commentary in this section is Context Pty Ltd with Dr Carlotta Kellaway, Heritage of the City of Wyndham Volume 1: Identifying & Caring for important places, 1997, City of Wyndham.

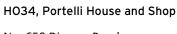
HO/Address	Description/comment ¹⁶	Theme
HO25, George Chirnside Experimental Dairy Lot 4, PS 332021, Crawfords Road	Demolished. WCC has initiated a process for the removal of the Experimental Dairy from the HO.	N/A
HO26, Cunningham House No. 51 Cunninghams Road ('The heritage place is the house and the irrigation channel')	Large, c. 1920s weatherboard bungalow, with addition to north side. Occupied by Norah Cunningham in early 1920s.	Closer Settlement

HO33, Diggers Road Soldiers Memorial Hall

No. 450 Diggers Road



Timber hall, opened by G T Chirnside in 1925. Associated with post-WWI soldier settlement / market gardening in area. Soldier Settlement





Single storey shop/residence, brick and timber, cantilevered awning. House 1933; shop 1946. The Portelli family is said to be first Italian family in Werribee South beach area, early 1930s.

Interwar and postwar migration

Description/comment¹⁶ HO/Address Theme HO45, Braemor (House) Large weatherboard Irrigation Federation house, c. 1910, No. 630 Duncans Road Norfolk pine, set back from Duncans Road. Larger than typical farmhouses of the period. HO46, Building and Water Tower Iron water tower and small Werribee South Irrigation/closer brick and concrete building, No. 818 Duncans Road close to irrigation channel. settlement Understood to relate to dairying in the district. No



date given.





Weatherboard house c. 1920s, in a ruinous condition. **Closer Settlement**

HO/Address Description/comment¹⁶ Theme HO48, Former Werribee Estate School and **Closer Settlement** Small weatherboard house (c. School Teachers House 1915) and fenced-in school site, shelter shed. School No. 849 Duncans Road buildings removed (1999). First school site in area (Werribee Park School, est. 1937) HO49, Fowlers House and Silo 1930s concrete house and **Closer Settlement** silo, remaining from cheese No. 885 Duncans Road factory. Fowler system of concrete house construction used by Housing Commission of Victoria and other

H050, Grahams Dairy No. 1107 Duncans Road



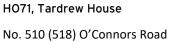


'Derelict' concrete and fibro farm building, L shape plan with loading platform, 1930s. Graham family occupied CA 62B and 63A and B.

architects. Land acquired by Fowlers through Closer Settlement scheme.

Closer Settlement

HO/Address	Description/comment ¹⁶	Theme
HO64	N/A	
Werribee Park		
320 K Road		
HO70, Adapted railway carriage	Railway carriage used as	Post-war migration
No. 500 O'Connors Road	storage. Rail carriages were used as residences for early	Market gardening
	settlers. This is the last remaining carriage in the area.	





Interwar weatherboard bungalow, enclosed front porch. Part of Werribee Park Estate Closer Settlement scheme.

Closer Settlement

Table 2 Places in the Schedule to HO associated with irrigation but peripheral to Werribee South

HO reference	Heritage place	Image
HO3	Werribee System - Diversion Weir	Source: Victoria. State Rivers and Water Supply Commission, rw005613, Rural Water Corporation Collection. Werribee, State Library of Victoria
HO61	Chaffey Irrigation Scheme	
	Riverbend Historical Park, Heaths Road, Werribee	
HO100	Water Tower & Office	
	1 Tower Road,	



Source: Victoria. State Rivers and Water Supply Commission, ds000104, Rural Water Corporation Collection. Werribee, State Library of Victoria

Werribee

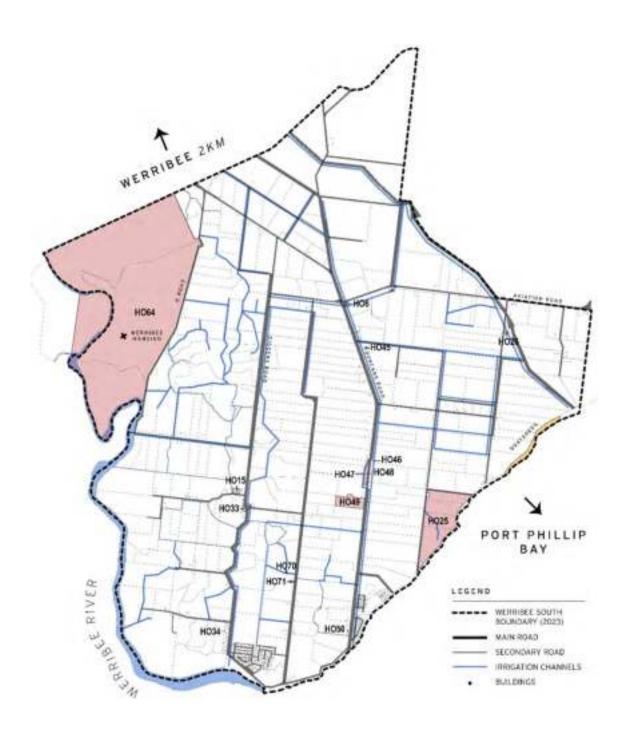


Figure 16 Heritage Overlay coverage in Werribee South

4.0 COMPARATIVE ANALYSIS

Werribee South is one of a number of municipalities in Victoria, and beyond, associated with irrigation and market gardening.

For the purposes of this report, a comparative analysis was undertaken to establish how these municipalities have addressed these associations from a heritage perspective. The findings are summarised below (see also Appendix B).

4.1 Findings

The following observations are drawn from the comparative analysis:

- No example was found where statutory heritage controls are applied to large-scale areas of agricultural land or market gardens.
- Likewise, the comparative work undertaken for this report did not reveal examples of active irrigation landscapes where the water channels are the subject of heritage controls.
- A pattern in relation to irrigation landscapes that are in active use is that the infrastructure that
 sustains the irrigation is controlled (for instance pumping stations and weirs, as is the case in
 Wyndham, see HO3 at Table 2). Likewise, there are examples of offices or headquarters
 buildings associated with the administration of irrigation schemes that are the subject of
 controls (see HO100 at Table 2).
- Only one irrigation scheme (Mildura) is valued/celebrated for its association with an eminent individual or family (the Chaffey brothers).
- It is common for parts of former market gardens to be included in Schedules to HOs, as historic features of landscapes.

Across the municipalities studied, a number of alternative approaches to recognising the heritage values of market gardening and irrigation places were found (see Table 3).

Table 3 Alternative approaches to recognising market gardening and irrigation heritage

Municipality	Alternative approach (interpretation)	Description
Brimbank City Council	Growing Stories: A Tale of Keilor's Market Gardens (2013)	A short documentary incorporating oral history with accompanying booklet
Greater Shepparton City Council	Thematic reference to market gardening in new Botanic Garden	A market garden is to be included in the Australian Botanic Gardens Shepparton, referencing the long history of market gardening in the municipality
Mildura Rural City Council	The Chaffey Trail (Figure 17)	Provides 'an immersive heritage experience consisting of 12 historically significant sites'
Mildura Rural City Council	'Blueways'	Using historic irrigation channels to create features through new urban areas that assist in cooling the area

Municipality	Alternative approach (interpretation)	Description
Moorabool Shire Council	Bacchus Marsh Heritage Trail	The only agricultural site included on the Bacchus Marsh Heritage Trail is the Chicory Kiln



Figure 17 Screen grab of the Chaffey Trail website

Source: https://thechaffeytrail.com.au/suggested-tour-itineraries/, accessed 29 August

2023

5.0 BASIS OF ALTERNATIVE APPROACH

The following establishes, in broad terms, a theoretical framework through which the alternative approaches to celebrating the history and identity of Werribee South summarised at Section 7.2 have been generated.

5.1 Context

Concepts of heritage are dynamic. What might be valued by one generation may be of limited interest to another. Likewise, processes for understanding and assessing significance evolve.

There are static and retrospective dimensions to traditional conceptions of heritage. Legislation passed in the 1970s gave weight to heritage as grounded in the past and embedded in place, typically buildings and building fabric. An emphasis on the tangible, technical and scientific characteristics of heritage gave specialists (including architects, archaeologists, engineers and historians) a central role in the identification and assessment of heritage places.

In recent years there has been a momentum shift in support of 'community-centred heritage' and a parallel resistance to expert-driven, thresholds-based approaches. Increasingly, heritage is recognised as a process that is informed by a range of social, political and economic factors.¹⁷

These shifts pose considerable challenges to local government. Prominent among them are reconciling what communities perceive to be important and why and resolving how to respond to those valued places and attributes, some of which may have little to do with established ideas of heritage. For many, 'heritage' relates to the amenity and lived experience of an area or neighbourhood as opposed to isolated buildings or areas within it.

There is also growing evidence of communities expressing views about what is important to them independent of consultants/experts, particularly on the part of communities who feel alienated from established processes. In these scenarios, heritage has been described as a form of participation.¹⁸

5.2 Cultural landscape studies

The alternative approach to understanding Werribee South is grounded in cultural landscape studies, which examine human interactions with the environment.

As well as the physical environment, with its geological structure, watercourses and vegetation covering, a landscape can be understood as a cultural setting (or artefact), including designed elements, evolving or changing elements, relict features and with intangible associative elements. These associations are the repository of collective memory and as such these landscapes may become familiar to people through their depiction in paintings, photography, the collective memory or song.

See for instance: Elizabeth Kryder-Reid, Jeremy W Foutz, Elizabeth Wood and Larry Zimmerman, "I just don't ever use that word; investigating stakeholders' understanding of heritage', in the *International Journal of Heritage Studies*, 2018, volume 24, no. 7; Rachael Kiddey, 'From the ground up: cultural heritage practices as tools for empowerment in the Homeless Heritage project' in the *International Journal of Heritage Studies*, 2018, volume 24, no. 7; Elizabeth Auclair and Graham Fairclough, *Theory and Practice in Heritage and Sustainability: Between the past and future*, Routledge, 2015; and Alan Mace and Mark Tewdwr-Jones, 'Neighbourhood Planning, Participation and Rational Choice', London School of Economics Research Online, 2017.

See, for instance, the Australian Research Council Everyday Heritage linkage project, https://everydayheritage.au/about/

Cultural landscapes may be designed estates or gardens, or archaeological sites, or continually evolving landscapes as in the agricultural countryside (i.e. Werribee South). Likewise, they may be associated with events, beliefs and social meanings. They can be large or small, urban or rural, wild or tamed. The scale of the landscape and the history of its use are essential components in its study.

Many definitions of cultural landscapes are available but all emphasise the interaction of people with their environment over time and the presence of cultural values in the landscape.

The World Heritage Committee has adopted categories of cultural landscapes. The Operational Guidelines for World Heritage properties contain the following definitions:

47. Cultural landscapes inscribed on the World Heritage List are cultural properties and represent the 'combined works of nature and of man' designated in Article 1 of the [World Heritage] Convention. They are illustrative of the evolution of human society and settlement over time, under the influence of the physical constraints and/or opportunities presented by their natural environment and of successive social, economic and cultural forces, both external and internal.

They should be selected on the basis both of their Outstanding Universal Value and of their representativity in terms of a clearly defined geo-cultural region. They should be selected also for their capacity to illustrate the essential and distinct cultural elements of such regions.

The term 'cultural landscape' embraces a diversity of manifestations of the interaction between humankind and the natural environment.

Cultural landscapes often reflect specific techniques of sustainable land use, considering the characteristics and limits of the natural environment they are established in, and may reflect a specific spiritual relationship to nature. Protection of cultural landscapes can contribute to current techniques of sustainable land use and can maintain or enhance natural values in the landscape. The continued existence of traditional forms of land use supports biological diversity in many regions of the world. The protection of traditional cultural landscapes is therefore helpful in maintaining biological diversity.

Types

47bis. Cultural landscapes fall into three main categories, namely:

- (i) The most easily identifiable is the clearly defined landscape designed and created intentionally by man. This embraces garden and parkland landscapes constructed for aesthetic reasons which are often (but not always) associated with religious or other monumental buildings and ensembles.
- (ii) The second category is the *organically evolved landscape*. This results from an initial social, economic, administrative, and/or religious imperative and has developed its present form by association with and in response to its natural environment. Such landscapes reflect that process of evolution in their form and component features. They fall into two sub-categories:
 - (a) a relict (or fossil) landscape is one in which an evolutionary process came to an end at some time in the past, either abruptly or over a period. Its significant

distinguishing features are, however, still visible in material form.

- (b) a continuing landscape is one which retains an active social role in contemporary society closely associated with the traditional way of life, and in which the evolutionary process is still in progress. At the same time it exhibits significant material evidence of its evolution over time.
- (iii) The final category is the associative cultural landscape. The inclusion of such landscapes on the World Heritage List is justifiable by virtue of the powerful religious, artistic or cultural associations of the natural element rather than material cultural evidence, which may be insignificant or even absent.'19

5.2.1 Heritage Victoria

A definition for 'cultural landscape' or 'culturally significant landscape' used by Heritage Victoria is as follows:

Cultural landscape or culturally significant landscape: a geographical area that reflects the interaction between humans and the natural environment. While all landscapes show a human–environment interaction, Heritage Victoria assesses only those landscapes which are predominantly culturally significant for registration and /or protection purposes and which are also typically post-European settlement places. ²⁰

Heritage Victoria's Landscape Assessment Guidelines for cultural heritage significance of landscapes in Victoria (2002) summarise the steps to be used in assessment of landscapes for their heritage values. Terminology and typologies follow both World Heritage and the Burra Charter practice.

5.3 Historic Urban Landscapes

The Historic Urban Landscapes (HUL) model of managing historic urban areas was developed and adopted by the UNESCO General Conference following a 2011 'Recommendation on the Historic Urban Landscape'. The model, which builds on principles implicit in cultural landscape studies (discussed above) was developed in response to proposals for change in historic urban areas included in the World Heritage List. It is described by UNESCO as follows:

The key to understanding and managing any historic urban environment is the recognition that the city is not a static monument or group of buildings, but subject to dynamic forces in the economic, social and cultural spheres that shaped it and keep shaping it ...

UNESCO's approach to managing historic urban landscapes is holistic; it integrates the goals of urban heritage conservation and those of social and economic

Operational Guidelines for the Implementation of the World Heritage Convention, UNESCO, 31 July 2021, Section 47, accessed 6 September 2023.

²⁰ Landscape Assessment Guidelines for cultural heritage significance of landscapes in Victoria, 2002, p. 3, accessed 18 August 2023.

development. This method sees urban heritage as a social, cultural and economic asset for the development of cities.

The recommendation on the Historic Urban Landscape was adopted on 10 November 2011 by UNESCO's General Conference. The historic urban landscape approach moves beyond the preservation of the physical environment and focuses on the entire human environment with all of its tangible and intangible qualities. It seeks to increase the sustainability of planning and design interventions by taking into account the existing built environment, intangible heritage, cultural diversity, socio-economic and environmental factors along with local community values.²¹

The HUL approach recognises that historic urban areas are living places whose collective identity is informed by a range of tangible and intangible attributes. It recognises and interprets urban areas as a continuum, with the present condition being the outcome of layers of natural (geological) and human activities over time. HUL also sees significance as fluid, contested and dynamic. Community-centred, interdisciplinary and locally focused methods of engagement and management are applied, a contrast with expert-led models of heritage practice. The HUL approach also moves beyond physical observations and documentary research to engage people through visual and spatial methods such as cultural mapping and digital tools.

In 2013, the City of Ballarat, Victoria signed up to the World Heritage Institute of Training and Research for the Asia and the Pacific Region (WHITRAP) pilot program to implement HUL. Early initiatives included running accessible projects in an attempt to break down perceptions of heritage as an exclusive and highly specialised endeavour – examples included a public event to extract an historic time capsule and heritage weekends. Attention then turned to the implementation of HUL's 'Six Critical Steps':

- To undertake comprehensive surveys and mapping of the city's natural, cultural and human resources;
- To reach consensus using participatory planning and stakeholder consultations on what values to protect for transmission to future generations and to determine the attributes that carry these values;
- To assess vulnerability of these attributes to socio-economic stresses and impacts of climate change;
- To integrate urban heritage values and their vulnerability status into a wider framework of city development, which shall provide indications of areas of heritage sensitivity that require careful attention to planning, design and implementation of development projects;
- To prioritize actions for conservation and development; and
- To establish the appropriate partnerships and local management frameworks for each of the identified projects for conservation and development, as well as to develop mechanisms for the coordination of the various activities between different actors, both public and private. 22

²¹ UNESCO, New Life for Historic Cities, The historic urban landscape approach explained, 2013, accessed via https://whc.unesco.org/en/activities/727, 5 August 2023.

²² UNESCO, The HUL Guidebook, Managing heritage in dynamic and constantly changing urban environments, 2016.

A year-long process of public consultation, 'Imagine Ballarat' elicited over 6,500 responses and revealed a strong public commitment for the city's heritage. This outcome gave HUL legitimacy, and set the vision for a strategic plan, *City of Ballarat, Our People, Culture & Place, A Plan to Sustain Ballarat's Heritage 2017-2030*.

Comment

It is important to note that HUL does not have force or effect under legislation. In Ballarat, the *Planning and Environment Act*, 1987 (through the local Planning Scheme) remains the primary tool for the administration and management of the built environment.

HUL has, however, been effective in reframing public debate about heritage-related issues. It has also been effective in bringing communities into those debates. Critically, there is evidence that the principles that underpin HUL have facilitated a 'bottom up' (i.e. community-led) approach and supported a shift from recognition of heritage as a series of buildings within a landscape to a recognition of heritage as broad-scale environments or settings.

6.0 ENGAGEMENT

For the purposes of exploring the alternative approaches to recognising and celebrating the valued characteristics of Werribee, two workshops were held: the first with representatives of WCC, and the second with representatives of the Werribee South Ratepayers' Association.

6.1 Workshops

6.1.1 Workshop #1, Wyndham Council

The workshop with available WCC staff was held on 16 August 2023. Objectives of the session were to provide a briefing on work undertaken to date, and to explore opportunities for aligning outcomes with on-going initiatives. Officers from the following WCC departments attended the session:

- Climate & Resilience
- Economic Development
- First Nations
- Heritage
- · Open Space Planning
- Strategic Marketing & Tourism
- Strategic Planning
- Strategic Property Management
- Town Planning

The following projects and initiatives were discussed (in note form):

Coastal planning

- Flood modelling has demonstrated that the land will become increasingly saline/inter-tidal, requiring change to crops in the future.
- A Coastal & Marine Management Plan has been prepared for the K Road Cliffs. This initiative includes the exploration of opportunities for interpretive signage.
- The Werribee River Trail shared path: this project has identified the need for Traditional
 Owner engagement and identifying cultural values.
- A Master Plan for Werribee South beach has identified cultural and environmentally significant sites.

Economic development

- The World Economic Forum has identified agriculture as one of the fastest growing professions/sectors.
- A review of WCC's Economic Development Strategy is underway. This includes the development of an Agri-Business Strategy. The strategy also looks at issues of job creation and emerging tech.
- Some Werribee South farmers are generational, such as the Velisha family, others are tapping into high tech agriculture, a growth area.

- A roadmap is being developed for the East Werribee Employment Precinct with ten emerging sectors identified include agricultural excellence.
- The WYNnovation Festival (May 2024) is a platform to celebrate creativity, entrepreneurship and innovation in Wyndham.
- Wyndham Tech School is a potential resource future thinkers with design skills.

Tourism

- The Tourism and Marketing Department is working on a new Visitor Economy Strategy, following State Government masterplans to support recovery in the tourism sector. This will include pillars such as nature based, First Nations and cultural experience related tourism.
- High-level recommendations for Wyndham's Visitor Economy Strategy include focusing on secondary experiences in Wyndham – i.e. the RAAF base, Wyndham Harbour, Bay Trail and areas of cultural significance.
- There is an opportunity to leverage these secondary experiences for Werribee South i.e. showcasing the Werribee South boatsheds and kayaking on the Werribee River.

Strategic Planning

- It is anticipated, as a consequence of climate change, that Werribee South will become an
 increasingly key area for agricultural production. As a consequence, issues with the potential
 to impact on agricultural activities (i.e. road maintenance and heritage controls) will become
 increasingly problematic.
- The Werribee South Green Wedge Management Plan is being updated, to include revised and expanded heritage principles (note: the review is on hold pending a State Government review into agricultural land).
- Wyndham is transitioning to a net zero carbon community, with the development of policies around electric vehicles and food security.

First Nations

- Aboriginal people are the original agriculturalists.
- There is a need to recognise cultural heritage, and ongoing cultural practices, and to incorporate them into future plans for Werribee South.
- o Traditional owner engagement will be critical if a tourism or heritage trail is recommended.

Town Planning

- The purpose of the Green Wedge Zone (GWZ) is to protect the food belt.
- The GWZ is recognised as quite restrictive for Werribee South landowners. Farmers want to subdivide to help kids – see previous house lot excisions.
- Any heritage strategy/policy needs to be clear around expectations and interpretation.

6.1.2 Workshop #2, Werribee South Ratepayers' Association

The workshop was held with representatives of the Werribee South Ratepayers' Association and Wyndham City Council on 30 August 2023. Objectives of the session included to: build understanding and trust, noting that this is an exploratory exercise; to listen, and understand what drives the

community's concerns; to understand what the community values about Werribee South; and to discuss options for next steps.

In attendance were:

- John Price (landowner), Joe Garra (representing landowners), Helen and Tuscanny Yankos (affected landowner), Ange Messina (representative), Anthony Varrasso (landowner)
- Adam Mornement and Ainslee Meredith (Lovell Chen)
- Aaron Chiles, Jack Willett, Heather Threadgold, Felicity Watson, Kristien Van den Bossche (Wyndham City Council)

The workshop discussion covered the following questions:

- What do you love about Werribee South?
- What do you want to retain in Werribee South?
- How would you contribute to celebrating and interpreting Werribee South?

Responses to these questions have been summarised below.

General discussion

- The constraints arising under the Green Wedge Zone are considerable and effectively control the key heritage issue i.e. farming.
- There are successive layers of evidence (physically and socially) that pay testament to the
 evolution of Werribee South. Those layers are readily tracked, given the highly
 interventionist approach to the natural environment of Werribee South. 'History creates
 heritage' (John Price).
- Are heritage controls the right tool? The places in the HO in Werribee South are not well recognised or understood by the community. The general view was that public buildings can be contemplated for controls, but not private houses.

'What do you love about Werribee South?'

- Its importance as a food bowl.
- Farming and agricultural activity.
- The history of migration, and soldier settlers. It's about the people, the sense of community and family, multigenerational connections to places.
- Public spaces i.e. beaches.
- Sensory qualities i.e. peace and tranquillity.
- The village near Werribee South boat ramp.

'What do you want to retain in Werribee South?'

- o Agricultural activity and farming.
- The 'history' (as opposed to 'heritage') of the area.
- Community ties 'there is such a strong sense of community here'.

 'Landmarks' (i.e. buildings that have, or had, a public use, such as the old Post Office/ General Store, Portelli's Café, Werribee Mansion and the golf course.

'How would you contribute to celebrating and interpreting Werribee South?'

- o Participants are willing to be part of an oral history (or similar) of Werribee South.
- There is a need to make people aware of the history of the area.
- Stories needs to be told by multigenerational farming families and descendants of soldier settlers (the latter including John Price).
- Recent initiatives, including the artwork/mural on the Werribee Water Tower (HO100),
 Marissa Burton video, Elio's Table and the photography by Imran Abul Kashem are all well supported.
- The participants are in favour of more recording (i.e. by photography/videography) the remaining historic irrigation channels.
- Places in the current Heritage Overlay lack interpretation i.e. the former railway carriage (HO70). This needs to change.
- o The Wyndham Cache café once had a photo wall of farmers. That was popular.

Other points of discussion

- o Are there particular locations or events where the Werribee South community congregates?
 - There are no longer any public congregation places. In the past, people congregated at the Corpus Christi fete, the Sagra Festival, St Joseph's Day for the Catholic community. The community also used to congregate at the Diggers Road Soldiers Memorial Hall for dances and other events, and Duncans Road for 21st birthdays.
 - Congregation now happens elsewhere as younger generations are no longer living with their parents on land in Werribee South
- Living in a Green Wedge Zone has effects on the population; young families are unable to build on the land leave the area.
- o Did the community congregate on ethnic lines?
 - No, the identity of the community is based on a shared history of opportunity and hard work, rather than being divided by country of origin.

o Diversity:

- Werribee South was once a more diverse landscape up until the 1970s there was dairying, poultry, orchards ...
- The landscape has also changed with loss of cypress trees (windbreaks) and concrete water channels.
- Questions were raised about the accessibility of interpretation:
 - O Would there be an online component?
 - How can heritage interpretation engage with younger people? Could QR codes be used to link interpretations to videos?

6.2 Summary of community-held values

The following summary of community-held values draws on the engagement, summarised above, and is based on the structure of Statements of Significance stipulated in PPN1.

The summary, which is intended to provide a basis for future engagement/consultation, is necessarily in draft form, consistent with the limited consultation undertaken for this report.

What is significant?

The Werribee South Intensive Agriculture Precinct is a large and strongly defined area that has been operated for the purposes of agricultural production since the early years of the twentieth century. The Agriculture Precinct, which extends over 36 square kilometres, is approximately 30 kilometres west of Melbourne and a short distance south of Werribee township.

The landscape has been the subject of repeated interventions over the past c. 120 years, principally to sustain and improve the supply of the water with the objective of ensuring food supply (the area is often described as Melbourne's 'food bowl').

It is a landscape that includes legacies of different phases of occupation and farming practices. In recent years, the Green Wedge Zone has been a key determinant in shaping the uses and character of the land.

The area was formed by Closer Settlement (1904) and is associated with post-World War I Solider Settlement as well as migration. Descendants of south European migrants are prominent members of the population today, including families from Italy, Greece, Malta and Macedonia.

How is it significant?

The history and on-going use of Werribee South for intensive agriculture, and its strong sense of social cohesion, are highly valued by the local community.

Why is it significant?

The history of the Werribee South Intensive Agriculture Precinct is valued by the local community. The land has supported agricultural production for over a century, much of it being at the leading edge of practice, consistent with the need for Werribee South to thrive.

Farming and land management practices have evolved consistently and considerably since the early twentieth century. Until the 1970s, dairy and poultry farms as well as orchards were features of the landscape. In recent decades, Werribee South has become less diverse, with an almost exclusive emphasis on intensive vegetable production, notably brassicas and lettuce cultivars.

Irrigation infrastructure has evolved over time. The original earthen channels were lined with concrete from the 1910s, and gunite was used to repair cracked and leaking channels from the 1950s. Since the 1980s, underground pipelines have been introduced, to optimise efficiency and minimise water loss.

Residential buildings (farmhouses) are dispersed, and typically aligned with the major irrigation channels. These buildings are of diverse style and character, including popular styles from the 1920s to the present. The adapted railway

carriage (now a store) at 500 O'Connor's Road is an apparently unique example of the informal accommodation that was common in the pre-World War II period.

The relatively small scale of the Werribee South population, and its collective engagement in agricultural activities are factors that have promoted a strong sense of communal identity in the area. Families with multi-generational connections to Werribee South are another. As noted above, there has been a strong representation of families with south European origins in the area since at least the 1920s.

In recent decades there has been a pattern of the Werribee South community coalescing in protest, for instance in opposition to a proposed toxic waste landfill site in the 1990s and a Youth Detention Centre in 2017. The proposed addition of places to the Heritage Overlay through the 'Stage 2 Study, Residential Places and Precincts' has also galvanised a collective response.

7.0 RECOMMENDATIONS

The following provides a summary of recommendations for:

- Applying the Heritage Overlay in Werribee South, consistent with the original brief for the 'Stage
 2 Study, Residential Places and Precincts'; and
- Community-centred approaches to recognising the valued characteristics/attributes of Werribee South as an alternative to applying the HO.

7.1 Applying the Heritage Overlay

Based on a limited analysis of the buildings in Werribee South identified in Stage 1, it is considered that there may be a case for serial listing controls to be explored, linking places by historic themes (see also Section 1.1).

The places identified in Stage 1 (see Figure 18) represent the following themes:

- Irrigation/Closer Settlement: 12 places associated with this theme/period of development were identified. Of these eight have been recommended for further assessment, with four not added to the shortlist, including one already with a HO control (51 Cunninghams Road).
- Post-World War II migration and market gardens: Nine places are associated with this theme, of which six have been identified for further assessment.
- *Tourism/recreation*: One place (13 Finch Road) is associated with this theme and has been recommended for further assessment.

7.1.1 Next steps

The rationale of applying serial listing controls is a response to the dispersed nature of the residential buildings in Werribee South. If pursued, a thorough survey of the locality is recommended, with the objective of identifying all buildings associated with these historic themes. This recognises that the fieldwork for Stage 1 was not comprehensive. Desirably, access would be provided to properties with poor/no visibility from the public ream. The fieldwork would provide a sound basis for comparative analysis.

In the event that serial listings are adopted, each place that forms part of a thematic grouping would share a common statement of significance, and each thematic grouping would have a single entry in the schedule HO and a single HO number.

In the event that serial listings are found to be unsuitable, the application of site-specific controls might be pursued for properties deemed to meet the relevant threshold.

7.1.2 Comment

The application of serial listing controls would, in large part, perpetuate the existing arrangements for the HO in Werribee South. That is to say, controls would be applied to a small group of dispersed buildings the majority of which are private residences. The group would include buildings from the post-World War II period, but the HO (seen as a group) would still provide limited insight into or understanding of Werribee South's identity as a dynamic agricultural landscape that has been populated for over a century by generations of farming families (it is recognised that the HO may not be the right tool to recognise these values/characteristics). In addition, this approach would fail to cover all the valued themes associated with the landscape, including those identified at Section 3.1.2.

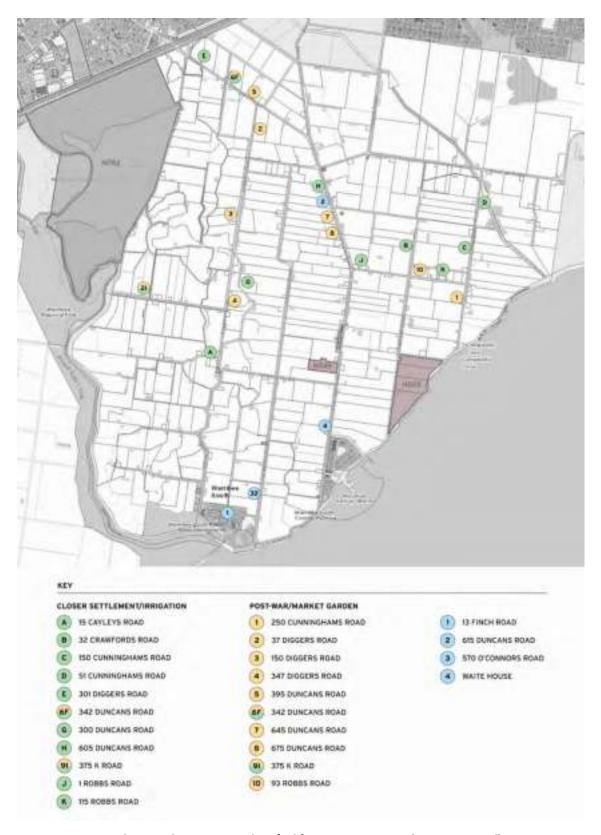


Figure 18 Werribee South: properties identified for review in Stage 1(Context Pty Ltd)

7.2 Alternative approach

The following is a summary of options that might be contemplated in the event that community-centred approaches to recognising the valued characteristics/attributes of Werribee South are pursued as an alternative to the HO.

7.2.1 Interpretation

For the purposes of the following, and consistent with the *Burra Charter*, a broad definition of 'interpretation' has been adopted, as follows (emphasis added):

The aim of interpretation is to *reveal* and help retain the significance — natural, cultural or both — of that place. It is often thought of as an action or an activity [...] the international ICOMOS *Ename Charter for the Interpretation and Presentation of Cultural Heritage Sites* (ICOMOS: 2008) defines interpretation as the 'full range of potential activities intended to *heighten public awareness and enhance understanding of* cultural heritage sites'.²³

As noted in the *Burra Charter* Practice Note for Interpretation, a common issue is to ensure 'respect for the special connections between people and a place':

Significant associations between people and a place should be respected, retained and not obscured. Opportunities for the interpretation, commemoration and celebration of these associations should be investigated and implemented (*Burra Charter Article* 24.1).

As discussed below, interpretation can take many forms.

Oral history

An oral history project would be a process of data gathering, and a foundational resource for subsequent interpretation of the Werribee South Intensive Agriculture Precinct.

Oral histories prioritise the voices and recollections of the community, and give an insight into the lived experience, which may otherwise be hard to understand through documentary and archival sources. Such a project would complement the existing historical record and allow the community take part in and feel a sense of ownership of any subsequent depiction of their story. These voices and stories could then be used in a range of other interpretation formats.

It is noted that members of the Werribee South community have expressed support for such a project, and it is likely that there would be a number of willing participants keen to share their stories and recollections.

Typically, an oral history project involves:

- Development of a project plan;
- Identifying participants, seeking to cover as broad a range of experiences, generations and backgrounds as possible;
- Initial contact with and briefing of participants, and development of release forms for interviews;

-

²³ Burra Charter 2013, Practice Note, Interpretation, p. 1.

- Preparatory research, and development of a range of standard questions/themes to provide to
 participants prior to interviews. The aim of this process is to make participants feel comfortable
 and give them the opportunity to tell their stories to the best of their ability and memory;
- Conducting interviews, usually 1-2 hours per interview;
- Transcription of interviews, usually through a specialised service/software. Participants are
 invited to review their transcript and interview summary, which puts the interview in a more
 readable format, and allows community members to 'tell' their stories in a continuous form,
 unbroken by questions as is the case in the transcripts; and
- Preparation of a summary document, which outlines the context of the place, identifies
 common themes and stories from the interviews. The more thematic structure of this history,
 rather than one adhering to a strictly chronological account, enables the shared experiences of
 the community to become clear.

The outcomes of the oral history could be presented in multiple formats including, but not limited to, a book, website or exhibition (online and/or physical). Consideration may also be given to commissioning photography to accompany the oral history (perhaps building on Imran Abul Kashem's 2019 *Green Wedge*, book/exhibit, see Figure 19 and Figure 20). A series of podcasts might also be contemplated.²⁴



Figure 19 Concrete-lined irrigation channel at Werribee South Source: Imran Abul Kashem, *Green Wedge*, 2019

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See, for instance, 'The last chance lands: Werribee South's market gardens' ABC Radio 'Earshot' podcast, first broadcast on 28 March 2022, https://www.abc.net.au/listen/programs/earshot/the-last-chance-lands:-werribee-souths-market-gardens/13800720



Figure 20 Farmhouse, c. 1910s, and Cypress windbreak at 301 Diggers Road Source: Imran Abul Kashem, *Green Wedge*, 2019

Public art

Large-scale public art projects present as possible means of interpretation. The mural applied to the Water Tower (HO100) was referenced in the workshop with the community as a popular and effective example (Figure 21).

Artworks can, of course, take many forms. At Werribee South, there may be an interest in a creative response to recognising the presence of redundant water channels, and/or harnessing these channels as an environmental resource (similar to the 'blueways' model in Mildura, referenced above).

A large-scale artwork installation referencing Werribee South's rich farming heritage may be another option, perhaps located near the primary entry to Werribee South on Duncans Road. An artwork in this location could function as a 'threshold' marker, defining the transition from Werribee to Werribee South. It might also be visible from Princes Freeway, M1 (i.e. freeway art).

There will also be opportunities for creative partnerships, including with local schools.



Figure 21 Themed artwork applied to the Water Tower on Tower Road (artist, Hayden Dewar) Source: https://artsassist.org.au/water-tower/, accessed 3 September 2023

Cycling trail

There are opportunities to recognise valued attributes in Werribee South through a cycling trail. This trail could connect to existing trails in the area such as the Federation Trail, Werribee River Trail, and Wyndham Bay Trail. The existing Werribee City Centre Heritage Trail is a walking trail limited to the township of Werribee. As Werribee South is a large area with disparate valued attributes, a cycling or driving trail, rather than walking, may be appropriate.

Heritage interpretation is a feature of the existing trails. The Federation Trail, which follows the historic Main Outfall Sewer through the western suburbs of Melbourne, is included in the Victorian Heritage Register (H1932) and the Brimbank, Hobsons Bay and Wyndham Heritage Overlays. The Werribee River Trail also features interpretation signs relating to the area's Indigenous and early pastoralist history. It is recommended that interpretative signs are used to capture the history and stories of Werribee South for existing sites on the HO and additional sites relating to the under-represented twentieth-century histories of market gardening, agriculture, irrigation and migration.

For further information see, Werribee City Centre Heritage Trail brochure - 2018-06-11.pdf (wyndham.vic.gov.au)

As another layer of interpretation, part of the trail might follow the main water channel in Werribee South. As above-ground channels are being decommissioned and replaced with pipeline through the Werribee Irrigation District modernisation project, this could be an opportunity to recognise the heritage of the channels as they disappear.

There would be need to consult with the relevant Traditional Owners if this option is pursued.

Education

Educational partnerships provide opportunities to recognise the history (and future) of Werribee South. As noted, the area has a strong association with pioneering/progressive approaches to agriculture. Further, farmers in the area today are active participants in high-tech agriculture.

As suggested at the Council workshop (see Section 6.1.1), consideration may be given to celebrating this legacy through education, entrepreneurship and creative partnerships. The WYNnovation Festival may provide a platform to stimulate such partnerships.

Former railway carriage as interpretive exhibit

Like most of the places in Werribee South that are included in the Schedule to the HO, there is no existing interpretation for the adapted railway carriage at 500 O'Connors Road (Figure 22). It is, however, a legacy of the earliest phase of occupation of Werribee South as an irrigation district, and as such has the capacity to provide insights into an era that has otherwise been overwritten by evolution.

Would Council consider acquiring, relocating and conserving the rail carriage, and potentially adapting it as an interpretive exhibit dedicated to the history of the area?

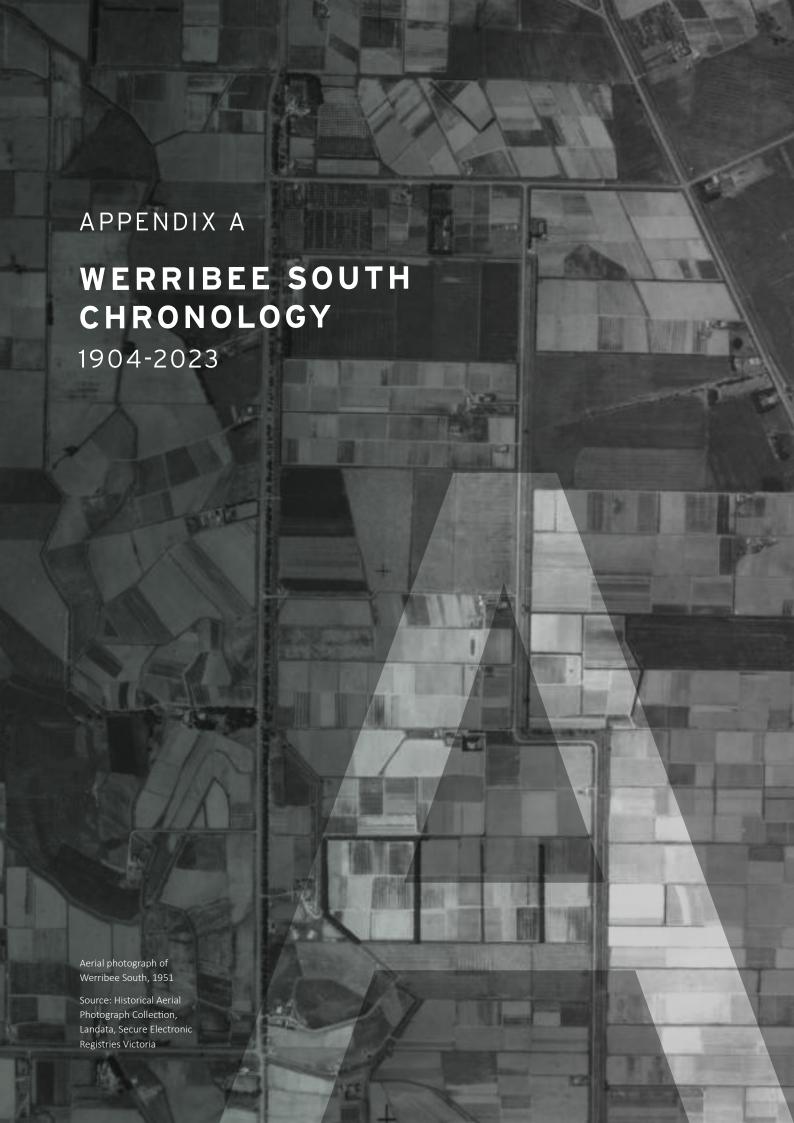


Figure 22 View of the adapted rail carriage from O'Connors Road

7.3 Conclusion

Based on the research, analysis and engagement undertaken for this report, it is recommended that alternatives to the inclusion of further places in the Heritage Overlay are pursued for Werribee South. A combination of the recommendations at Section 7.2.1 may be optimal.

The Werribee South community today draws upon aspects of the past to define its identity. In the absence of physical locations for congregation (a point referenced at Section 6.1.2), this interest in history can be harnessed as a public forum to support social cohesion. This approach would respond to views expressed by the community and recognise heritage as a 'process', as opposed to an accumulation of places and objects that, without supplementary interpretation, have limited capacity to communicate their intended messages/meanings.





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1904-1920

Closer Settlement and the origins of irrigation

Sequential map of Werribee South, c. 1920

1921-1940

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Sequential map of Werribee South, c. 1970

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Sequential map of Werribee South, c. 1990

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Sequential map of Werribee South, c. 2023

INTRODUCTION

This chronology has been prepared for the purpose of documenting the evolution of the landscape in Werribee South from the period of Closer Settlement in the early 1900s to the present day. The emphasis of the chronology is on the historical themes of market gardening, irrigation and migration. As a result, it makes no claims to completeness.

Land use and associations of the Bunurong Traditional Owners are not included in the chronology. Likewise, the nineteenth century history of grazing in the area, when the majority of the land was owned by the Chirnside family is excluded. The history of dairying in the area also requires further documentation and analysis. It is anticipated that these significant aspects of the history of Werribee South will be addressed in future research.



Werribee Irrigation District, automatic pick-up baler at G Graham's and W J Crawford's property, 1947

Source: Victoria. State Rivers and Water Supply Commission, rw005602, Rural Water Corporation collection. Werribee, State Library of Victoria



1904-1920

CLOSER SETTLEMENT AND THE ORIGINS OF IRRIGATION

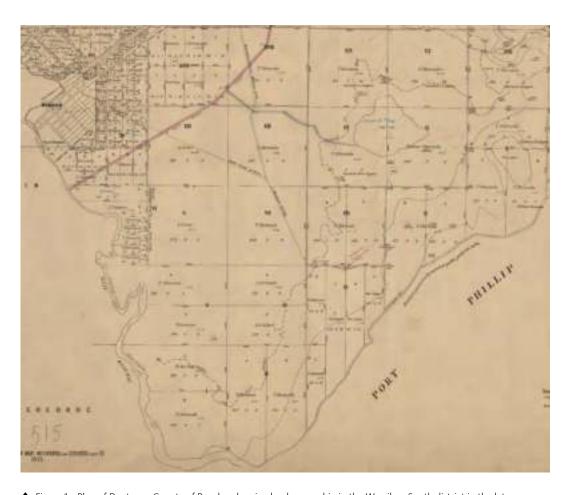
State government intervention in the Werribee South landscape began in the early twentieth century with the twin goals of Closer Settlement and irrigation, which supported the diversification of agriculture and increased food production.

- 1904
- The Closer Settlement Act 1904 gave the Government the power to compulsorily acquire land from freeholders for subdivision and allocation as Closer Settlement blocks. Land in Werribee South was subdivided for Closer Settlement, but without irrigation, occupation levels of the blocks were low.
- 1905
- With the passage of the Water Act, the Victorian Government created the State Rivers and Water Supply Commission (SRWSC) which took over the responsibilities of the Werribee Irrigation and Water Supply Trust (established 1888).
- 1906
- The State Government's Land Purchase and Management Board purchased 23,214 acres (9,394 hectares) from the Chirnside's Werribee Park Estate to develop as an irrigation area and subdivide for Closer Settlement (Figure 1).1 The SRWSC commissioned a report on general water supply requirements and the potential for irrigating Closer Settlement lands.²
- 1907
- In July, the SRWSC delivered its report and proposed a storage reservoir at Pykes Flat on the Korjamunnip Creek, a distance of around 45 kilometres from Werribee township. From the Pykes Creek Reservoir, water would travel down Werribee River to a diversion weir a few kilometres north of the township. The diversion weir would then feed a main channel to transport the water to the highest point of Werribee Park Estate, where a system of minor channels would distribute water throughout the irrigation area.3
- 1910
- Construction of the Werribee diversion weir and main channel was completed. Work to construct the minor earthen channels had also begun.4

The Victorian State and Water Supply Commissioner, John Stewart Dethridge (1865-1926), invented the Dethridge wheel, a device used to measure the flow of water at irrigation sites.⁵

- 1911
- Completion of the Pykes Creek Reservoir and earthen channel network.

6



▲ Figure 1. Plan of Deutgam, County of Bourke, showing land ownership in the Werribee South district in the late nineteenth century (detail), 1896

Source: Victoria, Department of Crown Lands and Survey, dq007016, Maps Collection, State Library of Victoria

Closer Settlement land sales continued, with the aim of diversifying farm production from grazing to small-scale intensive food production. Concrete lining of the earthen channels had begun, but only short sections of channels were lined at this point.⁶

1913

Only 40 of the 152 blocks available for Closer Settlement were occupied by 1913.⁷ Serving both Werribee and Bacchus Marsh, the Pykes Creek Reservoir (with a capacity of 18,502,200 m³) proved inadequate; Werribee received only 3,700 m³ per acre. The channel distribution system, built to serve 5,000 acres (2,023 hectares), remained unused due to lack of water. ⁸

1914

The area of land irrigated in Werribee increased from 1,000 to 2,185 acres (405 to 884 hectares) (Figure 2), but water supply remained inadequate. Construction began on a new reservoir at Melton with an initial storage capacity of 20,969,160 m³. As work began on the Melton Reservoir, more people took up farms on the Closer Settlement blocks. ¹⁰





▲ Figure 2. Excursion to the Werribee Irrigation Areas by Members of the British Association for the Advancement of Science (detail), 15th August 1914

Source: State Rivers and Water Supply Commission, vc000356-001, Maps Collection, State Library of Victoria

▲ Figure 3. Melton Reservoir, ca. 1900-1953

Source: Victoria. State Rivers
and Water Supply Commission,
rwg/2019, Rural Water
Corporation collection. Melton,
State Library of Victoria

1915

1916

After petitioning from the community, the Werribee Estate School (no. 3193) opened in October on land adjoining Mr Verity's holding on Duncans Road. The school was to serve the new farming families in the area. Dairy farmer Samuel J. Thomas was the first president of the school committee.

Construction of Melton Reservoir was completed on Werribee River, a distance of around 22 kilometres from Werribee township (Figure 3).





▲ Figure 4. Military survey of Australia: Ballan, Sunbury, Meredith & Melbourne (Victoria), detail showing Werribee South, 1917. Irrigation channels are shown in blue rectilinear lines. Edited to show the outline of Werribee South Source: Commonwealth Section, Imperial General Staff, A.J. Mullett, Govt. Printer, vc001517-001, Maps Collection, State Library of Victoria

1917

The Werribee Irrigation and Water Supply District was proclaimed by the SRWSC, ending the joint administration of the Werribee and Bacchus Marsh irrigation districts (Figure 4). By this time, early roadways such as Duncans Road had also been established.

The *Discharged Soldier Settlement Act* made special provision for the settlement on the land of soldiers returning from World War I, to be administered as part of the Closer Settlement program.

1919-1920

The Chirnsides donated an additional 200 acres (81 hectares) of land on Duncan's Road for Soldier Settlement.¹³

The Werribee diversion weir sill was raised to improve efficiency. The surface drainage system was extended to serve nearly all of the irrigation district.

SEQUENTIAL MAP OF WERRIBEE SOUTH, c. 1920

Land in Werribee South was subdivided under the Closer Settlement Act of 1904, but occupation of the unirrigated blocks was low.

The main channel and diversion weir were completed in 1912; the construction of Melton Reservoir in 1916 led to a significant increase in occupation. The crops grown were predominantly low yield cereals, with some grazing.

POPULATION IN 1920: c. 500





WERRIBEE IRRIGATION DISTRICT INFRASTRUCTURE

Werribee is a gravity irrigation district, relying on upstream heads of water to move supply through the channels and pipes. The system uses a combination of historical and modern infrastructure to convey water from the Werribee and Lerderderg River systems to the irrigation district. Irrigators place advance orders for water, which is released from storages at Pykes Creek, Merrimu Reservoir and Melton Reservoir to the north and north-west of Werribee. The water travels downstream to the Werribee Diversion Weir, through the offtake channel and the main channel in the Werribee township. The channel is piped under the Princes Freeway to the main part of the irrigation area in Werribee South. Manual drop-bar regulators are being replaced by under-shot (underwater) regulators to control flows through the network. At the farm gate, water is measured by a standard flow meter on pipelines. Irrigators store the water in on-farm dams for use in irrigation systems.⁶⁷

From 1910, when construction of the Werribee diversion weir and main channel was completed, the system has been refined to improve efficiency and minimise water loss. Concrete lining of the original earthen channels began in the 1910s, with the gunite process to repair cracked and leaking channels introduced in the 1950s. Since the 1980s, underground pipelines have been constructed to replace open channels. Dethridge wheels, invented in 1910, were in use until very recently, when they have been replaced by standard flow meters on pipelines (Figure 17). The construction of a surface drainage system began in 1920, consisting of earthen drains that discharge into Port Phillip Bay or the Werribee River. The 64km drainage system now serves nearly all the irrigation district and some land outside of it. As of 2023, the irrigation district had a total area of 2,981 hectares, with 19km of channels and 40km of pipes.⁶⁸

◆ Figure 17. Bailiff monitoring water allocations, c. 1940 Source: Victoria State Rivers and Water Supply Commission, rw005610, Rural Water Corporation collection. Werribee, State Library of Victoria

1921-1940

MIGRATION AND ESTABLISHING MARKET GARDENS

Returning soldiers were granted Closer Settlement blocks and the first wave of European migrants took up farms on the Werribee Park Estate. There was high demand for irrigated land as the area transitioned from low yield cereals to higher value lucerne and market gardens.

1922

Closer Settlement intensified following the building of the Melton Reservoir and the *Discharged Soldier Settlement Act*. By 1922, 224 of the 238 blocks available on the Werribee estate were occupied, including 100 dairy farms allotted to returned soldiers (Figure 5).¹⁴



▲ Figure 5. Plan of Deutgam, County of Bourke, detail showing land allotments in the Werribee South area, 1924 Source: Victoria, Department of Crown Lands and Survey, dq006997, Maps Collection, State Library of Victoria

Werribee Park Mansion was sold to the Catholic Church for use as a priest training college, Corpus Christi College.

1925

The Diggers Road Soldiers Memorial Hall opened on 25 April.

Six families from Vizzini, Sicily, arrived in the district. They established market gardens on parcels of land leased off Corpus Christi College; the land was irrigated and very fertile. Compared to the subsistence farming practised in Vizzini, the pace of farming was more intensive in Werribee South, with three crops sown and harvested over the year.

Sicilian, Italian, Greek and Maltese migrants settled in the area throughout the 1920s, including the Angelico, Baggio, Crimi, Lentini, Mantello, Montalto, Perillo, Portogallo, Scacciante, Vanella and Zausa families. Many lived in converted railway carriages, tents or improvised accommodation without running water on land leased from dairy farmers.¹⁷

The SRWSC moved its operations in Werribee from the Shire office to a new building next to the water tower (Figure 6).¹⁸



▲ Figure 6. Werribee office of State Rivers and Water Supply Commission, 1946

Source: Victoria. State Rivers and Water Supply Commission, rwg/1433, Rural Water Corporation collection.

Werribee, State Library of Victoria

Demand continued to increase for new areas to grow vegetables. Large areas of land previously used for lucerne or dairying were converted to market gardens.¹⁹

The poultry industry was also expanding, with the Carter brothers' Ribblesdale Poultry Farm in Werribee ultimately became one of the largest in the world.²⁰

1927

A second school (no. 4312) opened in Werribee South at the Soldiers Memorial Hall on Diggers Road. The hall was used as a school until 1937 until Werribee Park Primary was built on Cayleys Road.

After several years of dry weather and drought, the SRWSC reduced the water to be released from the Melton Reservoir by 50%, leading to a shortage of irrigation water in Werribee South. The shortage affected 195 market gardeners, lucerne growers, dairy farmers and orchardists.²² The shortage was exacerbated by the inefficient irrigation methods of many soldier settlers, who were not experienced farmers.²³

1928

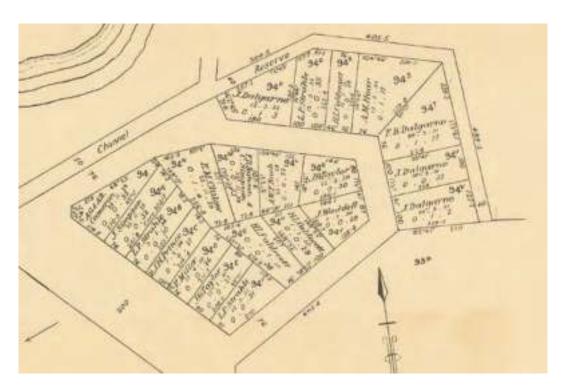
The Werribee Estate School (no. 3193) on Duncans Road was renamed Werribee South Primary School.

1929

Onset of the Great Depression.

The capacity of the Pykes Creek Reservoir was increased to 25,903,080 m³ to prevent further water shortages in Werribee South.²⁴

The first Crown allotments were granted on the Werribee foreshore along Beach Road and Finch Street (Figure 7).²⁵



▲ Figure 7. Plan of Deutgam, County of Bourke, detail showing land allotment sales in the 1930s along Beach Road and Finch Street in Werribee South, 1951

Source: Victoria, Department of Crown Lands and Survey, dq006998, Maps Collection, State Library of Victoria

In January, the Werribee Water Supply District was proclaimed by the Shire of Werribee. Werribee was connected to mains water by the Melbourne and Metropolitan Board of Works (MMBW).

A number of structures were built along the Werribee Foreshore Reserve. Cliff Elliot was the first to build a boatshed at the area now known as Bailey's Beach. Until 1938, this beach was known as Elliot's Beach; it was renamed for Ted Bailey, believed to have been the second person to construct a boatshed there.²⁶

1933

The Werribee Irrigation District now contained 47 miles (76 kilometres) of concrete lined channel and an additional 24 miles (39 kilometres) of drainage channel (Figure 8).

Market gardening had expanded rapidly, with the area devoted to growing vegetables increasing from 475 acres (192 hectares) in 1922 to 1500 acres (607 hectares) by 1932-33.²⁷ Vegetables grown included lettuce, cauliflower, cabbage, peas, beans and tomatoes (Figure 9).²⁸

The Australian census recorded 109 people born in Italy in Werribee Shire, 1.4% of the population.²⁹ It is assumed that a high percentage resided in Werribee South.

1934

Sustenance workers were engaged in the Werribee Irrigation District to line irrigation channels and waterways, lay temporary concrete-lined channels and drain swamp lands.³⁰ Works concluded in November.

Campbell's Cove was named after Fred Campbell, a plumber who had built a boatshed on Ted Bailey's property.³¹



Figure 8. Victoria, Melbourne, imperial survey, detail showing Werribee South, 1933. Irrigation channels are shown in blue rectilinear lines

Source: Australian Section, Imperial General Staff; revised in 1930 by the Australian Survey Corps, ey000153, Maps Collection, State Library of Victoria

The lining of the channel system was now substantially complete, and works commenced on increasing the capacity of the Melton Reservoir.

Market gardening now accounted for 2,137 acres (865 hectares) of irrigated land in Werribee South.³² Demand for irrigated land grew, with prices rising up to £8 10/ an acre for a period of two to five years; the lessees were predominantly Italian market gardeners (Figure 10). Sales of holdings to Italian market gardeners were also reported at prices from £75-85 an acre.³³ Many migrants lived in poor housing conditions with as many as five or six persons living in one room with earthen floors, poor ventilation and unhygienic facilities, or in renovated railway carriages.³⁴

1937

Completion of works on the Melton Reservoir, with capacity now at 23,559,468 m³.³⁵ Werribee Park Primary School opened at 10 Cayleys Road.



▲ Figure 9. Werribee Irrigation District vegetable cultivation, c. 1940-60
Source: Victoria. State Rivers and Water Supply Commission, rw005608, Rural Water Corporation collection. Werribee, State Library of Victoria



▲ Figure 10. Salvatore Burgio sowing broad bean seeds by hand, 1940

Source: Maria Mantello, Now and Then: The Sicilian farming community at Werribee Park 1929-1949, Il Globo, Carlton, 1986, p. 30

1938

In July, the Werribee Drainage District was proclaimed by the SRWSC, covering an area of 10,496 acres. Rates were applied for maintenance of the drains at 8d. in the pound on the annual valuation to all farms with drainage outlets. 36

Severe drought was experienced in the Werribee and Bacchus Marsh Irrigation Districts, with restrictions imposed on irrigators. By November, market gardeners had used all of that year's water entitlements.³⁷ The Werribee diversion weir was raised again in an attempt to increase storage capacity.

1939

The Premier of Victoria, Albert Dunstan, visited Werribee South and Bacchus Marsh in February to speak to farmers affected by drought and water shortages.³⁸ Some farmers had put down groundwater bores.³⁹ The drought ended with heavy rainfall at the end of February.

By the end of the 1930s, several migrant families were leasing land for market gardening at Corpus Christi. Abandoned houses were transported to the lots by contractor Tom Beasley for housing the families. 40

From the outbreak of World War II on 1 September, there was increasing animosity between Italian market gardeners and soldier settlers.⁴¹

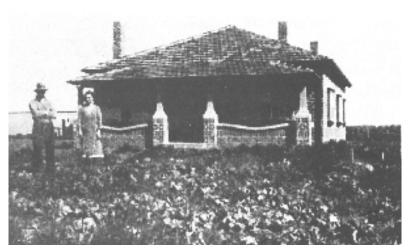


Figure 11.
Crimi family house in
Werribee South, c. 1940s
Source: Margaret Campbell,
From There to Here: Excerpts
from the First-Person
Accounts of Family Migration
Werribee 1840s-2000s
Recorded for a Centenary
of Federation Community
Grant Project, Werribee
Community Centre Inc.,
2005, p. 183

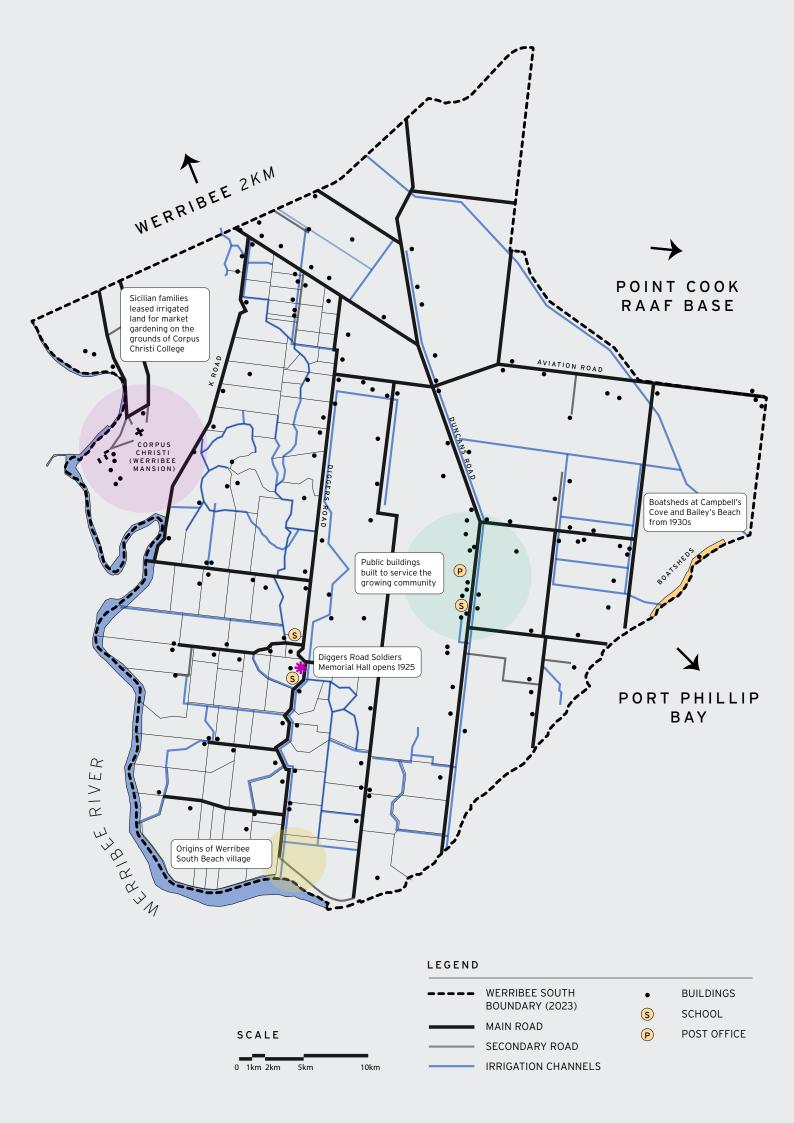


Figure 12.
Werribee Irrigation District hay baling, 1947
Source: Victoria. State
Rivers and Water Supply
Commission, rw005602,
Rural Water Corporation
collection. Werribee, State
Library of Victoria

SEQUENTIAL MAP OF WERRIBEE SOUTH, c. 1940

The first wave of European migrants took up farms on the Werribee Park Estate, now Corpus Christi College. Many lived in repurposed train carriages and tents. By the 1930s, market gardening had expanded rapidly on irrigated lands, with higher value crops such as lucerne and vegetables replacing earlier low yield crops. Concrete lining of the system of earthen channels continued and the capacity of the Melton Reservoir was increased.

POPULATION IN 1940: c. 1,500



EXPANSION

More Southern European migrants settled on market gardens in Werribee South in the years following World War II. The relining of concrete channels began to reduce water loss.

1938-45

General works on the Werribee Irrigation District continued throughout World War II.

Anti-aircraft gun emplacements were built on the Werribee South coastline in 1941 for the testing and practice firing of anti-aircraft guns (Figure 13). They were associated with anti-aircraft training based at Werribee Racecourse. 42

Werribee South market gardeners were among the Italians interned by the Australian government during World War II. Approximately 50 were interned from the Werribee area, including Sam Crimi and Giovanni Perillo.⁴³ Remaining Italians in the district wishing to travel outside the area, including to the Queen Victoria market, were required to apply for a special travel permit.⁴⁴



▲ Figure 13. Anti-aircraft units during a practice shoot held at Werribee, c. 1941

Source: Argus, H99.201/2802, Argus Newspaper Collection of Photographs, State Library of Victoria

Severe drought meant that restrictions on access to irrigated water were again imposed on farmers. World War II ended in September 1945. The *Soldier Settlement Act 1945* was put in place, with amendments that year and a new Act in 1946. The new scheme was administered by the Soldier Settlement Commission.

1947

The Australian census recorded 403 people born in Italy in Werribee Shire, representing 3.9% of the Shire's population.⁴⁶ It is assumed that a high percentage resided in Werribee South.

1948

The *Nationality and Citizenship Act* passed Parliament, coming into effect on 26 January 1949. The Act introduced the principle of citizenship for Australians as belonging to Australia, rather than to Britain.

1949

Tenant market gardeners were evicted from Corpus Christi College. By then, many families had already bought land in other parts of Werribee South such as Duncans Road from unsuccessful soldier settlers (Figure 14). However, only naturalised Italians were allowed to purchase land.⁴⁷



▲ Figure 14. Aerial photograph of Werribee South, detail showing development of agricultural holdings along Duncans Road (left-hand side of image), 1951

Source: Historical Aerial Photograph Collection, Landata, Secure Electronic Registries Victoria

The capacity of Werribee diversion weir was again increased with the installation of flash boards. 48

1951

In November, the SRWSC's Werribee hydraulic experimental station was officially opened by the Premier of Victoria, John Gladstone Black McDonald.⁴⁹ The station would test scale models of hydraulic structures such as the Eildon Dam.⁵⁰

Irrigated holdings continued to increase in value.

1953

As concrete channel linings were found to be subject to excessive leakage, relining of the channel system using the gunite process commenced.⁵¹ Also known as shotcrete or sprayed concrete, this technique involved conveying cement and aggregates through hoses or pipes to a nozzle. The mixture was then mixed with water before being projected pneumatically at a high velocity onto a surface (Figure 15).

1954

The Australian census recorded 1,112 people born in Italy in the Werribee Shire, 6.9% of the Shire's population. However, in non-metropolitan areas this figure was 10.88%.⁵²

The *Melbourne Metropolitan Planning Scheme Report* was compiled by the MMBW, the first step in beginning the planning system for Melbourne.



▲ Figure 15. Gunite lining of the 1K channel, Werribee District, c. 1953-54

Source: Victoria. State Rivers and Water Supply Commission, rw008097, Rural Water Corporation collection.

Werribee, State Library of Victoria

1959 With increasing enrolments at Werribee South Primary School, a second classroom was added.⁵³

Land in the Werribee Irrigation District was worth \$3000/acre.⁵⁴

The Maltby By-pass opened, diverting the Princes Highway around Werribee township.⁵⁵ Werribee was connected to Melbourne's water supply by the MMBW; later in the 1960s, Werribee's water tower was decommissioned. Chemical weed control was introduced for weed control in the drainage system. ⁵⁶

1962-63 The sealing compound Peratol was used to seal cracks in concrete channels, and neoprene introduced in metre outlet door seals.⁵⁷ The Werribee Sewerage Authority was constituted.

Werribee in the 1960s experienced a wave of immigration, with the relatively low cost of land contributing to the rapid population increase. In July 1963, the Shire of Werribee recorded that there were 164 boatshed sites at Campbell's Cove and 19 at Bailey's Beach.

1965 The Werribee Waterworks District was abolished in July.

Works commenced on the Lake Merrimu reservoir project with the construction of a tunnel from Goodmans Creek to Coimadai Creek.⁵⁹

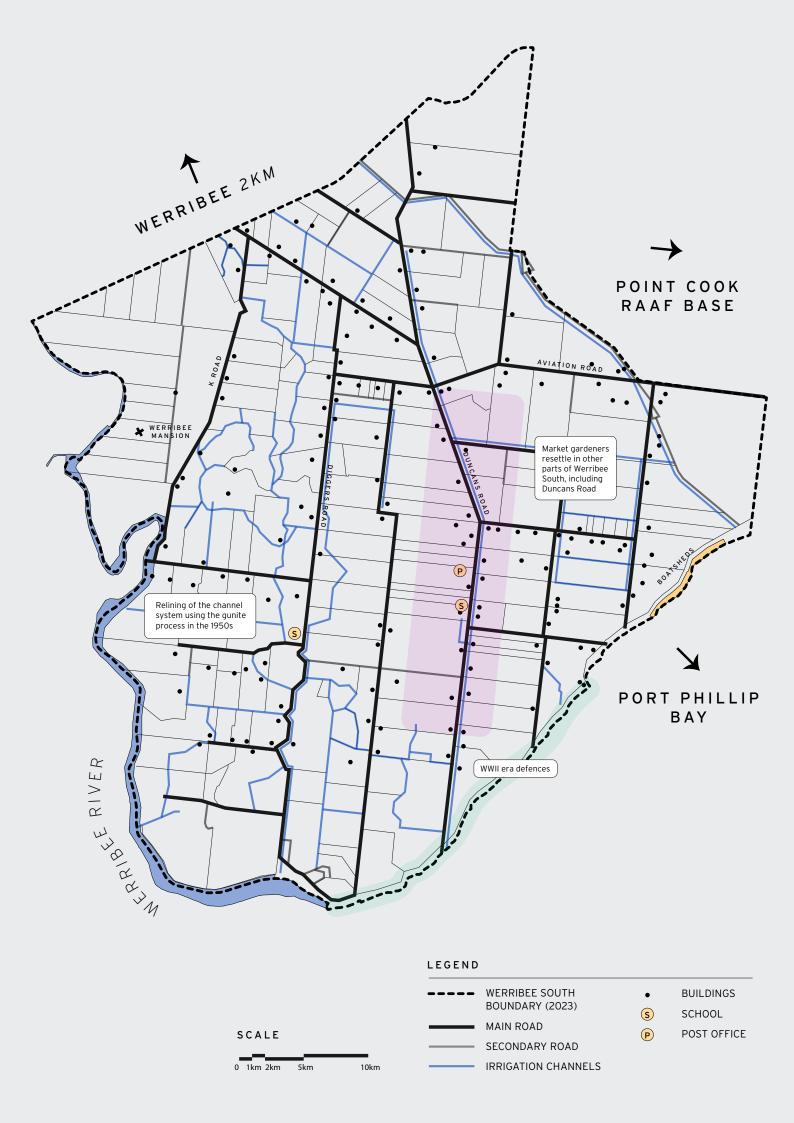
1969-70 • The first stage of the Lake Merrimu project was completed with works underway on the second stage, a tunnel to Lerderderg River.⁶⁰

SEQUENTIAL MAP OF WERRIBEE SOUTH, c. 1970

Southern European migrants continued to settle on market gardens in Werribee South with the main vegetables grown including cauliflowers, cabbages, lettuce, onions and tomatoes.

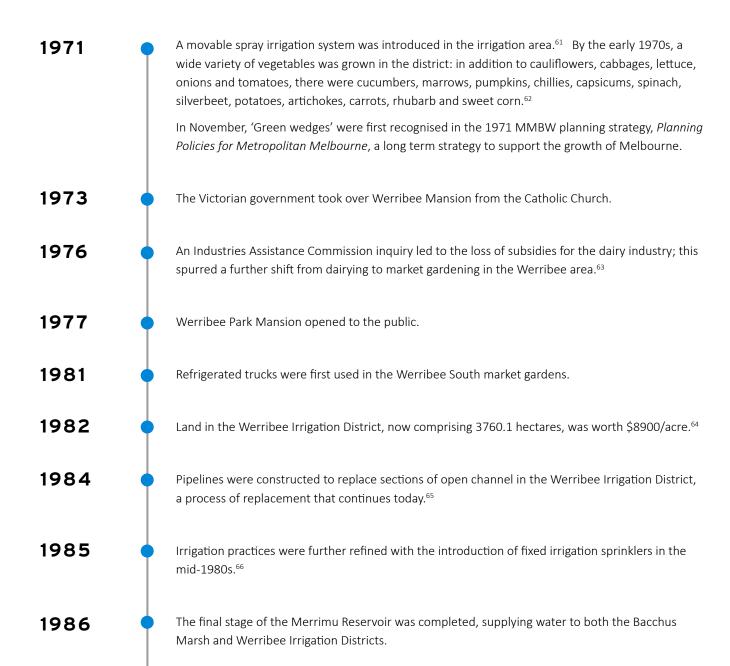
The capacity of Werribee Weir was increased in 1950 and the channel system was relined to minimise water loss. Werribee was connected to Melbourne's water supply in the early 1960s.

POPULATION IN 1970: c. 1,300



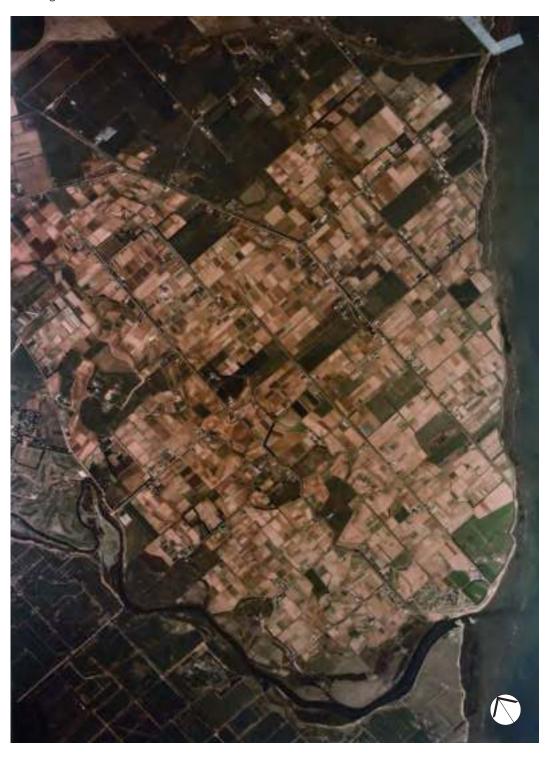
CONSOLIDATION

At the start of the 1970s, there was still a high degree of family operation of farms. Later decades saw a consolidation of land holdings. Irrigation infrastructure continued to be developed and refined.



1990

The Werribee Growth Area Heritage Report, incorporating the Werribee Heritage Study Preliminary Inventory and the Werribee Conservation Study (Stage 1) was presented by the Department of Planning & Urban Growth.

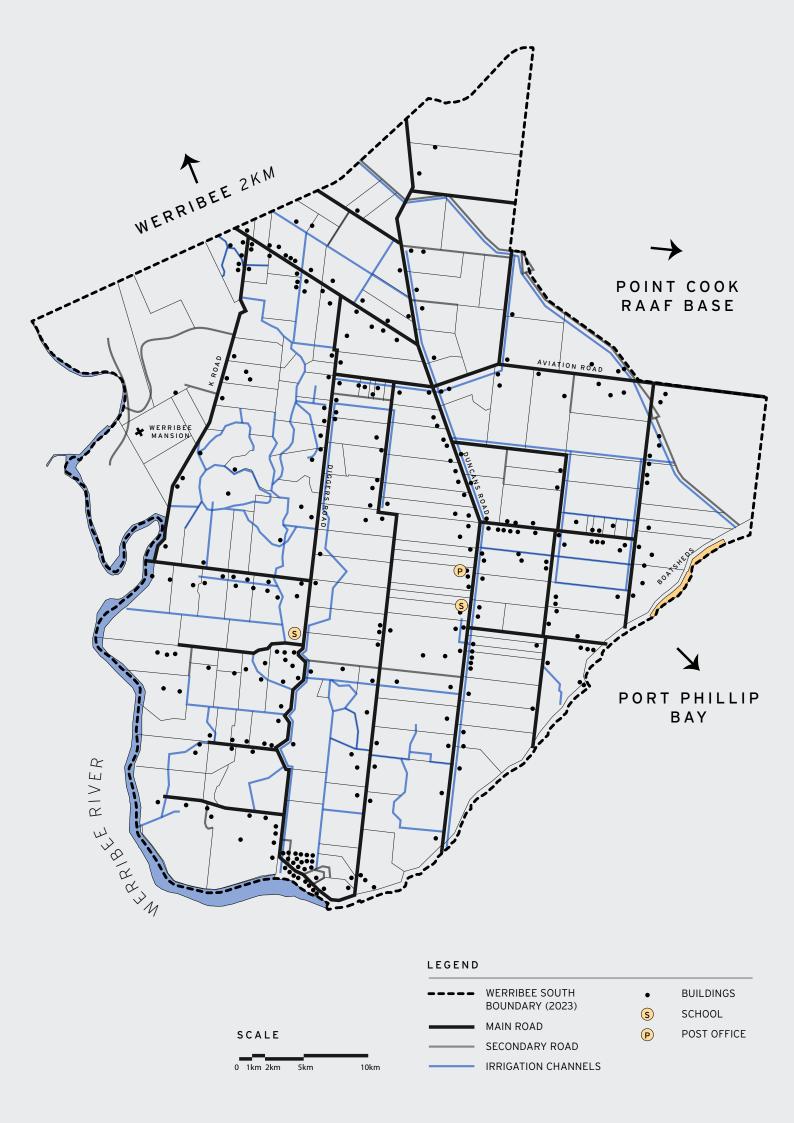


▲ Figure 16. Aerial photograph of Werribee South showing land use, February 1978s. Source: Wyndham City Council

SEQUENTIAL MAP OF WERRIBEE SOUTH, c. 1990

At the start of the 1970s, there was still a high degree of family operation of farms. Later decades saw a consolidation of land holdings. Irrigation infrastructure continued to be developed and refined. The Merrimu Reservoir, completed in 1986, provided greater water storage capacity for the district.

POPULATION IN 1990: c. 1,500



WATER MANAGEMENT AND REFORM

With the development of mechanical processes to improve the value of production, the Werribee Irrigation District had established itself as a major vegetable growing area in Melbourne's foodbowl. Farm ownership remained stable, with consolidation through leases rather than land sales.

- Restructuring of Victoria's local governments led to boundary changes and the renaming of the municipality as Wyndham City Council.
- Below average rainfall conditions in late 1996 through 1997 led to the beginning of the 'millennium drought' in Australia.
- The *City of Wyndham Heritage Study* was proposed by Context Pty Ltd with Dr Carlotta Kellaway. Several places in Werribee South were subsequently included in the Wyndham Heritage Overlay.
- In October, green wedges were formally introduced in the Victorian planning system through the State Government release of the metropolitan planning strategy *Melbourne 2030*. This document introduced the concept of limiting urban expansion through formalising the Urban Growth Boundary and introducing Green Wedge and Rural Conservation Zones.

There were an estimated 130 farm holdings in Werribee South.⁶⁹

Pipelines (as opposed to channels) delivered 20% of irrigated water in the Werribee Irrigation
District.⁷⁰

The millennium drought was recognised as the worst drought on record in Australia.

The Werribee Irrigation District Recycled Water Scheme was implemented to supplement water supply using 'Class A' recycled water from the Western Treatment Plant. Prior to the development of the scheme, water allocations from the Werribee River had fallen to 5% of the usual allocation and a ban was placed on pumping groundwater due to risks to the water table. The high salinity of recycled water was an issue.

In August, the City of Wyndham Review of Heritage Sites of Local Interest was presented by Peter Andrew Barrett.

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2009 There were 90 estimated farm holdings in Werribee South, with consolidation occurring through leases rather than land sales.73 The millennium drought ended in autumn with the transition to a wet La Niña pattern. 2010 Land ownership in the region remained stable, with few properties sold in the preceding two decades. Many farm owners were second or third generation descendants of those who had established the irrigated market gardens.74 Residential development began in the Wyndham Harbour precinct. 2011 Wyndham Council began engagement with Werribee South farmers and landowners around the 2013 future of agricultural production in the district. In May, the metropolitan planning strategy Plan Melbourne was released, superseding Melbourne 2014 2030 and outlining a 50-year plan for managing the growth of metropolitan Melbourne. Werribee South was identified as a potential drought-proof foodbowl area for Victoria. Early 2015 intensive cropping practices in the area continued, with the district responsible for producing 10% of Victoria's vegetables (including 85% of the state's cauliflower, 55% of broccoli, and 34% of lettuce), despite only constituting 0.02% of the state's agricultural land.⁷⁵ 2016 Stages 1-3 of the Werribee Irrigation District Modernisation project began to replace the channel irrigation network with a fully piped modern system. The project aimed to reduce water losses due to leakage and evaporation and to improve the climate resilience of irrigators. Wyndham City Council adopted the Werribee South Green Wedge Policy and Management Plan. All 645 lots within the Werribee South intensive agriculture precinct were zoned Green Wedge. At this time, 82% of all irrigated land (2384.4 hectares) within the precinct was classified as market gardens (Figure 18).76 Stages 1-3 of the Werribee Irrigation District Modernisation project concluded. 2019 2021 In June, the Wyndham Heritage Review (Gap Study) Stage 1, Volume 1: Key Findings and Recommendations Final Report was prepared for Council by Context Pty Ltd.

Stages 4-5 of the Werribee Irrigation District Modernisation project began. This phase of the

project involved replacing existing open channels with 16.2 km of new pipelines, installing 69 new automated customer outlets and flow meters, and upgrading channel regulators at Werribee Weir

2023

and Conquest Drive.77

33 LOVELL CHEN





SEQUENTIAL MAP OF WERRIBEE SOUTH, c. 2023

With the development of mechanical processes to improve the value of production, Werribee South established itself as a major vegetable growing area in Melbourne's foodbowl. Farm ownership remained stable, with consolidation through leases rather than land sales. Residential development began in Wyndham Harbour in the 2010s.

POPULATION IN 2023: c. 2,400





ENDNOTES

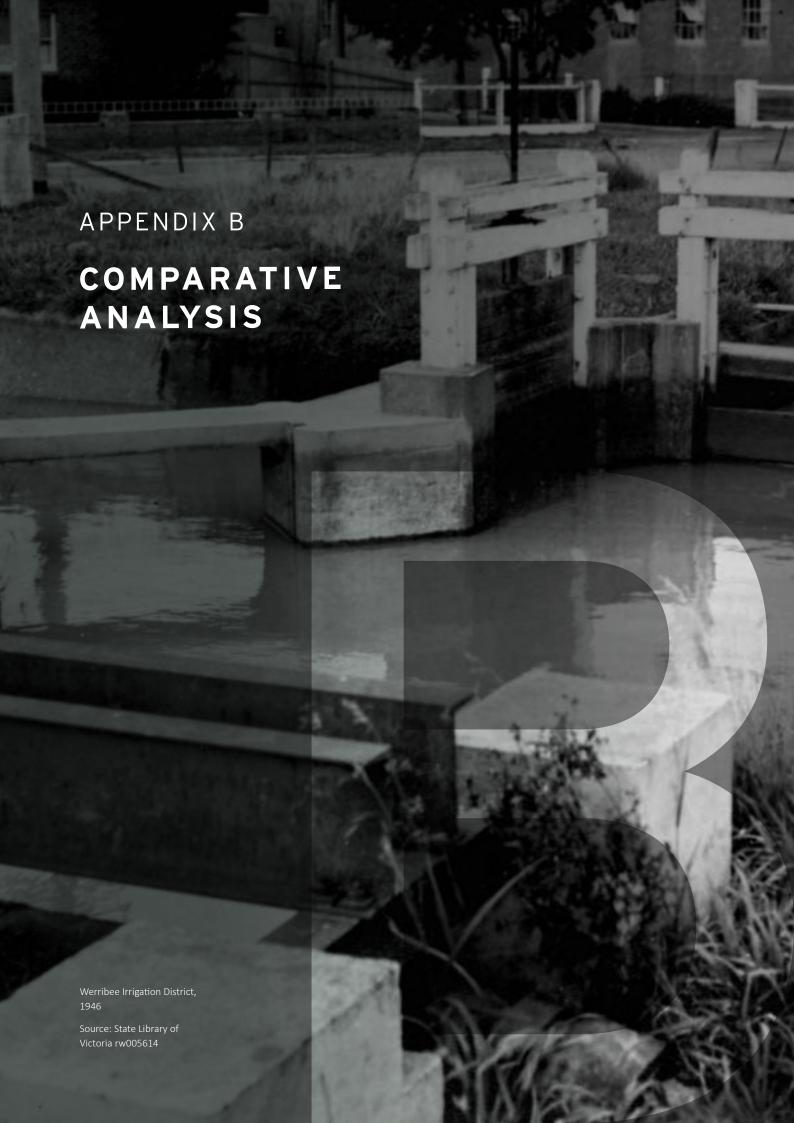
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Greater Shepparton City Council





MELBOURNE WESTERN REGION

BRIMBANK CITY COUNCIL

As in Werribee South, the former market gardens in Keilor are associated with the beginnings of irrigated horticulture in Victoria. In the early 2000s a proposal was made to designate the Keilor market gardens as a cultural landscape, however this did not eventuate. In 2013 the Keilor Market Gardens were rezoned by Brimbank City Council from a Rural Conservation Zone to a Green Wedge Zone. At the time, the panel noted that 'there was very little active farming of the land'. Several individual market gardens are included in the Brimbank City Council Heritage Overlay below.

H035

Milburn's weir

Arundel Road, Keilor

- Associated with the beginnings of irrigation for agriculture in Victoria
- The Milburns were a major market gardening family



Source: Victorian Heritage Database

H044

Hazelwood, John Milburn's farmhouse 136 Arundel Road, Keilor

• Associated with the Milburn family



Source: Victorian Heritage Database

¹ Planning and Environment Act 1987 – Panel Report: Brimbank Planning Scheme Amendments C146 & C147, 2013, p. 4.

H045

Grange Farm, David Milburn's

127 Milburn Road, Keilor

- Associated with the beginnings of irrigation for agriculture in Victoria
- The Milburns were a major market gardening family



Source: Google Maps, July 2019

H078

Market Garden

56 Yallourn Street, Ardeer

- Local historical significance for Mediterranean influence on Western suburbs post WWII
- Not currently in use as a market garden



Source: Victorian Heritage Database

H078

Market Garden

56 Yallourn Street, Ardeer

- Local historical significance for Mediterranean influence on Western suburbs post WWII
- Not currently in use as a market garden



Source: Victorian Heritage Database, HO97

MOORABOOL CITY COUNCIL

The development of market gardens in Bacchus Marsh is also associated with early twentieth century irrigation schemes and Closer Settlement. The Bacchus Marsh Irrigation District (BMID) Planning Study is presently reviewing the current and ongoing use of land within the BMID, a 'state significant irrigation and agricultural district'. Places associated with the history of irrigation in the Moorabool Shire Council Heritage Overlay include:

H014

Maddingley Chicory Kiln

30 Taverner Street, Maddingley

- Built in 1885 to dry locally grown chicory root
- Also in the Victorian Heritage Register (H2326)



Source: Victorian Heritage Database

H062

Dethridge Irrigation Wheel and Water Channel

Fisken Street, Maddingley

 Similar Dethridge wheels were operative throughout Werribee South in the twentieth century



Source: Victorian Heritage Database

MELBOURNE SOUTH EAST REGION

Former market garden and orchard sites with links to the Closer and Soldier Settlement schemes are found within the Cities of Casey, Glen Eira, Greater Dandenong and Kingston.

CITY OF CASEY

Post-World War I Soldier Settlement schemes led to the establishment of successful flower and market gardens in Narre Warren North. Post-World War II saw further development of Soldier Settlement market gardens in Berwick and Devon Meadows, with the latter linked to migrant families. There were areas of mixed farming and dairying in Tooradin, and market gardening in Clyde. Orcharding was an important industry from the 1890s until the 1920s in a number of areas including Pearcedale, Cranbourne North and Narre Warren North. The orcharding industry declined after the interwar period with most of the original orchards lost to suburban development.² Many of these market gardening areas have since been subdivided for housing and roads, with surviving Closer Settlement houses and orchards in the Narre Warren and Cranbourne areas mostly demolished. As in Werribee South, areas in the City of Casey have been zoned Green Wedge. Places associated with the history of market gardening and orcharding in the City of Casey Heritage Overlay include:

H052

Araluen (former)

301-331 Narre Warren North Road, Narre Warren

- Edwardian farm residence associated Bailey family orchard and irrigation
- Destroyed by fire now a 'heritage park'

H063

Glenlea

Part 32-42 Baker Road, Harkaway

Interwar farmhouse associated with market gardening and dairying



Source: Victorian Heritage Database

² Context Pty Ltd, Casey Heritage Study, Volume 1: Thematic Environmental History, December 2004, p. 33.

H0104

Strathard

6 Oldhome Court, Narre Warren South

 Homestead and land connected to a former market garden owned by a number of prominent farming families



Source: Google Maps

H0164

Farm Complex

272 Hardys Road, Clyde North

- Interwar farm and market garden
- Still in use as a farm



Source: Google Maps

CITY OF GLEN EIRA

The subdivision of former market gardening sites occurred earlier in the twentieth century for suburbs closer to the city. Market gardeners in Caulfield were driven out during the interwar period due to suburban expansion, and post-World War II in Bentleigh.³ Only one site associated with market gardening features on the City of Glen Eira Heritage Overlay.

H₀215

St Elmo

133 Tucker Road, Bentleigh

- c. 1889 market garden and poultry farm house associated with market gardener Benjamin Collins
- No longer in use for market gardening



Source: Built Heritage Pty Ltd, Statement of Significance for St Elmo, 133 Tucker Road, Bentleigh, 2019

Andrew Ward, City of Glen Eira Heritage Management Plan, 1996.

CITY OF KINGSTON

Market gardens were established in the late nineteenth century in the City of Kingston in Cheltenham, Heatherton, Moorabbin, Dingley and Bentleigh, with close proximity to the Queen Victorian Market. Farmers transported produce to the city on a system of tram plateways, which were designed to carry heavy vehicles over long distances from sandy market garden areas.⁴ Plateways constructed for market gardeners to transport produce to Melbourne were removed by 1925. Remnants of one tramline, the Market Gardeners Tram Plateway in Centre Dandenong Road, Heatherton, is cited at HO4 and HO928. After World War II, market gardens were subdivided for suburban expansion. As in Werribee South, part of the City of Kingston has been zoned Green Wedge. Places associated with market gardening in the City of Kingston Heritage Overlay include:

H04

Market Gardeners Tram Plateway

Centre Dandenong Road, Heatherton

- Remains of a tramline used by the market gardeners who built the market gardens of the district, since repositioned
- Also on the Victorian Heritage Register (H0928)



Market Gardeners Tram Plateway, 2008 Source: Victorian Heritage Database

H044

5 LaTrobe Street, Cheltenham

- Very early (1888) market garden
- House built 1928 (not associated with market gardening)
- Not currently in use as a market garden

H056

198 Old Dandenong Road, Heatherton

- House associated with market gardening history
- Not currently in use as a market garden

⁴ Living Histories, Kingston Heritage Study Stage 1 Report, 2000, p. 29.

H0112

156 Kingston Road, Heatherton

- Late nineteenth century market gardening property (house c. 1910)
- Not currently in use as a market garden



156 Kingston Road, Heatherton, July 2022 Source: Google Maps

CITY OF GREATER DANDENONG

In Dandenong, Springvale, Keysborough and Noble Park, market gardens were operating from the 1870s. Subdivision of land in the Closer and Soldier Settlement periods increased the number of small holdings.⁵ It was also an area known for its flower farming from the 1920s. Market gardens are generally no longer extant, with some possibly surviving in Keysborough. As in Werribee South, part of the City of Greater Dandenong has been zoned Green Wedge. Places associated with the history of market gardening in the City of Greater Dandenong Heritage Overlay include:

H08

Holmwood Farm Complex and Trees

310 Chapel Road, Keysborough

Dairy building associated with Keys family (settler farmers)



Holmwood Farm Complex, 2023 Source: Lovell Chen Pty Ltd

Graeme Butler & Associates, City of Greater Dandenong Heritage Study, Stage 1: Volume 2, Environmental History, 1998, pp. 32-33.

H022

Glen Alvie (homestead)

66 Hutton Road, Keysborough

- In the Keys family from c. 1840s until recently when sold
- Associated with pastoral era and dairying



Oblique satellite imagery showing the Glen Alvie Homestead Source: Nearmap, 16 February 2023

H023

Eversleigh Homestead

86 Hutton Road, Keysborough

• Property of the Keys family, farming from c. 1870s



Eversleigh Homestead, 2023 Source: Lovell Chen Pty Ltd

REGIONAL VICTORIA

In regional Victoria, there are areas comparable to Werribee South with historic and present market gardening, irrigation, migration and closer settlement histories. These are located in the Mildura Rural City Council, Greater Shepparton City Council and the Gippsland regions.

MILDURA RURAL CITY COUNCIL

After the Chaffey brothers' unsuccessful venture in Werribee, they introduced their irrigation scheme to Mildura in the late 1880s. After World War I, the Solider Settlement scheme offered new irrigated blocks to returning soldiers in Mildura, Merbein and Red Cliffs, and in Robinvale post-World War II. While Italian migrants first arrived in the region during the 1920s, the largest wave of Italian migration occurred post-World War I, with many purchasing former soldier settlement blocks. The Mildura Rural City Council Heritage Overlay includes a number of citations for precincts associated with the Chaffey brothers, as well as individual places associated with the irrigation history. A selection of these places is listed in below:

H0104

Big Lizzie, Red Cliffs

 Road train used in clearing land at Red Cliffs to create irrigated blocks for the Soldier Settlement scheme



Big Lizzie, 2008 Source: Victorian Heritage Database, HO104

H0301

Psyche Bend Pump House, Irymple

- Built 1887, most intact example of a Chaffey built pumping station
- Also on the Victorian Heritage Register (H0548)



Psyche Bend Pumping Station Source: Victorian Heritage Database, HO301

H0307

The Chaffey Avenue and Environs Area (precinct)

- Incorporates residential and riverine environments, including Lock 11 on the Mildura Weir
- Includes Rio Vista, built for William Chaffey (also on the Victorian Heritage Register, H0728)



Rio Vista Source: The Chaffey Trail

H0308

Deakin Avenue, Mildura (precinct)

 Includes public buildings in the Chaffey Plan for the Mildura Irrigation Colony



Deakin Avenue heritage Source: Mildura Rural City Council, Heritage Toolkit: Deakin Avenue Mildura

H0308

Chaffey heritage in Lemon Avenue (residential area) (precinct)

 A former working class residential area established during the Victorian and Edwardian periods

GREATER SHEPPARTON CITY COUNCIL

While Chinese market gardens existed in the Shepparton region from the 1850s, the area was predominantly used for wheat fields and milling until the early twentieth century. As in Werribee South, the extension of irrigation in the 1910s, combined with the Closer Settlement scheme, led to the subdivision of farming properties and the introduction of orchards, vineyards, dairies and market gardens.⁶ European migrants also established orchards in the area in the interwar period. Post-World War II, migrants from countries including Italy built up the orchards and developed the tomato production industry. The Goulburn Murray Irrigation District continues to support significant primary production including horticulture. Sites on the Greater Shepparton Heritage Overlay that are associated with irrigated agriculture include:

H0107

Former Rodney Irrigation Trust Office, now the Tatura Irrigation & Wartime Camps Museum 49 Hogan Street, Tatura



Tatura Irrigation & Wartime Camps Museum, 2019 Source: Greater Shepparton City Council

H0156

Tatura Township Precinct

 Associated with closer settlement, irrigation, horticulture and post-WWII immigration

H0162

The site of the former Mason's Irrigation Pump The Boulevard, Shepparton

H0307

Chinaman's Garden, Mooroopna

A former market garden site of archaeological significance

H0321

Former Ardmona Cannery

16, 32 and 35 Young Street & 6 Doonan Street, Mooroopna

⁶ Allom Lovell & Associates, *City of Greater Shepparton Heritage Study, Stage II*, Volume 2, Appendix B – Thematic Environmental History, February 2004, p. 48.

LOVELL CHEN

LEVEL 5, 176 WELLINGTON PARADE
EAST MELBOURNE 3002
AUSTRALIA
TEL +61 (0)3 9447 0800
enquiry#levetichen.com.av
waw.levelichen.com.au